DEPARTMENT OF THE NAVY
UNITED STATES OF AMERICA

Draft

Environmental Impact Statement /
Overseas Environmental Impact Statement

GUAM AND CNMI MILITARY RELOCATION

Relocating Marines from Okinawa,
Visiting Aircraft Carrier Berthing, and
Army Air and Missile Defense Task Force

Volume 9: Appendices

November 2009

Comments may be submitted to:

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Guam and CNMI Military Relocation EIS/OEIS

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AECOM Technical Services, Inc.

Air Quality Impact Analysis Data

AIR IMPACT STUDY
FOR
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Executive Summary

This air impact study discusses the air impacts in relation to the Guam and Commonwealth of the Northern Marianas (CNMI) Military Relocation Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) (U.S. Navy and Joint Guam Program Office in progress).

The overall proposed action includes components involving the U.S. Marine Corps (Marine Corps or Marines), the Navy and the U.S. Army [Army]. The three main components of the proposed action are briefly stated as follows:

1. *Marine Corps*. (a) Develop and construct facilities and infrastructure within Guam and the CNMI to meet the Marine Corps' living, training, and readiness requirements. (b) Relocate approximately 8,600 Marines and their 9,000 dependents from Okinawa to the Mariana Islands (Marianas) while concurrently increasing the civilian support workforce by approximately 1,700. (c) Conduct and support training and operations for the relocated Marines.
2. *Navy*. Construct a new deep-draft wharf with shoreside infrastructure improvements creating the capability to support a transient nuclear aircraft carrier and carrier strike group (CSG) in Apra Harbor, Guam.
3. *Army*. (a) Develop facilities and infrastructure on Guam to allow an Army AMDTF to protect Guam from potential ballistic missile attacks. (b) Relocate approximately 600 military personnel, 900 dependents, and 100 civilian support workforce to Guam.

The locations of Guam and CNMI are shown in Figure ES-1.

Figure ES-1. Locations of Guam and CNMI

Potential air impacts on Guam would occur from construction and operational activities associated with the project alternatives that are being evaluated for the proposed development on and around Guam.

Air quality can be affected by air pollutants produced by mobile sources, such as vehicular traffic, aircraft, or non-road equipment used for construction activities and by fixed or immobile facilities, referred to as “stationary sources.” Stationary sources can include combustion and industrial stacks and exhaust vents.

The air impact analysis is divided into the following categories and associated alternatives that are characterized in this study:

Major Stationary Sources

Power

- *Interim Alternative 1 (Preferred Alternative).* Interim Alternative 1 would recondition existing combustion turbines and upgrade T&D systems and would not require new construction or enlargement of the existing footprint of the facility. This work would be undertaken by the GPA on its existing permitted facilities. Reconditioning would be made to existing permitted facilities at the Marbo, Yigo, Dededo, and Macheche combustion turbines. These combustion turbines are not currently being used up to permit limits. T&D system upgrades would be on existing above ground and underground transmission lines. This alternative supports Main Cantonment Alternatives 1 and 2 and Main Cantonment Alternatives 3 and 8 would require additional upgrades to the T&D system.
- *Interim Alternative 2.* Interim Alternative 2 is a combination of reconditioning of existing permitted GPA facilities, an increase in operational hours for existing combustion turbines, and upgrades to existing T&D systems. Interim Alternative 2 would not require new construction or enlargement of the existing footprint of the facility. Reconditioning would be performed on the existing permitted GPA facilities at the Marbo, Yigo, and Dededo combustion turbines. This alternative supports Main Cantonment Alternatives 1 and 2 and Main Cantonment Alternatives 3 and 8 would require additional upgrades to the T&D system.
- *Interim Alternative 3.* Interim Alternative 3 is a combination of reconditioning existing GPA permitted facilities at Marbo, Yigo, and Dededo and upgrades to the Navy power plant at Orote. Upgrades would be made to existing T&D. The proposed reconditioning to the existing power generation facilities at Marbo, Yigo, and Dededo would not require new construction or enlargement of the existing footprint of the facility. For the Orote power plant, upgrades would include a new fuel storage facility to facilitate longer run times between refueling. This would disturb approximately one acre (4,047 square meters). This alternative supports Main Cantonment Alternatives 1 and 2 and Main Cantonment Alternatives 3 and 8 would require additional upgrades to the T&D system.
- *Long-Term Alternative 1.* New Power Plant at Cabras Piti fueled by No. 6 oil, No. 2 diesel, or liquefied natural gas (LNG). Transmission and distribution upgrades may be required.
- *Long-Term Alternative 2.* New Power Plant at Potts Junction fueled by No. 6 oil, No. 2 diesel or LNG. Transmission and distribution upgrades may be required.
- *Long-Term Alternative 3.* GPA to provide needed power via current and/or potential new generation sources. Transmission and distribution upgrades likely required.

Minor Stationary Sources

Wastewater

- *Alternative 1a (Preferred Alternative) and 1b.* Alternative 1a supports Main Cantonment Alternatives 1 & 2; and Alternative 1b supports Main Cantonment Alternatives 3 and 8. The Alternative combines upgrade to the existing primary treatment facilities and expansion to secondary treatment at the Northern District Wastewater Treatment Plant (NDWWTP). The difference between Alternatives 1a & 1b is a requirement for a new sewer line from Barrigada housing to NDWWTP for Alternative 1b.
- *Long-Term Alternative 1.* Construct a new DoD only stand alone secondary treatment facility on DoD land at Finegayan including a new outfall in support of all main cantonment alternatives.

Solid Waste

- *Alternative 1 (Preferred Alternative)*. The Preferred Alternative for solid waste would be the continued use of Navy Landfill at Apra Harbor until Layon Landfill is opened, which is scheduled for July 2011.

Mobile sources

Mobile sources are covered by four alternatives for the location of the cantonment area functions and family housing/community support functions.

- Alternative 1. Represents one contiguous location for cantonment area functions and family housing/community support functions. It would include portions of Naval Computer and Telecommunications Station (NCTS) Finegayan and South Finegayan, as well as acquisition or long-term leasing of non-DoD lands at the former Federal Aviation Administration (FAA) parcel and the Harmon Annex parcel. A portion of the development would be constructed in the undeveloped overlay refuge.
- Alternative 2. Represents one contiguous land area for the cantonment and family housing /community support functions. It would include portions of NCTS Finegayan, portions of South Finegayan, and the acquisition or long-term leasing of portions of privately-held lands in the former FAA parcel. A portion of the development would be constructed in the undeveloped overlay refuge.
- Alternative 3. Plans for the main cantonment to include portions of NCTS Finegayan, and housing would be located on three geographically separated DoD parcels, including South Finegayan, Air Force Barrigada, and Navy Barrigada. No privately held lands would be acquired. Housing would be located non-contiguous to the main cantonment functions and a portion of the main cantonment would be constructed in the undeveloped overlay refuge.
- Alternative 8. would include portions of NCTS Finegayan, a portion of South Finegayan, the former FAA parcel, and a portion of the housing would be located on the geographically separated Air Force Barrigada parcel. A portion of privately held lands would be acquired by purchase or long-term lease. A portion of the main cantonment would be constructed in the undeveloped overlay refuge and a portion of the required housing would be non-contiguous to the Main Cantonment Area.

Construction Activity Emissions

- Construction-related emissions were estimated for each alternative based on information specific to construction activities associated with different components of the proposed action. Because no specific information regarding sizes or types of construction is provided in the case of certain components, a series of construction prototypes was developed to represent these components.
- Estimates of the operational emissions from construction equipment were developed based on the estimated hours of equipment use and the emission factors for each type of equipment. An actual running time factor (i.e., actual usage factor) was employed to determine actual equipment usage hours for the purpose of estimating equipment emissions.
- Emission factors related to construction-associated delivery trucks, truck and commuting vehicles, and asphalt curing-related VOC emissions were also calculated.

Regional Emissions under Preferred Alternatives

The greatest impact to air quality resources would occur if all of the proposed actions were implemented concurrently. Impacts on air quality were evaluated for each individual region of influence (ROI). As construction activities would occur prior to operational activities, it was assumed that all of the proposed construction actions are occurring at the same time and that all operational activity will commence upon completion of construction. The potential scenario, a consideration of the preferred alternative from each individual component of the proposed action, is addressed to provide a sumamry assessment of potential impacts associated with the overall proposed action.

Preferred Alternatives

Each component of the overall proposed action has separate alternatives. A preferred alternative has not been identified for the overall proposed action at this time, but each individual component of the proposed action is assumed to have a preferred alternative in order to facilitate this summary analysis. The alternatives to be addressed in the analysis of preferred alternatives are as follows; however, it should be noted that this study does not contain details of all components of the overall proposed action (see EIS/OEIS for further details):

- Volume 2, Marine Corps Guam: Alternative 2
- Volume 3, Marine Corps Tinian: Alternative 1
- Volume 4, Aircraft Carrier Berthing: Alternative 1
- Volume 5, Army AMDTF: Alternative 1
- Volume 6, Connected Actions:
    - Power: Interim Alternative 1 (Preferred Alternative)
    - Potable Water: Alternative 1 (Preferred Alternative)
    - Wastewater: Alternative 1a (Preferred Alternative) and 1b
    - Solid Waste: Alternative 1 (Preferred Alternative)
    - Roadway Projects: Alternative 2 (Preferred Alternative)

CAA General Conformity Applicability Analysis

The 1990 amendments to the CAA (CAAA) require federal agencies to ensure that their actions conform to the State Implementation Plan (SIP) in a nonattainment area. As the proposed action would potentially involve activities in Piti and Tanguisson sulfur dioxide (SO_2) nonattainment areas, the General

Conformity Rule (GCR) applies to the proposed activities within the nonattainment areas. Therefore, a subsequent general conformity applicability analysis is required.

The *de minimis* level established by USEPA applicable to the two non-attainment areas on Guam, Piti and Tanguisson, is 100 TPY of SO_2. If the total direct and indirect emissions of a pollutant are above the *de minimis* level, a formal general conformity determination is required for that pollutant. The net increase in SO_2 emissions with potential to emit from the proposed action within the two SO_2 nonattainment areas was predicted for operational and construction activities with potential to occur. Annual SO_2 emissions from the Guam Military Relocation under the preferred alternatives would not exceed the *de minimis* criterion of 100 TPY of SO_2 in both the Tanguisson and the Piti nonattainment areas and a formal conformity determination is not required.

Summary

The air quality analyses conducted in this study and summarized in Table ES-1 indicate that emissions from the categories and alternatives discussed above would range from less than significant impacts to significant mitigable to less than significant impacts. Alternatives with significant mitigable to less than significant impacts would require that mitigation measures be implemented if those alternatives were selected.

Table ES-1. Summary of Air Quality Impacts

Category/Alternative	*Significance Level*	*Mitigation/Comments*
Major Stationary Sources		
Power Interim Alternative 1 (Preferred Alternative)	LSI	
Power Interim Alternative 2	SI-M	Mitigation measures could include raising stack. Therefore, the impact would be less than significant.
Power Interim Alternative 3	SI-M	Mitigation measures could include a combination of raising stacks, increasing stack exit velocity, using add-on controls, and/or using lower sulfur content fuel. Therefore, the impact would be less than significant.
Power Long-Term Alternative 1	SI-M	Details are currently conceptual and may change; therefore, emissions could not be quantified. However, impacts may be significant but are anticipated to be mitigable.
Power Long-Term Alternative 2	SI-M	Details are currently conceptual; therefore, emissions could not be quantified. However, impacts may be significant but are anticipated to be mitigable.
Power Long-Term Alternative 3	SI-M	Details are currently conceptual; therefore, emissions could not be quantified. However, impacts may be significant but are anticipated to be mitigable.
Minor Stationary Sources		
Wastewater Alternative 1a (Preferred Alternative) and 1b	LSI	
Wastewater Long-Term Alternative 1	SI-M	Refers only to odor impacts.
Solid Waste Alternative 1 (Preferred Alternative)	LSI	
Mobile Sources		
Alternative 1	LSI	
Alternative 2 (Preferred Alternative)	LSI	
Alternative 3	LSI	
Alternative 8	LSI	
Construction Activity		
All Alternatives	LSI	Construction impacts for all alternatives for each component resulted in LSI.
Regional Emissions under Preferred Alternatives		
Preferred Alternative	LSI	
CAA General Conformity Applicability under Preferred Alternatives		
Preferred Alternative	LSI	Annual SO_2 emissions would not exceed the *de minimis* criterion of 100 TPY.

Notes: SI = Significant impact; SI-M = Significant impact mitigable to less than significant; LSI = Less than significant impact; NI = No impact; NA = Not available

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LIST OF ACRONYMS

AFB	Air Force Base
AFCEE	Air Force Center for Engineering and the Environment
AMDTF	Air and Missile Defense Task Force
APCR	Air Pollution Control Regulations
APCSR	Air Pollution Control Standards and Regulations
BACT	Best Available Control Technology
BMP	Best Management Practices
BOMBEX	Bombing Exercise
Btu	British Thermal Units
BUMED	Bureau of Medicine and Surgery
C3	Command, Control and Communications
CAA	Clean Air Act
CAAA	Clean Air Act Amendment
CAL	Confined Area Landing
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CM	cubic meter
CCN	Command Code Numbers
CNMI	Commonwealth of the Northern Mariana Islands
CO	carbon monoxide
CO_2	carbon dioxide
CY	cubic yard
DEIS	Draft Environmental Impact Statement
DEG	diesel electric generator
DEM	digital elevation model
DEQ	Department of Environmental Quality
DM	Defensive Maneuvering
DoD	Department of Defense
EG	Emission Guidelines
EGU	electrical generating unit
EIS	Environmental Impact Statement
EO	Executive Order
EXT	External Loads
FAA	Federal Aviation Administration
FAM	Familiarization and Instrument Flight
FCLP	Field Carrier Landing Practice
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
FSL	Forecast Systems Laboratory
ft	foot/feet
ft^2	square foot/feet
ga	gallon
GCA	Guam Code Annotated
GCR	General Conformity Rule
GEPA	Guam Environmental Protection Agency
GIS	Geographic Information Systems
GovGuam	Government of Guam
GPA	Guam Power Authority
gpd	gallons per day
gph	gallons per hour
gpm	gallons per minute
GTR	Ground Threat Reaction
GUI	graphical user interface
HIE	Helicopter Insertion Extraction
HMMV	High Mobility Multipurpose Vehicle
hr	hour(s)
hp	horsepower
HVAC	heating, ventilation, and air-conditioning
in	inch(es)
INRMP	Integrated Natural Resources Management Plan
km	kilometer(s)
km^2	square kilometer(s)
kph	kilometers per hour
kW	kilowatt(s)
kW/hr	kilowatts per hour
L	liter
LAER	Lowest Achievable Emission Rate
lb	pound
LF	linear feet
LOS	level of service
LNG	Liquefied Natural Gas
m	meter(s)
m^2	square meter(s)
m^3	cubic meters()
M	million
MACG	Marine Air Control Group Training
mg	million gallons
mgd	million gallons per day
MMBtu	million Btu
MMS	Minerals Management Service
mph	miles per hour
MSW	Municipal Solid Waste
MSWLF	Municipal Solid Waste Landfill Facility
MW	megawatts
NAA	Non-Attainment Areas
NAAQS	National Ambient Air Quality Standards
NCAR	National Center for Atmospheric Research
NCEP	National Center for Environmental Prediction
NCTS	Naval Computer and Telecommunications Station
NDWWTP	Northern District Wastewater Treatment Plant
NEPA	National Environmental Policy Act
NESHAPs	National Emission Standards for Hazardous Air Pollutants
NEW	Net Explosive Weight
NMOC	non-methane organic compounds
NO_2	nitrogen dioxides
NO_x	nitrogen oxides
NOAA	National Oceanic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
NSF	New Source Review
NSPS	New Source Performance Standards
NWF	Northwest Field
O_3	ozone
OAQPS	Office of Air Quality Planning and Standards
OEIS	Overseas Environmental Imapact Statement
O&M	Operations and Maintenance
ODMDS	Ocean Dredged Material Disposal Site
Pb	lead
PGUM	Guam International Airport
PM	particulate matter
ppm	parts per million
ppmv	parts per million by volume
PSD	Prevention of Significant Deterioration
RTA	Range Training Area
SIL	Significant Impact Level
SIP	State Implementation Plan
SLAMRAAM	Surface-Launched Advanced Medium-Range Air-to-Air Missile
SO_2	sulfur dioxide
SRTM	Shuttle Radial Topography Mission

TERF	Terrain Flight
THAAD	Terminal High Altitude Area Defense
TPY	tons per year
TSP	total suspended particles
U.S.	United States
USEPA	U.S. Environmental Protection Agency
UTM	Universal Transverse Mercator
VMT	vehicle miles traveled
VOC	Volatile Organic Compound
WGS	World Geodetic System
WWTP	Wastewater Treatment Plant

AIR IMPACT STUDY

1.0 Introduction

This report focuses on air quality issues associated with the proposed United States (U.S.) Marine Corps Relocation to Guam and the Commonwealth of the Northern Mariana Islands (CNMI). The overall proposed action includes components involving the U.S. Marine Corps (Marine Corps or Marines), the U.S. Navy (Navy) and the U.S. Army (Army). The three main components of the proposed action are briefly stated as follows:

1. *Marine Corps*. (a) Develop and construct facilities and infrastructure within Guam and the CNMI to meet the Marine Corps' living, training, and readiness requirements. (b) Relocate approximately 8,600 Marines and their 9,000 dependents from Okinawa to the Mariana Islands (Marianas) while concurrently increasing the civilian support workforce by approximately 1,700. (c) Conduct and support training and operations for the relocated Marines.
2. *Navy*. Construct a new deep-draft wharf with shoreside infrastructure improvements creating the capability to support a transient nuclear aircraft carrier and carrier strike group (CSG) in Apra Harbor, Guam.
3. *Army*. (a) Develop facilities and infrastructure on Guam to allow an Army AMDTF to protect Guam from potential ballistic missile attacks. (b) Relocate approximately 600 military personnel, 900 dependents, and 100 civilian support workforce to Guam.

The locations of Guam and Tinian are shown in Figure I.1-1.

Potential air quality effects on Guam would occur from construction and operational activities associated with project alternatives that are being evaluated for the proposed development on and around Guam that are described in detail in the Guam and Commonwealth of the Northern Marianas (CNMI) Military Relocation Environmental Impact Statement/Overseas Environmental Impact Statement (EIS/OEIS) (U.S. Navy and Joint Guam Program Office in progress). The EIS/OEIS provides further information on some components of the proposed action that are not discussed in detail in this study. Volumes 2-7 of the EIS/OEIS discuss the following components of the proposed action:

- Volume 2: Marine Corps Relocation – Guam
- Volume 3: Marine Corps Relocation – CNMI
- Volume 4: Aircraft Carrier Berthing
- Volume 5: Army Air and Missile Defense Task Force
- Volume 6: Related Actions – Utilities and Roadway Projects
- Volume 7: Mitigation, Summary of Impacts, and Cumulative Impacts

Volume 6 in particular uses many of the analyses contained in this study to determine air quality emissions associated with utilities (major and minor stationary sources) and roadway (mobile sources) projects. Construction and operational elements that would generate air quality emissions are included in all volumes of the EIS/OEIS. Regional emissions under all the preferred alternatives are covered in Volume 7.

Air quality can be affected by air pollutants produced by mobile sources, such as vehicular traffic, aircraft, or non-road equipment used for construction activities, and by fixed or immobile facilities, referred to as "stationary sources." Stationary sources can include combustion and industrial stacks and exhaust vents. This study is organized as follows:

- *Chapter 1:* Introduction. States the purpose of and need for the proposed action and presents the organization of the report.
- *Chapter 2:* Air Quality Standards and Regulations. Discusses U.S. national, Guam, and CNMI air quality standards and regulations and their application to the proposed action.
- *Chapter 3*: Air Impact Analysis. This chapter contains the analyses performed for this study. It is divided into the following sections:
  - Major stationary sources. Summarizes regulations for stationary sources of air emissions and evaluates air quality impacts of major power generation facilities under interim alternatives. Long-term alternatives for major stationary sources are currently conceptual and will be quantitatively evaluated at a later date.
  - Minor stationary sources. Evaluates air quality impacts from additional wastewater treatment and solid waste disposal associated with the proposed action under the preferred alternative, including odor impacts from wastewater treatment.
  - Mobile sources. Examines potential air quality impacts associated with mobile sources (e.g., on-road vehicle operations and roadway construction) on a micro-scale (local) and meso-scale (regional) basis.
  - Construction activity emissions. Describes various construction activities associated with different components of the proposed action and how associated air emissions were estimated for components such as buildings, equipment, vehicles, and asphalt curing. Constructions estimates for all parts of the proposed action are referenced.
  - Regional emissions under preferred alternatives. Discusses and provides references to the summary impact to air quality resources if all of the proposed actions were implemented concurrently.
  - CAA general conformity applicability analysis. Describes conformity regulations and how they apply to the proposed action.
- *Chapter 4:* References.

2.0 Air Quality Standards and Regulations

Air quality can be affected by air pollutants produced by mobile sources, such as vehicular traffic, aircraft, or non-road equipment used for construction activities, and by fixed or immobile facilities, referred to as "stationary sources." Stationary sources can include combustion and industrial stacks and exhaust vents. Potential air quality effects on Guam would occur from construction and operational activities associated with project alternatives that are being evaluated for the proposed development on and around Guam. The proposed action also includes relocation of some United States Marine Corps (USMC) training operations to the CNMI, which are considered separately from Guam due to the geographic distance. Therefore, CNMI components are discussed in a separate report (Volume 3 of the EIS/OEIS).

2.1 National Ambient Air Quality Standards

The U.S. Environmental Protection Agency (USEPA), under the requirements of the 1970 Clean Air Act (CAA), as amended in 1977 and 1990 (Clean Air Act Amendments [CAAA]), has established National Ambient Air Quality Standards (NAAQS) for six contaminants, referred to as criteria pollutants (40 Code of Federal Regulations [CFR] 50). These six criteria pollutants are:

- Carbon monoxide (CO)
- Nitrogen dioxide (NO_2)
- Ozone (O_3), with nitrogen oxides (NO_x) and volatile organic compounds (VOCs) as precursors
- Particulate matter (PM_{10}—less than 10 microns in particle diameter; $PM_{2.5}$—less than 2.5 microns in particle diameter)
- Lead (Pb)
- Sulfur dioxide (SO_2)

Table I.2-1 presents a description of the criteria pollutants and their effects on public health and welfare.

Table I.2-1. Criteria Pollutants - Sources and Impacts

Pollutants and Their Sources	*Health and Environmental Impacts*
Ozone (O_3): a gas composed of three oxygen atoms. It is not usually emitted directly into the air, but is created at ground level by a chemical reaction between oxides of nitrogen (NO_x) and volatile organic compounds (VOC) in the presence of heat and sunlight. Ground-level O_3 is known as smog. O_3 has the same chemical structure whether it occurs miles above the earth or at ground level and can have positive or negative effects, depending on its location in the atmosphere. Most O_3 (about 90%) occurs naturally in the stratosphere approximately 10 to 30 miles above the earth's surface it forms a layer that protects life on earth by absorbing most of the biologically damaging ultraviolet sunlight. In the earth's lower atmosphere, ozone comes into direct contact with living organisms. High levels of ground-level ozone can cause toxic effects, detailed in the adjacent column. VOC + NOx + Heat + Sunlight = O_3: Motor vehicle exhaust and industrial emissions, gasoline vapors, and chemical solvents are some of the major sources of NO_x and VOC that help to form O_3. Sunlight and hot weather cause ground-level O_3 to form in harmful concentrations in the air. As a result, it is considered an air pollutant, particularly in summer. Many urban areas tend to have high levels of O_3, but even rural areas are also subject to increased O_3 levels because wind carries O_3 and associated pollutants hundreds of miles away from their original sources.	**Health Problems**: • O_3 can irritate lung airways and cause inflammation much like sunburn. Other symptoms include wheezing, coughing, pain when taking a deep breath, and breathing difficulties during exercise or outdoor activities. People with respiratory problems are most vulnerable, but even healthy people that are active outdoors can be affected when O_3 levels are high. • Repeated exposure to O_3 pollution for several months may cause permanent lung damage. Anyone who spends time outdoors in the summer is at risk, particularly children and other people who are active outdoors. • Even at very low levels, ground-level O_3 triggers a variety of health problems including aggravated asthma, reduced lung capacity, and increased susceptibility to respiratory illnesses like pneumonia and bronchitis. **Plant and Ecosystem Damage**: • Ground-level O_3 interferes with the ability of plants to produce and store food, which makes them more susceptible to disease, insects, and harsh weather. • O_3 damages the leaves of trees and other plants, injuring them and impacting the appearance of cities, national parks, and recreation areas. • O_3 reduces crop and forest yields and increases plant vulnerability to disease, pests, and harsh weather.

Carbon Monoxide (CO): a colorless, odorless gas that is formed when carbon in fuel is incompletely burned. It is a component of motor vehicle exhaust, which contributes about 56 % of all CO emissions nationwide. Nonroad engines and vehicles (such as construction equipment and boats) contribute about 22 % of all CO emissions nationwide. Higher levels of CO generally occur in areas with heavy traffic congestion. In cities, 85 to 95 % of all CO emissions may come from motor vehicle exhaust. Other sources of CO emissions include industrial processes (e.g., metals processing and chemical manufacturing), residential wood burning, and natural sources such as forest fires. Woodstoves, gas stoves, cigarette smoke, and unvented gas and kerosene space heaters are sources of CO indoors. The highest levels of CO in the outside air typically occur during the colder months of the year when inversion conditions are more frequent. The air pollution becomes trapped near the ground beneath a layer of warm air.	**Health Problems**: CO can cause harmful health effects by reducing oxygen delivery to the body's organs (e.g., heart, brain) and tissues. • **Cardiovascular Effects** – The health threat from lower levels of CO is most serious for those who suffer from heart disease (e.g., clogged arteries, congestive heart failure). For a person with heart disease, a single exposure to CO at low levels may cause chest pain and reduce their ability to exercise; repeated exposures may contribute to other cardiovascular effects. • **Central Nervous System Effects** – Even healthy people can be affected by high levels of CO. People who breathe high levels of CO can develop vision problems, reduced ability to work or learn reduced manual dexterity, and difficulty performing complex tasks. At extremely high levels, CO is poisonous and can cause death. • **Smog** – CO contributes to the formation of smog (ground-level O_3), which can trigger serious respiratory problems.

Sulfur Dioxide (SO_2): SO_2 belongs to the family of sulfur oxide gases (SO_x). These gases dissolve easily in water. Sulfur is prevalent in raw materials, including crude oil, coal, and ore that contains common metals like aluminum, copper, zinc, lead, and iron. SO_x gases are formed when fuel containing sulfur, such as coal and oil, is burned, when gasoline is extracted from oil, or when metals are extracted from ore. SO_2 dissolves in water vapor to form acid, and interacts with other gases and particles in the air to form sulfates and other products that can be harmful to people and their environment. Over 65 % of SO_2 released to the air, or more than 13 million tons per year, comes from electric utilities, especially those that burn coal. Other sources of SO_2 are industrial facilities that derive their products from raw materials like metallic ore, coal, and crude oil, or that burn coal or oil to produce process heat. Examples are petroleum refineries, cement manufacturing, and metal processing facilities. Also, locomotives, large ships, and some nonroad diesel equipment currently burn high sulfur fuel and release SO_2 emissions to the air in large quantities.	SO_2 causes a wide variety of health and environmental impacts because of the way it reacts with other substances in the air. Particularly sensitive groups include people with asthma who are active outdoors, and children, the elderly, and people with heart or lung disease. **Health Problems**: • **Respiratory Effects from Gaseous SO_2** – High levels of SO_2 in the air can cause temporary breathing difficulty for people with asthma who are active outdoors. Longer-term exposures to high levels of SO_2 gas and particles cause respiratory illness and aggravate existing heart disease. • **Respiratory Effects from Sulfate Particles** - SO_2 reacts with other chemicals in the air to form tiny sulfate particles. When these are breathed, they gather in the lungs and are associated with increased respiratory symptoms and disease, difficulty in breathing, and premature death. **Plant and Ecosystem Damage**: • **Acid Rain** - SO_2 and NO_x react with other substances in the air to form acids, which fall to earth as rain, fog, snow, or dry particles. Some may be carried by the wind for hundreds of miles. • **Plant and Water Damage** - Acid rain damages forests and crops, changes the makeup of soil, and makes lakes and streams acidic and unsuitable for fish and other aquatic life. Continued exposure over a long time changes the community of plants and animals in an ecosystem. **Visibility Impairment:** • Haze occurs when light is scattered or absorbed by particles and gases in the air. Sulfate particles are the major cause of reduced visibility in many parts of the United States. **Aesthetic Damage:** • SO_2 accelerates the decay of building materials and paints, including irreplaceable monuments, statues, and sculptures that are part of our nation's cultural heritage.

Nitrogen Oxides (NO_x): the generic term for a group of highly reactive gases, all of which contain nitrogen and oxygen in varying amounts. Many of the NO_x are colorless and odorless. However, one common pollutant, NO_2, along with particles in the air can often be seen as a reddish-brown layer over many urban areas. NO_x form when fuel is burned at high temperatures, as in a combustion process. The primary sources of NO_x are motor vehicles, electric utilities, and other industrial, commercial, and residential sources that burn fuels.	NO_x causes a wide variety of health and environmental impacts because of various compounds and derivatives in the family of NO_x, including NO_2, nitric acid, nitrous oxide, nitrates, and nitric oxide. **Health Problems**: • **Ground-level** O_3 **(smog)** is formed when NO_x and volatile organic compounds (VOCs) react in the presence of heat and sunlight. Children, people with lung diseases (e.g., asthma), and people who work or exercise outside are susceptible to adverse effects such as damage to lung tissue and reduction in lung function. O_3 can be transported by wind currents and cause health impacts far from original sources. Millions of Americans live in areas that do not meet the health standards for ozone. • **Particles** - NO_x reacts with ammonia, moisture, and other compounds to form nitric acid and related particles. Human health concerns include effects on breathing and the respiratory system, damage to lung tissue, and premature death. Small particles penetrate deeply into sensitive parts of the lungs and can cause or worsen respiratory diseases such as emphysema and bronchitis, and aggravate existing heart disease. • **Toxic Chemicals** - In the air, NO_x reacts readily with common organic chemicals and even O_3, to form a wide variety of toxic products. Examples of these chemicals include the nitrate radical, nitroarenes, and nitrosamines.

	Plant and Ecosystem Damage: • **Acid Rain** - NO_x and sulfur dioxide react with other substances in the air to form acids that fall to earth as rain, fog, snow or dry particles, which can be carried by wind for hundreds of miles. Acid rain causes lakes and streams to become acidic and unsuitable for many fish and other aquatic life. • **Water Quality Deterioration** - Increased nitrogen loading in water bodies, particularly coastal estuaries, upsets the chemical balance of nutrients used by aquatic plants and animals. Additional nitrogen accelerates "eutrophication," which leads to oxygen depletion and reduces fish and shellfish populations. • **Global Warming** - One of the NO_x, nitrous oxide, is a greenhouse gas. It accumulates in the atmosphere with other greenhouse gasses causing a gradual rise in the earth's temperature. This leads to increased risks to human health, a rise in sea level, and other adverse changes to plant and animal habitat. **Visibility Impairment**: • Nitrate particles and nitrogen dioxide can block the transmission of light, reducing visibility in urban areas and on a regional scale in other areas. **Aesthetic Damage:** • Acid rain damages cars, buildings and historical monuments.

Particulates (PM_{10} and $PM_{2.5}$): Particulate matter (PM) is the term for particles found in the air, including dust, dirt, soot, smoke, and liquid droplets. Particles can be suspended in the air for long periods of time. Some particles are large or dark enough to be seen as soot or smoke. Others are so small that individually they can only be detected with an electron microscope. Some particles are directly emitted into the air. They come from a variety of sources such as cars, trucks, buses, factories, construction sites, tilled fields, unpaved roads, stone crushing, and burning of wood. Other particles may be formed in the air from the chemical change of gases. They are indirectly formed when gases from burning fuels react with sunlight and water vapor. These can result from fuel combustion in motor vehicles, at power plants, and in other industrial processes.	**Health Problems**: • Many scientific studies have linked breathing PM to a series of significant health problems, including: – Aggravated asthma. – Increases in respiratory symptoms (e.g., coughing; difficult or painful breathing etc.) – Chronic bronchitis. – Decreased lung function. – Premature death. **Plant and Ecosystem Damage:** • Particle matter can be carried over long distances by wind, settling on ground or water. The effects of this atmospheric deposition include: – Contributing to acidification of water bodies. – Changing the nutrient balance in coastal waters and large river basins. – Depleting the nutrients in soil. – Damaging sensitive forests and farm crops. **Visibility impairment:** • PM is the major cause of reduced visibility (haze) in parts of the United States. **Aesthetic damage:** • Soot, a type of PM, stains and damages stone and other materials, including culturally important objects such as monuments and statues.

Source: USEPA (August 2003)

The NAAQS are comprised of primary and secondary standards. The primary standards were established to protect human public health. Typical sensitive land uses and associated sensitive receptors protected by the primary standards include publicly accessible areas, such as residences, hospitals, libraries, churches, parks, playgrounds, and schools. The secondary standards were established to protect the environment, including plants and animals, from adverse effects associated with pollutants in the ambient air.

The Guam Air Pollution Control Standards and Regulations, under Section 1103.2, contain the Guam Ambient Air Quality Standards (GAAQS), which are equivalent to the NAAQS. Table I.2-2 presents the NAAQS and the GAAQS.

The CNMI Air Pollution Control Regulations require compliance with NAAQS and permitting for stationary sources of air emissions. The CNMI Division of Environmental Quality (DEQ) reviews air permit applications and issues air permits for stationary sources.

The air emissions that may result from the proposed action are addressed in this study for all criteria pollutants with the exception of lead. Lead emissions have been reduced significantly over years as a result of federal programs to control vehicle emissions by eliminating the use of lead-containing fuel. Ozone is a regional pollutant which normally is not addressed on a project basis; however, its precursor's emissions (NO_x and VOCs) are quantified in this study.

Table I.2-2. National and Guam Ambient Air Quality Standards

Pollutant and Averaging Time	*Primary Standard*	*Secondary Standard*
Carbon Monoxide:		
8-Hour Concentration[1]	9 ppm (10,000 µg/m^3)	None
1-Hour Concentration[1]	35 ppm (40,000 µg/m^3)	
Nitrogen Dioxide:		
Annual Arithmetic Mean	0.053 ppm (100 µg/m^3)	Same as Primary
Ozone		
8-Hour Average[2]	0.075 ppm	Same as Primary
Particulate Matter[3]:		
PM_{10}		
24-Hour Average[4]	150 µg/m^3	Same as Primary
$PM_{2.5}$		
Annual Arithmetic Mean[5]	15 µg/m^3	Same as Primary
24-Hour Average[6]	35 µg/m^3	Same as Primary
Lead:		
Quarterly Average	1.5 µg/m^3	Same as Primary
Rolling 3-Month Average[7]	0.15 µg/m^3	Same as Primary
Sulfur Dioxide:		
Annual Arithmetic Mean	0.03 ppm	---
24-Hour Maximum[1]	0.14 ppm	---
3-Hour Maximum[1]	---	0.5 ppm (1,300 µg/m^3)

Notes: 1. Not to be exceeded more than once a year
2. To attain this standard, the 3-year average of the fourth-highest daily maximum 8-hour average ozone concentrations measured at each monitor within an area over each year must not exceed 0.075 ppm.
3. PM_{10} - particulate matter diameter of 10 microns or less; $PM_{2.5}$ - particulate matter diameter of 2.5
4. Not to be exceeded more than once per year on average over 3 years.
5. To attain this standard, the 3-year average of the weighted annual mean PM2.5 concentrations from single or multiple community-oriented monitors must not exceed 15.0 µg/m^3.
6. To attain this standard, the 3-year average of the 98th percentile of 24-hour concentrations at each population-oriented monitor within an area must not exceed 35 µg/m^3.
7. Final rule signed October 15, 2008.
Sources: 40 CFR 50 and Guam Air Pollution Control Standards and Regulations.

2.2 Attainment Status and Area Classification

Areas where concentration levels are below the NAAQS for a criteria pollutant are designated as being in "attainment." Areas where a criteria pollutant level equals or exceeds the NAAQS are designated as being in "nonattainment." Based on the severity of the pollution problem, nonattainment areas are categorized as marginal, moderate, serious, severe, or extreme. Where insufficient data exist to determine an area's attainment status, it is designated as either unclassifiable or in attainment.

Components of the proposed action would occur in various locations on Guam. Many of the areas where the actions are proposed are currently designated as attainment areas for all criteria pollutants. There are two areas on Guam that are designated as attainment areas for CO, NO_x, O_3, PM, and Pb, but are designated as nonattainment areas for SO_2, as follows (Figure I.2-1, Guam SO_2 Nonattainment Areas):

- Piti: Portion of Guam within a 3.5- kilometers(km) (2.2-mile) radius of the Piti Power Plant
- Tanguisson: Portion of Guam within a 3.5-km (2.2-mile) radius of the Tanguisson Power Plant

Figure I.2-1. Guam SO_2 Nonattainment Areas

Pursuant to Section 325(a) of the CAA and a petition submitted by the Governor of Guam on February 11, 1997, the EPA conditionally exempts Guam power plants from certain CAA requirements including using low sulfur fuel requirement. Such low sulfur fuel exemption is also applicable to Guam highway diesel vehicles (USEPA, 2000).

Both Piti and Tanguisson areas are designated nonattainment for sulfur dioxide as a result of monitored and modeled exceedences in the 1970's prior to implementing changes to power generation facilities. Guam believes the area around Piti is now in attainment. The Tanguisson power plant is relatively far from sensitive land use areas. Since Guam is exempt from using low sulfur content fuel, it is anticipated that the allowance of using high sulfur content fuel by power generation facilities is the primary cause of the current nonattainment designation of the two areas.

On CNMI, except for power generating facilities, there are no significant sources of air emissions resulting from the components of the proposed action on Tinian. However, military training vessels, on-road vehicles, and open burnings are sources of emissions that contribute to the existing ambient air quality background conditions at Tinian. While there are no air monitoring stations on Tinian, it can be assumed that ambient air quality is good and in compliance with air quality standards given the small number of emission sources on the island and that the island is currently designated as an attainment area for all criteria pollutants.

2.3 Clean Air Act General Conformity

The 1990 amendments to the CAA require federal agencies to ensure that their actions conform to the appropriate state implementation plan (SIP) in a nonattainment area. The SIP is a plan that provides for implementation, maintenance, and enforcement of the NAAQS, and it includes emission limitations and control measures to attain and maintain the NAAQS. Conformity to a SIP, as defined in the CAA, means conformity to a SIP’s purpose of reducing the severity and number of violations of the NAAQS to achieve attainment of such standards. The federal agency responsible for an action is required to determine if its action conforms to the applicable SIP.

The USEPA has developed two sets of conformity regulations, and federal actions are appropriately differentiated into transportation projects and non-transportation-related projects:

- Transportation projects are governed by the “transportation conformity” regulations (40 CFR Parts 51 and 93), which became effective on December 27, 1993 and were revised on August 15, 1997.
- Non-transportation projects are governed by the “general conformity” regulations (40 CFR Parts 6, 51 and 93) described in the final rule for Determining Conformity of General Federal Actions to State or Federal Implementation Plans that was published in the Federal Register on November 30, 1993. The General Conformity Rule (GCR) became effective January 31, 1994 and has not been updated since then.

As the proposed action is a non-transportation project and would potentially involve activities in the Piti and Tanguisson SO_2 nonattainment areas, the GCR applies to the proposed activities within the nonattainment areas. Therefore, a conformity analysis is required.

2.4 Air Toxics and Mobile Source Air Toxics

In addition to the criteria pollutants, the CAA also lists 188 air toxics, known as hazardous air pollutants (HAPs). Toxic air pollutants include a number of substances that are known or suspected to cause cancer or other health effects in humans when they are exposed to certain levels of the pollutants. The CAA authorizes USEPA to characterize and control emissions of these pollutants. However, unlike the criteria pollutants, the ambient air quality standards have not been established for the majority of the air toxics by USEPA.

For air toxic pollutants, USEPA has identified a group of 21 HAPs as mobile-source air toxics, among which a total of six air toxics are considered the priority Mobile Source Air Toxics (MSATs). These priority MSATs are benzene, formaldehyde, acetaldehyde, diesel particulate matter/diesel exhaust organic gases, acrolein, and 1,3-butadiene.

2.5 Greenhouse Gas Emissions

Greenhouse gases (GHGs) are compounds found naturally within the Earth's atmosphere. These compounds trap and convert sunlight into infrared heat. In this way, greenhouse gases act as insulation in the stratosphere, and contribute to the maintenance of global temperatures. As the levels of greenhouse gases increase at ground level, the result is an increase in the temperature on Earth, commonly known as global warming.

The climate change associated with global warming is predicted to produce negative economic and social consequences across the globe. Within the last 100 years or so, both ocean and land surface temperatures have risen significantly. Warmer water and increased humidity is thought to cause changes in weather that may encourage tropical cyclones, more intense hurricanes, and increased flooding. Changing wave patterns, caused by the Earth's warming may produce more tidal waves and stronger beach erosion on the coasts, causing some coastal lands to be washed beneath the ocean's surface. Furthermore, the sea level has risen on average, between 4 and 10 inches since 1990, and threatens to increase salinity in freshwaters throughout the world. On land, global warming effects are thought to be evidenced in the melting of glaciers and polar ice caps, droughts, and the greater incidence of forest fires. As these climate changes occur, the range of some insect and pests and associated diseases may expand across the globe further complicating the effects of natural disasters across the globe.

The most common GHGs emitted from natural processes and human activities include carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O). The primary GHG emitted by human activities in the U.S. is CO2, representing approximately 85% of total GHG emissions. The largest source of CO2, and of overall GHG emissions, is fossil fuel combustion. CH4 emissions, which have declined from 1990 levels, result primarily from enteric fermentation (digestion) associated with domestic livestock, decomposition of wastes in landfills, and natural gas systems. Agricultural soil management and mobile source fuel combustion are the major sources of N2O emissions in the U.S. Because CO2 emissions comprise approximately more than 85% of GHGs and CO2 emission factors are readily available for many stationary and mobile sources, this study considers CO2 as an indicator of GHG emissions. Accordingly, this study provides estimates of CO2 emissions predicted in a similar way to those predicted for criteria pollutants. Unlike criteria pollutants, there is no established impact significance threshold for GHG, inclusive of CO2, therefore, the predicted GHG emissions levels provided in this study only fulfill National Environmental Policy Act (NEPA) disclosure purposes, whereas predicted criteria pollutant emissions are regulated under the NAAQS.

3.0 Air Impact Analysis

The air impact analysis is divided into the following sections:

- Major stationary sources.
- Minor stationary sources.
- Mobile sources.
- Construction activity emissions.
- Regional emissions under preferred alternatives.
- CAA general conformity applicability analysis.

3.1 Major Stationary Sources

According to CAA regulations, a facility is considered to be a major stationary source when annual emissions exceed 250 tons per year (TPY) of any criteria pollutants (with the exception of a list of 28 source catagories including fossil-fuel–fired steam electric plants with more than 250 British thermal unit per hour heat input for which 100 TPY will apply) in an attainment area or and 100 TPY in a nonattainment area. New or existing major stationary sources are associated with the major power generation facilities described in EIS/OEIS under the following alternatives:

- Major power generation facilities under power interim alternatives 2 and 3 by upgrading Guam Power Authority (GPA) existing combustion turbines (CTs) and increasing existing operational capacity of several existing CTs.
- Three programmatic power long-term alternatives that may include constructing a new power plant with option of using Number (No.) 6 oil fuel, No.2 oil fuel, or liquefied natural gas (LNG). However, given the limited design specifics provided for these programmatic alternatives, the air quality impact analysis cannot be performed at this time and, if required, may be addressed in separate NEPA documents in the future if required.

3.1.1 Stationary Source Regulations

Table I.3-1 summarizes the applicable emissions thresholds for air pollutants for a major source and a major source modification. For sources with annual emission levels exceeding the threshold of a major stationary source or major modification of the existing major stationary source, microscale ambient concentration levels from these sources are predicted and compared with the applicable standards and thresholds. The analysis is conducted in accordance with NEPA requirements, and the air permitting requirements described in Guam's Environmental Protection Agency (GEPA's) Air Pollution Control Standards and Regulations (APCSR) Section 1104.6 (c) (12) (ix) (GEPA 2004) and applicable USEPA regulations on major sources. As noted, a facility is considered to be a major stationary source when annual emissions exceed 250 TPY of any criteria pollutants in an attainment area (with the exception of a list of 28 source catagories including fossil-fuel–fired steam electric plants with more than 250 British thermal unit per hour heat input for which 100 TPY will apply) and 100 TPY in a nonattainment area. For an existing major stationary source, the net emission increase of each attainment pollutant that exceeds a specified significant emission increase level is considered to be a major modification that is subject to the provisions of the major modification regulations and New Source Review (NSR) regulations.

Table I.3-1. Applicable Major Source and Major Modification Thresholds

Pollutant	*Major Source Threshold (TPY)*	*Major PSD Source Threshold (TPY)*	*Major Modification Threshold (TPY)*
Sulfur dioxide (SO_2)	100	250/100[a]	40
Carbon monoxide (CO)	100	250/100[a]	100
Particulate matter (PM_{10})[b]	100	250/100[a]	15
Particulate matter ($PM_{2.5}$)[b]	100	250/100[a]	10
Nitrogen oxide (NOx)	100	250/100[a]	40
Volatile organic compounds (VOCs)	100	250/100[a]	40

Notes: PSD = Prevention of Significant Deterioration

[a] 100 TPY applies to certain sources such as fossil-fuel–fired steam electric plants with more than 250 British thermal unit per hour heat input

[b] PM_{10} is particulate matter with a diameter of 10 microns. $PM_{2.5}$ is particulate matter with a diameter of 2.5 microns.

Source: USEPA (40 CFR)

The USEPA also established Prevention of Significant Deterioration (PSD) regulations, last modified under the 1990 CAA Amendments (42 USC §§7470-7479), to ensure that air quality in attainment areas does not significantly deteriorate as a result of construction and operation of major stationary sources, and to allow future industrial growth to occur. New PSD major sources or major modifications to existing PSD major sources that are located in attainment areas are required to obtain a PSD permit prior to initiation of construction. Major new sources or major modifications to existing major sources located in non-attainment areas must meet the more stringent nonattainment NSR requirements as established in both USEPA and GEPA programs.

A PSD major source is classified as a stationary source with the potential to emit 250 TPY of any regulated pollutant in an attainment area. However, for several types of major source operations, including fossil fuel–fired steam electric plants of more than 250 million British thermal units (Btu) per hour heat input, 100 TPY is the PSD major source threshold. For an existing PSD major source, the net emission increase of each attainment pollutant that exceeds a specified significant emission increase level is considered to be a major modification that is subject to the provisions of the PSD regulations and PSD NSR. Table I.3-1 summarizes the applicable emissions thresholds for air pollutants for a PSD major source. Table I.3-2 provides the PSD Significant Impact Levels (SILs) for CO, NO_x, PM_{10} and $PM_{2.5}$ and SO_2.

Table I.3-2. PSD Significant Impact Levels

Pollutant	*Averaging Period*	*PSD Significant Impact Levels (µg/m3)*
NO_2	Annual (1)	1
SO_2	Annual (1) 24-hour (2) 3-hour (2)	1 5 25
PM_{10}	Annual (4) 24-hour (3)	1 5
$PM_{2.5}$	Annual (4) 24-hour (3)	1 5
CO	8-hour (2) 1-hour (2)	500 2,000

Notes:
(1) Not to be exceeded.
(2) Not to be exceeded more than once per year.
(3) Not to be exceeded more than an average of 1 day per year over 3 years.
(4) Not to be exceeded by the arithmetic average over 3 successive years.
Source: 40 CFR 51.165

Because Guam has two nonattainment areas for SO_2, a nonattainment NSR under both USEPA and GEPA programs would be required by the project for SO_2 if an existing source major modification within the SO_2 nonattainment area would occur. However, since the interim alternatives would not construct a new power facility or modify any of existing GPA facilities within the two SO_2 nonattainment areas, the nonattainment NSR requirement would not apply.

3.1.2 Operating Permits

Stationary sources of air emissions at the various sites that could be affected by the proposed action include combustion turbines, boilers, generators, and fuel tanks. The CAAA set permit rules and emission standards for pollution sources of certain sizes. An air permit application is submitted by the operator of an emitting source in order to obtain approval of the source construction permit. A construction permit generally specifies a time period within which the source must be constructed. Permits should be reviewed for any modifications to the site or the air emissions sources to determine permit applicability. The USEPA oversees the programs that grant stationary source operating permits (Title V) and new or modified major stationary source construction and operation permits (NSR). The New Source Performance Standards (NSPS) apply to sources emitting criteria pollutants, while the National Emission Standards for Hazardous Air Pollutants (NESHAPs) apply to sources emitting hazardous air pollutants (HAPs). HAPs, also known as toxic air pollutants, are chemicals that can cause adverse effects to human health or the environment. The 1990 CAAA directed USEPA to set standards for all major sources of toxic air pollutants. The Title V major source thresholds for pollutant emissions that are applicable to Guam are:

- 100 tons per year (TPY) for any criteria pollutant
- 25 TPY total HAPs
- 10 TPY for any one HAP.

The GEPA has adopted the USEPA-established stationary source regulations and acts as the administrator to enforce these stationary source air pollution control regulations on Guam. This is accomplished by requiring major emission sources and major modifications to employ the best available control technology (BACT) to curb air pollutant emissions (GEPA, Guam Code Annotated [GCA] Chapter 49, Title 10) in attainment areas. Therefore, the GEPA standards and permitting requirements may impose design constraints on modified major stationary sources. Further, the GEPA standards and stationary source regulations in conjunction with USEPA standards and regulations establish the basis for the assessment of the potential impacts on ambient air quality of the modified emission sources.

3.1.3 Interim Alternatives

In 2008, the power requirements for proposed facilities were evaluated under the various planning alternatives (NAVFAC 2008). This study determined the electrical generation capacity needs, evaluated the interconnection options with existing GPA infrastructure, and evaluated alternative energy generation options that are viable on Guam. The air quality modeling for stationary sources assesses the air impacts from three proposed power interim alternatives, considering various equipment operating scenarios within the interim alternatives. The three interim alternatives that were evaluated for the proposed action are as follows:

- *Power Interim Alternative 1 (Preferred Alternative).* Interim Alternative 1 would recondition existing combustion turbines and upgrade T&D systems and would not require new construction or enlargement of the existing footprint of the facility. This work would be undertaken by the GPA on its existing permitted facilities. Reconditioning would be made to existing permitted facilities at the Marbo, Yigo, Dededo, and Macheche combustion turbines. These combustion turbines are not currently being used up to permit limits. T&D system upgrades would be on existing above ground and underground transmission lines. This alternative supports Main Cantonment Alternatives 1 and 2 and Main Cantonment Alternatives 3 and 8 would require additional upgrades to the T&D system.
- *Power Interim Alternative 2.* Interim Alternative 2 is a combination of reconditioning of existing permitted GPA facilities, an increase in operational hours for existing combustion turbines, and upgrades to existing T&D systems. Interim Alternative 2 would not require new construction or enlargement of the existing footprint of the facility. Reconditioning would be performed on the existing permitted GPA facilities at the Marbo, Yigo, and Dededo combustion turbines. This alternative supports Main Cantonment Alternatives 1 and 2 and Main Cantonment Alternatives 3 and 8 would require additional upgrades to the T&D system.
- *Power Interim Alternative 3.* Interim Alternative 3 is a combination of reconditioning existing GPA permitted facilities at Marbo, Yigo, and Dededo and upgrades to the Navy power plant at Orote. Upgrades would be made to existing T&D. The proposed reconditioning to the existing power generation facilities at Marbo, Yigo, and Dededo would not require new construction or enlargement of the existing footprint of the facility. For the Orote power plant, upgrades would include a new fuel storage facility to facilitate longer run times between refueling. This would disturb approximately one acre (4,047 square meters). This alternative supports Main Cantonment Alternatives 1 and 2 and Main Cantonment Alternatives 3 and 8 would require additional upgrades to the T&D system.

The objective of the interim power alternatives is to provide interim power solutions for the proposed action. The power required under each interim alternative would consequently result in an increase in operational hours from existing GPA power facilites to be affected under the proposed action. Potential air emissions associated with the operational hours increase above the current actual GPA opeational condition were estimated. Based on the potential to emit (PTE) defined in the air permit for each affected existing power facility, the emissions associated with the megawatt hours required from each facility (described in Chapter 3 of Volume 6) were prorated with the permitted annual emissions under the megawatt hour capacity for each affected facility. Table I.3–3 summarizes the percentage of megawatt hour capacity needed from each facility under each interim alternative. The potential increases in annual emissions under and/or above the permitted level are summarized in Tables I.3-4 to I.3-6.

Table I.3-3. Megawatt Hour Percentage under Proposed Interim Action

Affected Sources	*Interim Alternative 1*	*Interim Alternative 2*	*Interim Alternative 3*
Dededo CT #1	95	90	80
Dededo CT #2	95	90	85
Marbo	85	80	55
Yigo	85	160	150
Macheche	50	0	0
Orote	0	0	460

Table I.3-4. Net Increase in Annual Emissions – Interim Alternative 1

Affected Source	*Pollutant*					
	SO_2	*CO*	*PM_{10}*	*NO_x*	*VOC*	*CO_2*
Dededo CT#1	907.1	87.4	82.4	345.4	16.6	120,780.1
Dededo CT#2	907.1	87.4	82.4	345.4	16.6	120,780.1
Yigo	245.0	49.0	74.9	101.8	15.9	53,561.1
Marbo	212.1	32.3	10.5	110.8	0.14	24,154.8
Macheche	134.3	25.0	22.0	67.6	0.45	23,888.2
Combined Sources	2,405.6	281.0	272.1	970.9	49.8	343,164.4
Net Increase in Potenital to Emit Above Permitted Capacity						
All Affected Sources	0	0	0	0	0	0

Table I.3-5. Net Increase in Major Stationary Source Annual Emissions – Interim Alternative 2

Affected Source	*Annual Emissions (TPY)*					
	SO_2	*CO*	*PM_{10}*	*NOx*	*VOC*	*CO_2*
Dededo CT#1	859.4	82.8	78.0	327.2	15.8	114,423.3
Dededo CT#2	859.4	82.8	78.0	327.2	15.8	114,423.3
Yigo	470.4	94.1	143.8	195.5	30.5	102,823.1
Marbo	199.6	30.4	9.9	104.2	0.1	22,734.0
Combined Sources	2,388.7	290.0	309.7	954.1	62.2	354,403.7
Net Increase in Potenital to Emit Above Permitted Capacity						
Yigo	234.4	46.9	71.7	97.4	15.3	51,234.9
Other Affected Sources	0	0	0	0	0	0

Table I.3-6. Net Increase in Affected Source Annual Emissions – Interim Alternative 3

Affected Source	*Annual Emissions (TPY)*					
	SO2	*CO*	*PM10*	*NOx*	*VOC*	*CO2*
Dededo CT#1	763.9	73.6	69.4	290.8	14.0	101,709.6
Dededo CT#2	811.6	78.2	73.7	309.0	14.9	108,066.4
Yigo	444.3	88.9	135.8	184.6	28.8	97,110.7
Marbo	137.2	20.9	6.8	71.7	0.1	15629.6
Orote	107.2	28.5	32.2	448.5	34.8	27,857.3
Combined Sources	2,264.2	290.0	317.9	1,304.6	92.6	350,373.7
Net Increase in Potenital to Emit Above Permitted Capacity						
Orote Point	111.1	29.5	33.4	464.6	36.0	28,859.0
Yigo	234.4	46.9	71.7	97.4	15.3	51,234.9
Other Affected Sources	0	0	0	0	0	0

Since the affected existing facilities have demonstrated the compliance with applicable CAA air quality standards under their Title V permitted capacity, the utilization of these existing CTs under their permitted capacity can be consequently considered in compliance with any CAA air quality standards without resulting in significant air quality impacts. Therefore, the predicted increases in annual emissions within the permitted capacity of each affected CT are not subject to a further air quality impact analysis and are only included in the EIS/OEIS for the purposes of NEPA disclosure. The following sections focus on addressing the potential air quality impact from these CTs that require increased permitted capacity.

Table I.3-7 provides a summary of the interim alternatives, including the type of change, whether a permit modification would be required, and if impact modeling was performed. A total of five facilities or locales may be affected by the alternatives.

Each alternative may or may not require PSD/NSR permit applications for affected existing units. For each potentially affected major stationary source under the proposed interim alternatives, impact modeling was performed as necessary, as discussed below. Given the limited modifications to the existing major sources under interim alternatives, the comparisons of the modeling results with PSD SILs (Table I.3-2) were used as the basis for evaluating potential impact significance from three interim alternatives.

Table I.3-7. Summary of the Facilities and Locales – Interim Alternatives

Alternative	*Facility location*	*Type unit change*	*Permitted Emissions Increase*	*Permit Modification*	*Impact Modeling*
Interim 1	Marbo	Utilize	No	No	No
	Yigo	Utilize	No	No	
	Dededo No. 1 and No.2 CTs	Utilize	No	No	
	Macheche	Utilize	No	No	
Interim 2	Marbo	Utilize	No	No	No
	Yigo	Increase hours of operation	Yes	Yes	Yes
	Dededo No. 1 and No.2 CTs	Utilize	No	No	No
Interim 3	Marbo	Utilize	No	No	No
	Yigo	Increase hours of operation	Yes	Yes	Yes
	Dededo No.1 and No.2 CTs	Utilize	No	No	No
	Orote	Increase hours of operation	Yes	Yes	Yes

Figure I.3-1 (Locations of Candidate Major Existing EGU Sources on Guam) shows existing major electrical generating units (EGU) facilities, affected existing EGU facilities under the interim alternatives, and the potential locations of the proposed long-term new power plant. As noted previously, given the limited design specifics for the long-term programmatic alternatives, potential air quality impact analysis is not considered in this study and, if required, may be addressed in separate NEPA documents in the future. However, the potential impacts from the proposed modification of existing EGU facilities (interim alternatives) are evaluated here.

Figure I.3-1. Locations of Affected Major Existing EGU Sources on Guam

3.1.4 Impact Modeling for Power Plants

This section discusses the air quality impacts resulting from each of the proposed interim power alternatives. The goal of the power plant impact modeling study was to determine whether the proposed modification with potential improvements to the existing CTs would exceed the Class II area[1] SILs defined for PSD of the air quality on Guam.

3.1.4.1 Technical Approach For Modeling

The PSD air quality dispersion modeling was used to estimate air concentrations based on the available information for existing sources. The components of the modeling include, but are not limited to, choice of models and model options, assumptions and caveats regarding the emissions limits established in the affected GPA existing source Title V permit, development of model inputs, and analysis of the modeling results to quantify changes in air emission concentrations resulting from each alternative. Air dispersion modeling was conducted for the emissions arising from the combustion of fossil fuels by existing major EGUs that would be utilized under the interim alternatives GPA EGUs.

The dispersion modeling approach is designed to estimate near-field impacts, defined as within a 50-km (31-mile) transport radius (USEPA 2005), which covers the Region of Influence (ROI) of the proposed interim alternatives. The modeling approach was developed in accordance with the following USEPA guidance:

- Guideline on Air Quality Models (Revised), incorporated as Appendix W of 40 CFR Part 51, Code of Federal Register (FR) Revision to the Guideline on Air Quality Models (USEPA November 2005)
- Draft New Source Review Workshop Manual (USEPA 1990)

The USEPA recommended regulatory dispersion model for near-field applications, American Meteorological Society (AMS)/EPA Regulatory Model (AERMOD), was used. AERMOD is a steady-state plume dispersion model that simulates transport and dispersion from multiple point, area, or volume sources based on an up-to-date characterization of the atmospheric boundary layer. The model employs hourly sequential pre-processed meteorological data to estimate concentrations for selected averaging times from 1 hour to 1 year.

Because the existing sources to be impacted under interim alternatives are located inland in areas remote from coastal effects and under the influence of the relatively constant nature of the trade winds, the near-source steady-state regulatory model, AERMOD, is an appropriate tool for estimating air impacts from these sources.

Geography and Climate

Guam is the largest and southernmost island in the Marianas Archipelago, bounded by the Philippine Sea to the west and the western Pacific Ocean to the east. The island is divided into a northern coralline limestone plateau and a southern chain of volcanic hills. It is 25 km by 45 km (15.5 miles by 28 miles) and has a population approximately of 176,000 people, with a number of significant population centers concentrated in the central of the island, near areas of interest covered by this study.

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[1] Class I areas have the highest level of protection from air pollutants, and very little deterioration of air quality is allowed in these areas. Moderate deterioration, associated with well managed growth, is allowed in Class II areas.

The southwestern portion of Guam has a sharp ridge of hills terminating at, the highest point on Guam. The topography is significant enough to often induce rows of cumulus or cumulus-type clouds that align parallel to the low-level wind, downwind of the island. The northern portion of the island has a raised plateau where Andersen Air Force Base (AFB) is located. The terrain of the island in many places rises steeply near the shore.

The climate is characterized as tropical marine. The weather is generally hot and very humid with little seasonal temperature variation. Guam has two seasons, the wet season (July - December) and the dry season (January - June). During the dry season the prevailing winds (trades from the east) intensify. Figure I.3-2 (Annual Surface Wind Rose at Guam International Airport (PGUM) – 2005) displays the wind rose from PGUM. The figure illustrates the peak in the trade wind direction (east to northeast). When a cool lake or sea breeze blows inland, it gradually warms through heating and mixing. At the shoreline this layer of cool air is generally rather thin, but as it moves inland the surface heating creates an increasingly thicker layer of well mixed air. When the plume from a power plant near the shore initially enters the atmosphere it experiences relatively stable air in the marine layer or in the air above it. The power plant plume rapidly rises and reaches a constant height above the ground and moves inland. In the stable air the plume initially grows in size at a moderate pace. When the plume encounters the increasing well-mixed layer, an abrupt and rapid mixing occurs, known as fumigation.

Shoreline sea breeze circulations can modify a dominant trade wind from the east northeast on Guam and bluffs along the shoreline can also influence local wind patterns. Onshore wind flow from either the trade winds or from a sea breeze may result in the possibility of shoreline fumigation for the EGUs located along the coast. As all affected existing EGUs under interim alternatives are all located in inland areas, the use of AERMOD which assumes that the atmosphere has the same degree of mixing everywhere outside of a building wake is applicable.

Meteorological Model Input Selection and Preparation

AERMOD meteorological inputs consist of hourly surface observations from the airport over five years (2003 through 2007), and twice-daily upper air soundings collected at the airport (WBAN No. 91212). Data was processed using AERMET software, with surface parameters derived from land use around the PGUM anemometer site (see discussion of land use below.)

Geophysical Data Preparation

Topographic digital elevation model (DEM) data was extracted from the Shuttle Radial Topography Mission (SRTM) database provided by the U.S. Geological Survey USGS at approximately 100 m (328 feet [ft]) resolution. The DEM data was reprojected from longitude – latitude to UTM zone 55 using the WGS-84 datum.

The U.S. Department of Agriculture (USDA) has created a 28 m (92 ft) high resolution ground cover data set for Guam (Liu and Fischer 2000) using satellite imagery, a spectral classification scheme, and an extensive ground level calibration effort. This data set was processed to develop fractional land cover information for the CALSYSTEM Makegeo Program. USDA land cover categories represent specific landscapes unique to Guam. Twenty-one land cover categories were mapped using a supplied weighting system for a set of reference classes for which values are assigned for roughness, albedo (surface reflectivity of sun's radiation), Bowen ratio (the ratio of sensible heat to latent heat -in arid zones, values are much greater than unity; in humid zones they are much less than unity), and other variables. These values were then averaged for each grid. For each receptor around a typical radial AERMOD extending out to 1 km (0.6 mile) the roughness length, albedo, and Bowen ratio were found and averaged to a 30

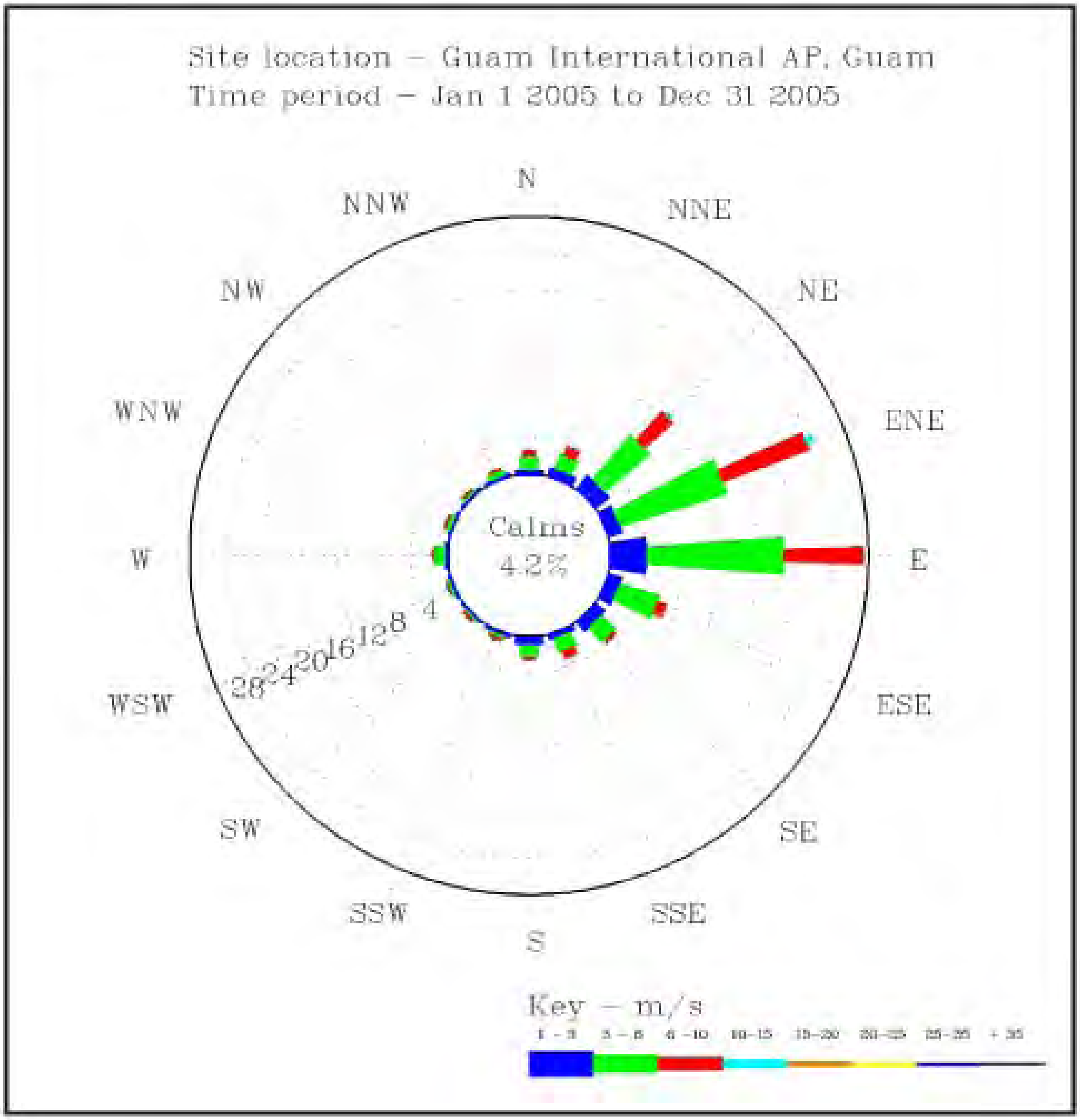

Figure I.3-2. Annual Surface Wind Rose at Guam's International Airport (PGUM) - 2005

degree sector. A single season was used since snow and deciduous tree variations are not present on Guam. The 28 m (92 ft) ground cover classification information was also analyzed to provide a matrix of the land cover by type around PGUM.

Modeling System Configuration

The receptor network that was used for AERMOD modeling is described below along with the AERMOD control input settings and the output concentration metrics that were used to assess the concentrations for existing sources, and the changes in concentrations under each of the interim alternatives.

Receptor Configuration

A common receptor grid was utilized for AERMOD modeling. The grid includes a near source field of receptors around each source, and a coarse grid of receptors extending across the modeling domain.

The near source receptor grids are centered on each of the interim alternatives major sources that will be utilized under Interim Alternatives 2 and 3 (i.e., Marbo, Yigo and Orote). Each of three polar grids consists of receptors along 36 radials that are spaced at 10 degree arcs (10 through 360 degrees). For each radial, receptors are located at 100 m (328 ft) increments from 100 m to 2,000 m (6,560 ft) from the center of the receptor grid, and at 200 m (656 ft) increments from 2,000 m to 5,000 m (16,400 ft) from the center of the grid. The three near field polar grids are overlaid on a rectangle grid which covers the entire island of Guam, with receptors spaced 500 m (1,640 m) apart. The rectangular receptor network is truncated over water. In areas where two polar grids overlap, the receptors of the higher resolution grid are retained. A minimum source receptor distance of 100 m was imposed in these areas of overlap. Figure I.3-3 (Coarse Grid Receptor and High-Resolution Radial Receptor Network Coverage) illustrates the coarse grid of receptors with the refined radial receptor grids centered at Orote, Yigo, and Marbo power plants that may be utilized under Interim Alternatives 2 and 3.

Development of Source Stack Parameters and Model Emissions

Source information, including emission rates and stack parameters, is discussed for existing sources in the Section 3.1.5. For stacks that do not follow good engineering practice (GEP) (e.g. less than 2.5 times highest wake generating building height), the physical height and footprint of nearby buildings were established from available drawings, satellite images, onsite photographs, and information confirmed by the GPA. Stack locations were determined from drawings, satellite images and onsite photographs. Model emission estimates SO_2, NO_x, CO, and PM were based on the emissions limits available from current Title V permits and prior GPA dispersion modeling inputs.

Options for AERMOD

AERMOD was run with the rural dispersion option and no dry or wet deposition. The model used stack tip downwash and elevated terrain effects. Predicted concentration averaging times used were:

- 3-hour, 24-hour, and annual for SO_2
- Annual for NO_x
- 1-hour and 8-hour for CO
- 24-hour and annual for PM_{10}
- 24-hour and annual for $PM_{2.5.}$ Given the lack of established emission factors, it is conservatively assumed that the $PM_{2.5}$ emission rate is the same as the PM_{10} emission rate for modeling purposes.

Figure I.3-3. Coarse Grid Receptor and High-Resolution Radial Receptor Network Coverage

3.1.4.2 Historical Monitoring Observations and Existing Background Conditions

The government of Guam has not collected ambient air quality data since 1991. Therefore, no existing ambient air quality data are available to represent current air quality conditions with respect to the criteria pollutants for which the NAAQS were established. Historical data are available from 1972 through 1991, when ambient air quality data were collected at a number of sites through a USEPA-sponsored monitoring program. The monitored pollutants were total suspended particles (TSP), SO_2, NO_2, and nitrogen monoxide (NO). In 1991, PM_{10} was monitored in addition to TSP.

Prior to 1991, TSP were monitored at 20 sites, SO_2 at 14 sites, NO_2 at five sites, and NO at one site. In 1991, PM_{10} was monitored at four sites. In addition to the historical monitoring identified above, the GPA established a network of five stations to measure SO_2 at locations that are not downwind or close to any major EGUs during normal trade wind conditions from the fall of 1999 through the summer of 2000. Measured data for these monitoring stations, whose locations are shown in Figure I.3-4, indicate that the Apra Heights site has the highest concentrations, occurring in spring. The Dededo site recorded the highest concentrations during the unstable low wind conditions in summer. The Orote Point monitor concentrations were the highest during the fall and winter months. All of the observed SO_2 concentrations were below the 24-hour NAAQS.

Because there are no comprehensive ambient background air quality levels from recent monitoring available for Guam, the existing background air quality conditions around Guam are based on the current ambient air quality attainment status condition applicable for Guam:

- Attainment for all criteria pollutants, except for $SO_{2.}$
- Two SO_2 nonattainment areas with a 3.5 km radius around Piti and Tanguisson power plants.

The areas around affected existing sources under the three interim alternatives are in attainment areas. Ambient air quality conditions are expected to be affected by existing stationary source operations and other minor source operations such as vehicular traffic. Since the comparisons of the modeling results with PSD SILs (Table I.3-2) were used as the basis for evaluating potential impact significance from the three interim alternatives, ambient background conditions were not considered in the study.

Figure I.3-4. Guam Power Authority Air Monitoring Stations

3.1.4.3 Affected Existing Source Emission Rates and Stack Parameters

Among the affected existing sources, Yigo, Marbo and Orote power plants would increase annual operating hours and would require permit modification in order to meet the power demand under Interim Alternatives 2 and 3. The current permits are discussed in this section. Data used for the AERMOD modeling analysis for these sources were based on information available from various sources including air permits and GPA-provided information, and several air quality studies previously conducted for some existing EGUs. To predict NO_2 concentration levels, the USEPA-recommended default conversion factor of 0.75 (40 CFR 51-Appendix W USEPA 2005a) was used to convert predicted NO_x concentration levels to NO_2 concentration levels.

*Orote Point***.** The Navy's Orote Point Power Plant located in Apra Harbor has several air permits with combined permitted emissions exceeding 100 TPY for both NO_x and VOC. The sources covered by these separate air permits under the Orote Point Power Plant are as follows:

- Three 6.6 MW emergency diesel (No. 2 fuel oil) generators that can operate up to 1,350 hours per year combined for all three units (450 hours per unit), one 300 kilowatt (kW) black start emergency generator, a 196,000 cubic yard (yd^3) (149,852.75 cubic meter [m^3]) sanitary landfill and shredder. Permitted emissions from these sources are included in a Title V permit.

- One 10.5 million Btu (MMBtu)/hour (hr) boiler, one 6.3-MMBtu/hr boiler, and one 200 kW emergency generator.

- Various portable boilers and emergency diesel generators.

The existing permitted emissions for the Orote Point are summarized in Table I.3-8. The stack parameters and emissions for the Orote Point that were used in the modeling analysis are summarized in Tables I.3-9 and I.3-10 for the short-term and annual modeling scenarios, respectively. Annual emissions were scaled based on permitted 1,350 hours of operation for all three units combined. The sanitary landfill, a tire shredder, and some small emergency generators were not modeled.

Table I.3-8. Existing Permitted Conditions – Orote Point

Unit Name	*Capacity MW*	*Fuel*	*Emissions (TPY)*				
			CO	*NOx*	*SO_2*	*PM*	*VOC*
EG -1	6.6	No. 2	2.03	32.00	7.65	0.23	2.48
EG-2	6.6	No. 2	2.03	32.00	7.65	0.23	2.48
EG-3	6.6	No. 2	2.03	32.00	7.65	0.23	2.48
Sanitary Landfill	196,000 yd^3/yr						118.00
342 – tire shredder	0.210	No. 2	1.41	6.55	0.43	0.47	0.53
424- EG	0.30	No. 2	2.02	9.35	0.62	0.66	0.76
Total			9.52	111.90	24.00	1.80	126.73

Source: Guam EPA Title V Permit No. FO-015F

Table I.3-9. Existing Permitted Conditions Used for Short-Term Modeling Scenario – Orote Point

Unit Name	*Capacity MW*	*Stack Exhaust Temp. °K*	*Stack Height m*	*Stack Exit Velocity m/sec*	*Emissions (g/sec)*		
					CO	*SO_2*	*PM*
EG -1	6.6	623	35	23.6	1.14	4.32	0.13
EG-2	6.6	623	35	23.6	1.14	4.32	0.13
EG-3	6.6	623	35	23.6	1.14	4.32	0.13

Source: Emissions Guam EPA Title V Permit No. FO-015F

Table I.3-10. Existing Conditions Used for Annual Modeling Scenario – Orote Point

Unit Name	*Capacity MW*	*Stack Exhaust Temp. °K*	*Stack Height m*	*Stack Exit Velocity m/sec*	*Emissions (g/sec)*		
					NOx	*SO_2*	*PM*
EG -1	6.6	623	35	23.6	0.92	0.22	0.0066
EG-2	6.6	623	35	23.6	0.92	0.22	0.0066
EG-3	6.6	623	35	23.6	0.92	0.22	0.0066

Source: Emissions Guam EPA Title V Permit No. FO-015F

Yigo Station. The Yigo Station Power Plant located in the town of Yigo has a capacity of 22 MW. The existing permitted emissions for the Yigo Station Power Plant are summarized in Table I.3-11. The unit is currently used for peaking and emergency operations. No additional information is available at this time.

The stack parameters and emissions for Yigo Station Power Plant that were used in the short-term and annual modeling analysis are summarized in Tables I.3-12 and I.3-13, respectively. Annual emissions were scaled based on permitted 4,280 hours of operation.

Table I.3-11. Existing Permitted Conditions– GPA Yigo Station

Unit Name	*Capacity MW*	*Fuel*	*Annual emissions (TPY)*				
			CO	*NOx*	*SO_2*	*PM*	*VOC*
CT-1	22	Diesel	37.71	119.10	250.60	5.95	0.20
BSG-1	0.575	Diesel	3.18	13.88	4.68	0.084	0.41
Total			40.89	132.97	255.27	6.04	0.61

Source: Guam EPA Title V Permit No. FO-009

Table I.3-12. Existing Conditions Short-Term Modeling – GPA Yigo Station

Unit Name	*Capacity MW*	*Stack Exhaust Temp. °K*	*Stack Height m*	*Stack Exit Velocity m/sec*	*Emissions (g/sec)*		
					CO	*SO_2*	*PM*
CT-1	22	805	12.8	34.5	2.75	15.75	2.52

Source: Emissions based on Guam EPA Title V Permit No. FO-009

Table I.3-13. Existing Conditions Used for Annual Modeling – GPA Yigo Station

Unit Name	*Capacity MW*	*Stack Exhaust Temp. °K*	*Stack Height m*	*Stack Exit Velocity m/sec*	*Emissions (g/sec)*		
					NOx	*SO_2*	*PM*
CT-1	22	805	12.8	34.5	3.44	7.70	1.23

Source: Emissions based on Guam EPA Title V Permit No. FO-009

3.1.4.4 Interim Alternative Criteria Pollutant Impact Analysis

Since potential existing source modification associated with the interim alternative would not change the short-term (i.e., daily) operation condition, the short-term emissions and stack parameters would remain the same as the existing source conditions. However, under Interim Alternatives 2 and 3, the annual emission rates for affected Orote, Marbo and Yigo CTs would be affected given the increase in annual operational capacities at each CT. The comparisons of the modeling results with PSD SILs were used as the basis for evaluating potential impacts from the three interim alternatives.

Annual criteria pollutant emissions levels for the proposed interim alternatives were estimated using the existing permits for the sources and the proposed hours of operation for SO_2, NO_2, CO, and PM emissions.

In addition to the criteria pollutant dispersion modeling, the potential increase in hazardous pollutants (HAPs) and greenhouse gas emissions in terms of CO_2 were also estimated and are provided for each EGU with potential to be modified.

Interim Alternative 1

This alternative would utilize up to five existing permitted Guam Power Authority (GPA) Combustion Turbines (CTs) to support interim load demands that result in no air permit modifications and no change in permitted air emissions. Affected units may include Yigo, Dededo No. 1 and No. 2, Marbo, and Macheche CTs and may require transmission and distribution upgrades.

Because the overall permitted capacity and the operational scheme for these combustion turbines would not change, the resulting potential air quality impact would remain the same as the current permitted conditions established previously during each facility permitting process. Therefore, the Interim Alternative 1 would not result in any increase of air emissions at these facilities under the permitted condition. Furthermore, utilization of these permitted sources is in compliance with any applicable CAA air quality standards and would not result in a significant air quality impacts.

Interim Alternative 2

This alternative utilizes upto four existing permitted GPA facilities at Marbo, Yigo, and Dededo No. 1 and No. 2, and would result in an increase of operational hours for the existing CT facilities requiring a permit modification at Yigo due to an increase of annual emissions. The Yigo plant permitted annual hours of operation would increase from 4,280 hours per year to 7,760 hours per year. Additionally, transmission and distribution upgrades may be required.The expanded capacity required would be evenly distributed between the three existing facilities based on their available design capacity. The Yigo plant would require an air permit as part of the major modification of existing major stationary sources. The expansion-associated increases in criteria pollutant emissions were predicted and are summarized in Table I.3-5. The level of emissions increases are above the major modification thresholds summarized in Table I.3-1. In addition to the criteria pollutants, the greenhouse gas emission increase in terms of CO_2 was also estimated using the USEPA AP-42 emission factors associated with the size of combustion turbine Yigo uses (USEPA 1995 and after). The change of emissions levels above the current permitted level at Yigo is significant and would require obtaining a permit modification for Yigo's Title V and PSD permits under Interim Alternative 2.

Since the short-term emission rates for all three stationary sources (Yigo, Marbo, Dededo) would not change from the existing conditions, no short-term impacts under Interim Alternative 2 would occur. For both short-term and annual average conditions, the concentration levels under Interim Alternative 2 were predicted through the dispersion modeling around the Yigo Power Plant. Table I.3-14 presents the emission rates utilized for the annual modeling scenario based on the increase in the annual hours of operation.

Table I.3-14. Yigo Annual Modeling Scenario – Interim Alternative 2

Unit	*Capacity*	*Stack Exhaust Temp.*	*Stack Height*	*Stack Exit Velocity*	*Emissions (g/sec)*		
Name	*MW*	*°K*	*m*	*m/sec*	*NOx*	*SO_2*	*PM*
CT-1	22	805	12.8	34.5	6.21	13.07	0.31

Based on the predicted incremental concentration from Yigo alone, both short-term and long-term levels were predicted to exceed the PSD SIL of 1 µg/m^3 for SO_2 (Table I.3-15). In order to improve the existing conditions under Interim Alternative 2, mitigation measures would be considered: 1) increasing the CT stack height, or 2) utilizing low sulfur content diesel fuel with 0.05% sulfur, as compared to the current 0.6% content, or 3) increasing stack exit velocity. The modeling analysis was conducted assuming a mitigation measure of increasing the stack height to 32 meters. Under such improved source conditions, the model-predicted concentration levels are all below the existing condition levels and the PSD SILs (Table I.3-16). Therefore, under mitigated Interim Alternative 2 conditions, the existing ambient air quality conditions would be improved and no significant air quality impacts would occur. It should be noted that the detailed mitigation measure(s) would be determined during the design and permit application stage.

Table I.3-15. Predicted Criteria Pollutant Concentrations at Yigo – Interim Alternative 2

Pollutant	*Averaging Period*	*Baseline Yigo only µg/m3*	*Proposed Yigo only µg/m3*	*Proposed Yigo only Maximum Increment µg/m3*	*PSD SIL µg/ m3*
NO_2	Annual	0.777	1.407	0.630	1
SO_2	Annual	2.319	4.200	1.882	1
	24-hour	34.442	34.442	NA	5
	3-hour	131.46	131.46	NA	25
PM_{10}	Annual	0.370	0.672	0.301	1
	24-hour	4.687	4.687	NA	5
$PM_{2.5}$	Annual	0.354	0.643	0.288	1
	24-hour	2.475	2.475	NA	5
CO	8-hour	17.612	17.612	NA	500
	1-hour	30.338	30.338	NA	2,000

Table I.3-16. Predicted Criteria Pollutant Concentrations at Yigo – Mitigated Interim Alternative 2

Pollutant	*Averaging Period*	*Baseline Yigo only µg/m3*	*Proposed Yigo only µg/m3*	*Proposed Yigo only Maximum Increment µg/m3*	*PSD SIL µg/ m3*
NO_2	Annual	0.777	0.932	0.306	1
SO_2	Annual	2.319	2.781	0.915	1
	24-hour	34.442	15.339	0.503	5
	3-hour	131.46	33.834	1.622	25
PM_{10}	Annual	0.370	0.445	0.147	1
	24-hour	4.687	2.189	0.0804	5
$PM_{2.5}$	Annual	0.354	0.418	0.138	1
	24-hour	2.475	1.315	0.0804	5
CO	8-hour	17.612	4.934	0.194	500
	1-hour	30.338	6.516	0.377	2,000

Interim Alternative 3

This alternative utilizes upto four existing permitted GPA facilities at Marbo, Yigo, and Dededo No. 1 and No. 2, and the existing Navy Orote Power Plant. There would be an increase in annual operational hours for existing CTs at Yigo and Orote facilities, which would require permit modifications due to increase of annual emissions. Additionally, transmission and distribution upgrades may be required.

Interim Alternative 3 combines elements of Interim Alternatives 1 and 2 with phased utilization of existing GPA-permitted facilities at Marbo, Yigo, and Dededo, and the Navy's Orote Point plant. The differences in Interim Alternative 3 as compared to Interim Alternative 2 are the modification of Orote Point plant in Apra Harbor/Central Guam West area. Interim Alternative 3 would increase hours of operation at Yigo from the permitted 4,280 to 7,760 hours per year each. Orote hours of operation would increase from 1,350 hours per year (3 units combined) to 7,884 hours (3 units combined).

Table I.3-17 presents the emission rates utilized for the annual modeling scenario based on the increase in the annual hours of operation at Yigo and Orote Point. The Dededo and Marbo annual emission rate would remain unchanged. The short-term modeling scenario is the same as the existing source modeling, as no change is proposed to short-term operation of the unit.

Table I.3-17. Affected Source Modeling Parameters – Interim Alternative 3

Unit	***Capacity***	***Stack Exhaust Temp.***	***Stack Height***	***Stack Exit Velocity***	***Emissions (g/sec)***		
Name	*MW*	*°K*	*m*	*m/sec*	*NOx*	*SO_2*	*PM*
Yigo CT-1	22	805	12.8	34.5	6.23	13.95	2.232
Orote EG -1	6.6	623	35	23.6	5.38	1.29	0.04
Orote EG-2	6.6	623	35	23.6	5.38	1.29	0.04
Orote EG-3	6.6	623	35	23.6	5.38	1.29	0.04

The increases in annual emissions levels above the permitted levels estimated are considered significant, as shown in Table I.3-6. The Yigo and Orote facilities would require permit modifications for both Title V and PSD permit under Interim Alternative 3.

Since the short-term emission rates would not change from the existing conditions, no short-term impact under Interim Alternative 3 would occur. However, for the annual average condition, concentration levels under Interim Alternative 3 were predicted through the dispersion modeling around Orote and Yigo plants. The concentrations predicted around the Yigo Power Plant are the same as shown in Table I.3-15. The modeling results around Orote are summarized in Table I.3-18. The PSD SIL of 1 μg/m^3 would be exceeded at Orote for SO_2 and NO_2.

Table I.3-18. Predicted Criteria Pollutant Concentrations at Orote from Interim Alternative 3

Pollutant	*Averaging Period*	*Baseline Orote only μg/m3*	*Proposed Orote only μg/m3*	*Proposed Orote only Maximum Increment μg/m3*	*PSD SIL μg/m3*
NO_2	Annual	1.408	8.232	6.824	1
SO_2	Annual	0.449	2.632	2.183	1
	24-hour	36.184	36.184	N/A	5
	3-hour	50.780	50.780	N/A	25
PM_{10}	Annual	0.014	0.080	0.066	1
	24-hour	1.027	1.027	N/A	5
$PM_{2.5}$	Annual	0.013	0.077	0.064	1
	24-hour	0.760	0.760	N/A	5
CO	8-hour	12.068	12.068	N/A	500
	1-hour	24.603	24.603	N/A	2,000

Because the incremental concentration from Orote and Yigo were predicted to exceed the PSD SIL of 1 μg/m^3 for SO_2 and/or $NO_{2,}$ mitigation measures would be considered 1) increasing the modified CT stack heights for the Yigo and Orote power plants, 2) increasing stack exit velocities at at Orote, and 3) adding NOx control for the three units at Orote. A more detailed discussion of an example of proposed type of add-on control is presented below.

In order to control NO_x emissions at the Orote Power Plant, the use of add-on control devices is considered as a mitigation measure for the proposed increase in operational hours of the three diesel generators. Specifically, the use of selective catalytic reduction (SCR) system(s) can be used as add-on control. The SCR system is a common and effective method of NO_x control that uses ammonia to reduce NO_x to N_2 and H_2O in the presence of a catalyst. A SCR system is comprised of an ammonia storage tank, ammonia forwarding pumps and control, an injection grid (system of nozzles that spray ammonia into the exhaust gas ductwork), a reactor which contains the catalyst, and instrumentation and controls. Aqueous ammonia (a solution of ammonia and water) is pumped into the injection grid and sprayed into the gas flow upstream of the reactor. The hot exhaust gas vaporizes the water and the ammonia is released and mixed with the exhaust. As the flow passes through the reactor, the reactions cited above are triggered by the presence of the catalyst. In order to achieve high NO_x removal and to compensate for imperfect distribution of NO_x and NH_3, thermal decomposition of some NH_3, and other factors, excess ammonia is injected at levels greater than required for stoichiometric balance.

The typical operation of an SCR system significantly reduces NO_x emissions at control efficiencies of approximately 90 percent. However, because existing units at Orote will be retrofitted with the control devices, a more conservative 75 percent control was assumed for modeling purposes. Thus, the use of add-on SCR systems at the Orote Plant with a conservative 75 oercent NO_x control efficiency of at least 75 percent was considered as part of the overall mitigated Interim Alternative 3 mitigation.

Although the detailed mitigation measures would be determined during the design and permit application stage, the mitigation modeling analysis conducted assumes a combination of 1) an increase of the Yigo current stack height to 32 meters and the Orote current stack heights to 45 meters, 2) increasing the stack exit velocities of 55.0 m/s for each stack at Orote power plants, and 3) adding NOx control for the three units at the Orote power plant.

Under such improved source conditions, the model-predicted concentration levels are all below the PSD SILs (Tables I.3-16 and I.3-19) for individual source as well as the two combined affected sources (Table I.3-20). Therefore, it can be concluded that the mitigated Interim Alternative 3 would not result in significant air quality impacts.

Therefore, under mitigated Interim Alternative 3 conditions, the existing ambient air quality conditions would be improved and no significant air quality impacts would occur.

Table I.3-19. Predicted Criteria Pollutant Concentrations at Orote from Mitigated Interim Alternative 3

Pollutant	*Averaging Period*	*Baseline Orote only μg/m3*	*Proposed Orote only μg/m3*	*Proposed Orote only Maximum Increment μg/m³*	*PSD SIL μg/m3*
NO_2	Annual	1.408	0.868	0.008	1
SO_2	Annual	0.449	1.114	0.719	1
	24-hour	36.184	16.082	3.807	5
	3-hour	50.780	22.671	23.617	25
PM_{10}	Annual	0.014	0.034	0.022	1
	24-hour	1.027	0.445	0.115	5
$PM_{2.5}$	Annual	0.013	0.032	0.021	1
	24-hour	0.760	0.309	0.115	5
CO	8-hour	12.068	5.516	3.019	500
	1-hour	24.603	17.410	15.533	2,000

Table I.3-20. Predicted Criteria Pollutant Concentrations from Mitigated Interim Alternative 3 Combined Sources

Pollutant	*Averaging Period*	*Baseline μg/m3*	*Proposed Interim Alternative 3 μg/m3*	*Proposed Interim Alternative 3 Increment μg/m3*	*PSD SIL μg/m3*
NO_2	Annual	1.419	0.932	0.307	1
SO_2	Annual	2.319	2.782	0.916	1
	24-hour	36.248	16.146	3.807	5
	3-hour	131.46	33.834	23.617	25
PM_{10}	Annual	0.370	0.445	0.147	1
	24-hour	4.687	2.189	0.115	5
$PM_{2.5}$	Annual	0.354	0.418	0.147	1
	24-hour	2.475	1.315	0.115	5
CO	8-hour	17.615	5.534	3.019	500
	1-hour	30.338	17.410	15.533	2,000

3.1.5 Interim Alternatives 2 and 3 HAPs Emissions Analysis

HAP emissions from combustion turbines at Yigo, Marbo and Orote Point were based on existing permit levels established in existing Title V permits for each facility. Under the proposed Interim Alternatives 2 and 3, the only variable that changed for each operating scenario was the annual hours of operation, while there would be no change under Interim Alternative 1. Based on the applicable hours of operation of the CTs for interim alternatives 2 and 3, the total resultant HAPs emissions and the incremental differences above the permitted levels for the CTs at Yigo and Orote were calculated and are provided in Table I.3-21. Since the total HAP resultant levels at each modified source would be well below the major source threshold (25 TPY of total HAPs), the increase in total HAP level under each interim alternative is not considered significant.

Table I.3-21. HAPs Emissions and Incremental Increase Above Permitted Level for Combustion Turbines

	Yigo	*Orote Point*
Total Current HAP Emissions (TPY)	0.64	0.0624
Total Proposed HAP Emissions (TPY)	1.16	0.364
Incremental Difference (TPY)	0.52	0.302

3.1.6 Interim Alternatives 2 and 3 CO_2 Emissions Analysis

Emissions of CO_2 from combustion turbines at Yigo, Marbo and Orote Point were calculated using USEPA AP42 emission factors (USEPA 1999, 2000), permit information, and manufacturer data. Specifically, a fuel input emission factor for distillate oil-fired turbines of 157 pound (lb)/MMBtu from USEPA (USEPA 2000) was used.

Heat input for each of the combustion turbines was calculated using manufacturer provided engine capacity output in MWs, and assumed an engine efficiency of 40% (as noted within the Yigo permit statement of basis) to generate input capacities for each turbine.

For Yigo and Orote Point, CO_2 emissions were calculated for both current operations and proposed future operations to determine the incremental change in CO_2 emissions. The only variable that would change for each operating scenario is the annual hours of operation. Based on the applicable hours of operation of the combustion turbines for both operating scenarios and the MW output of each engine, the total resultant CO_2 emissions and the incremental differences for the combustion turbines at Yigo and Orote Point were calculated and are provided in Table I.3-22.

Table I.3-22. CO_2 Emissions and Incremental Increase for Combustion Turbines

	Yigo	*Orote Point*
Total Current CO_2 Emissions (TPY)	63,013.05	5,962.68
Total Proposed CO_2 Emissions (TPY)	114,247.96	34,822.07
Incremental Difference (TPY)	51,234.91	28,859.39

<u>Summary of Impacts</u>

Due to incomplete design data provided for the three programmatic long-term alternatives the potential air quality impact analysis is not included in this study and, if required, may be addressed in a future NEPA document. However, given the potential size of a new power plant, and the exemption to using low sulfur content fuel in Guam, a new power plant as proposed under each long-term alternative using current fuel types would have potential to result in a significant air quality impact in Guam. Successful mitigation would require improvements to source physical parameters and/or the use of cleaner fuel types. These measures would likely be required to prevent the occurrence of significant air quality impacts.

Table I.3-23 summarizes the potential air quality impacts associated with each of the interim and long-term alternatives for major stationary sources. Operational activities for Interim Alternative 1 would result in less than significant impacts to air quality resources. Under Interim Alternative 2, impacts would be significant, but mitagable to less than significant. The change of emissions levels at Yigo Power Plant would be significant and the Yigo Power Plant would be required to obtain a permit modification for both the Title V and PSD permit. Under Interim Alternative 3, impacts would be also significant, but mitagable to less than significant at the two facilities - the Yigo and Orote facilities – which would require permit modifications for both Title V and PSD permits.

Table I.3-23. Summary of Potential Air Quality Impacts – Major Stationary Sources

	Interim Alt. 1	*Interim Alt. 2*	*Interim Alt. 3*
Power	LSI	SI-M	SI-M

3.2 Minor Stationary Sources

New or modified minor stationary sources that are associated with the utility development include the wastewater treatment plant and the solid waste landfill facility. Air emissions under each of these alternatives were modeled, as described in the following sections.

In addition to the minor stationary sources noted above, the proposed Marine Corps Main Cantonment build-up will require various minor stationary sources such as heating boilers, emergency generators, etc. At this stage, most of these anticipated minor sources are unknown because the proposed action is still in the EIS/OEIS planning stage. These minor stationary sources are typically of a small scale, and would potentially produce only negligible emissions. As such, operation of these sources is unlikely to require air permitting. Nevertheless, as these sources are identified during the design stage for each proposed facility, these minor stationary source emissions will be quantified to ensure that their operation is in compliance with applicable regulations.

3.2.1 Annual Operational Emissions for Wastewater Treatment

The proposed alternative (Alternative 1a and 1b) combines upgrade to the existing primary treatment facilities and expansion to secondary treatment at the Northern District Wastewater Treatment Plant (NDWWTP). The difference between Alternatives 1a and 1b is a requirement for a new sewer line from Barrigada housing to NDWWTP for Alternative 1b. Because this alternative would utilize existing primary and secondary treatment facilities within their operational capacity and these facilities consist of only limited combustion sources, it is anticipated that this alternative would not result in significant air quality impacts with respect to criteria pollutants. Although potential odor emissions associated with wastewater treatment would likely increase above the existing level, the odor impact evaluated over the short-term average condition (e.g., one hour) around existing facilities would remain the same and would result in no significant odor impact.

Given the incomplete design data provided for the programmatic long-term alternative, potential air quality impacts resulting from the alternative are not analyzed in this study and, if required, may be addressed in a future NEPA document. However, potential odor emissions from the new long-term wastewater treatment facility are expected to be significant particularly within the neighborhoods located around the new facility, and given the relatively high temperature in Guam. Odor control measures are anticipated to be required for the new facility under the long-term alternative.

3.2.2 Annual Operational Emissions for Solid Waste Disposal

Alternative 1 was evaluated for solid waste disposal, as follows:

The Preferred Alternative for solid waste would be the continued use of Navy Landfill at Apra Harbor until Layon Landfill is opened, which is scheduled for July 2011. Operation of solid waste disposal facilities to handle additional solid waste generated as a result of the Proposed Action would increase air emissions. The USEPA LandGEM model (USEPA December 2005) was used to predict the increase in VOC and CO_2 emissions associated with the added solid waste disposal.

Landfill Gas Emissions Model (LandGEM) and Predicted Emissions

The LandGEM model (Version 3.02) is a screening tool used to estimate emission rates from municipal solid waste landfills of total landfill gas, methane, carbon dioxide, non-methane organic compounds (NMOC), and individual air pollutants (USEPA May 2005). The model uses a first order decay equation and estimates annual emissions over a period specified by the user. LandGEM provides two sets of default parameters to use if site-specific data are not available and CAA defaults and inventory defaults. The CAA defaults are based on federal regulations pertaining to municipal solid waste (MSW) landfills as specified in the CAA, and may be used to determine whether the proposed landfill would be subject to control requirements associated with the regulations. The inventory defaults are based on emission factors in the USEPA *Compilation of Air Pollution Emission Factors (AP-42)* (USEPA 1995 and after) and may be used to generate emission estimates for use in emission inventories and air permits.

Control requirements could include a gas flare or flare stack to vent and/or burn waste gas resulting from the decomposition of waste. Flaring is a VOC combustion control process in which the VOCs are piped to a remote, usually elevated location, and burned in an open flame in the open air using auxiliary fuel, steam, air, or a specially designed burner tip, to promote mixing for nearly complete (>98%) VOC destruction. In this evaluation, 99 percent destruction efficiency was assumed.

LANDGEM Model Parameters and Data Inputs

The CAA default parameters were used in this analysis to determine whether the proposed landfill would be subject to control requirements associated with the regulations. The CAA defaults incorporate the federal NSPS requirements for new MSW landfills, the federal Emission Guidelines (EG) for existing MSW landfills, and the NESHAP for MSW landfills. The emission estimates generated from the model reflect maximum expected emissions and are used to determine whether a potential landfill would be subject to NSPS/EG and/or NESHAP regulatory controls.

The applicability of the NSPS to a particular landfill is determined in tiers. Landfills under 2.5 million tons (or 2.5 million cubic meters of waste) are not subject to the rule. After the size cutoff, the first tier of the applicability determination is to assess whether estimated emissions of NMOCs exceed a cutoff value of 50 megagrams (Mg), or metric tons, of NMOCs a year (USEPA May 2005). Landfills with emissions exceeding the cutoff value can install emission controls or move to the second tier of the applicability determination, which consists of testing the landfill for landfill gas NMOC concentrations. If testing shows NMOC emissions that exceed 50 Mg of NMOCs/yr, the landfill can choose to install emission controls or move to the third tier of the applicability determination, which is to perform another test to obtain a site-specific methane generation rate constant.

LandGEM relies on four model parameters to estimate landfill emissions, as follows:

- Methane generation rate (k).
- Potential methane generation capacity (L_o).
- NMOC concentration.
- Methane content.

The methane generation rate constant, or *k* value, is a constant that determines the rate of methane generation for the mass of waste in the landfill. The higher the value of *k*, the faster the methane generation rate increases and then decays over time. The value of *k* is a function of: the moisture content of the waste mass; the availability of nutrients for the microorganisms that break down the waste and form methane and carbon dioxide; the pH of the waste mass; and the temperature of the waste mass. The default CAA value is 0.05/ year.

The potential methane generation capacity (L_o) is a constant that represents the potential capacity of a landfill to generate methane. This value depends only on the type and composition of waste placed in the landfill. The higher the cellulose content of the waste, the higher the value of *Lo*. The default CAA value is 170 m^3/Mg.

The NMOC concentration in landfill gas is a function of the type of waste in the landfill and the extent of the reactions that produce various compounds from the anaerobic decomposition of waste. The default CAA value is 4,000 parts per million by volume (ppmv) as hexane. Finally, in the LandGEM model, emissions resulting from a MSW landfill are estimated to be approximately 50% methane.

The LandGEM model also requires waste acceptance data. Characteristics to be entered in the model include the landfill name, opening date, closure date, design capacity (the total amount of refuse that can be disposed of in the landfill), and the amount of refuse in place in the landfill, or the annual refuse acceptance rate for the landfill.

Under the Preferred Alternative for solid waste treatment, solid waste disposal would occur at the Navy Sanitary Landfill at Apra Harbor, until the GovGuam Landfill in Layon is completed. At that time, the solid waste will be diverted to the GovGuam Landfill per the Memorandum of Understanding between the DoD and GovGuam. This action would potentially result in increased VOC and CO_2 emissions. To estimate this potential increase, the existing (2008) landfill throughput (input) based on a waste generation rate of 7.4 lbs per capita per day as the baseline condition. The future additional waste throughput associated with the Preferred Alternative was considered to begin in 2009 and the resulting net annual increases in air emissions, shown in Table I.3-24, were predicted up to 2010.

Table I.3-24. Total Annual Operation Emissions – Preferred Alternative

Year	*Pollutant (TPY)*		
	Uncontrolled VOC	*Controlled VOC*	CO_2
2010	1.0	N/A	62.9

Once the new Layon Landfill is opened, DoD will divert solid waste from the Navy Sanitary Landfill to Layon per the Memorandum of Understanding between the DoD and GovGuam. The new landfill is assumed to open in 2011 and close in 2036 (with 80th year limit and without limit).

The same methodology described above was used to predict the increase in VOC and CO_2 emissions associated with the added solid waste disposal at the proposed GovGuam landfill beyond 2011. Table I.3-25 summarizes the predicted emissions for each year after the interim period. According to the *Revised Final Report: Guam Solid Waste Utility Study for Proposed USMC Relocation* (HDR/Hawaii Pacific Engineers 2008), a flare system to control VOC emissions would be installed in 2013. Therefore, the controlled VOC emission increase shown in Table I.3-25 for 2014 reflects the presence of a flare controlling VOC emissions with a destruction rate of 98% or greater (USEPA August 2003).

Table I.3-25. Total Annual Operation Emissions – GovGuam Landfill in Layon

Year	*Pollutant (TPY)*		
	Uncontrolled VOC	*Controlled VOC*	*CO_2*
2011	2.7	N/A	169.6
2012	4.3	N/A	273.2
2013	6.2	N/A	398.5
2014	N/A	0.2	624.2
2015	N/A	0.3	946
2016	N/A	0.4	1,422
2017	N/A	0.6	1,908
2018	N/A	0.7	2,371
2019	N/A	0.9	2,812
2020	N/A	1.0	3,239
2021	N/A	1.1	3,645
2022	N/A	1.3	4,032
2023	N/A	1.4	4,400
2024	N/A	1.5	4,749
2025	N/A	1.6	5,082.
2026	N/A	1.7	5,399
2027	N/A	1.8	5,700
2028	N/A	1.9	5,986
2029	N/A	2.0	6,258
2030	N/A	2.0	6,517
2031	N/A	2.1	6,764
2032	N/A	2.2	6,998
2033	N/A	2.3	7,221
2034	N/A	2.3	7,433
2035	N/A	2.4	7,635
2036	N/A	2.5	7,827

Legend: N/A = Not Applicable.

The waste acceptance rates used in the model for the GovGuam option presented in Table I.3-26 are based on the waste generation rate of 7.4 lbs/cy provided in the Guam Solid Waste Utility Study (HDR/Hawaii Pacific Engineers 2008). The model applies the final (or most current) acceptance rate over the baseline entered for 2009 to 2035, the year prior to the estimated closure date.

Table I.3-26. Waste Acceptance Rates at GovGuam Landfill in Layon

Year	*Waste Acceptance Rate (in tons [2,000 lbs])*
2009	4,136
2010	7,215
2011	7,350
2012	9,113
2013	16,108
2014	23,151
2015	34,299
2016	36,550
2017	36,550
2018	36,550
2019	37,090
2020	37,090
2021	37,090
2022	37,090
2023	37,090
2024	37,090
2025	37,090
2026	37,090
2027	37,090
2028	37,090
2029	37,090
2030	37,090
2031	37,090
2032	37,090
2033	37,090
2034	37,090
2035	37,090

Summary of Minor Stationary Source Impacts

Table I.3-27 summarizes the potential impacts associated with the alternatives for minor stationary sources, consisting of wastewater treatment and solid waste disposal. The operation activities associated with wastewater facilities would be well below the significance criterion of 250 TPY.

Potential air quality impacts associated with the solid waste alternative is also shown in Table I.3-27. Operational emissions associated with solid waste facilities were well below the significance criterion of 250 TPY for criteria pollutants for all alternatives. Therefore, the Preferred Alternative would result in less than significant impacts to air quality resources with respect to criteria pollutants but the planned new GovGuam Landfill in Layon would result in significant odor impacts that are mitigable to less than significant impacts.

It should be noted that CO_2 is not a criteria pollutant and therefore is not compared to criteria pollutant thresholds. The potential effects of CO_2 and other greenhouse gas emissions are by nature global and are based on cumulative impacts. Individual sources are not large enough to have an appreciable effect on climate change. Hence, the impact of proposed CO_2 and other greenhouse gas emissions is discussed in the context of summary of preferred alternatives' impacts later in this report.

Table I.3-27. Summary of Potential Air Quality Impacts – Minor Stationary Sources

Component	*Preferred Alternative*	*Long-Term Alt. 1*
Wastewater	LSI	SI-M [1]
Solid waste	LSI/ SI-M [2]	NA

[1]: Referred to odor
[2]: Referred to VOC emissions
Legend: N/A = Not Applicable.

3.3 Mobile Sources

Typical mobile sources include aircraft, aircraft ground support equipment, on-road and non-road vehicles, and construction equipment. Air quality impacts would result from the four functional components of the proposed action:

1. *Main Cantonment Area functions*. Main cantonment military support functions (also known as base operations and support) include headquarters and administrative support, bachelor housing, family housing, supply, maintenance, open storage, community support (*e.g.*, retail, education, recreation, medical, day care, etc.), some site-specific training functions, and open space (e.g. parade grounds, open training areas, open green space in communities, etc), as well as the utilities and infrastructure required to support the cantonment area.

2. *Training functions.* There are 3 subclasses of training support functions required by Marine Corps units that would be stationed on Guam: *Firing ranges* are required for live and inert munitions practice, which generates the need for safety buffers called Surface Danger Zones (SDZs), and special use airspace (SUA) for certain weapons. *Non-fire maneuver ranges* are required for vehicle and foot maneuver training, including urban warfare training. Urban warfare training is conducted in buildings that simulate an urban environment. These buildings would be arranged close together where Marines can practice entering and maneuvering in tight spaces. *Aviation training ranges* are either improved (paved runway) or unimproved (unpaved landing sites) used to practice landing/takeoff and air field support (including loading/unloading of fuel, munitions, cargo, and personnel).

3. *Airfield functions*. The proposed Marine Corps relocation would include aviation units and aviation support units that require runway and hangar space and maintenance, supply and administrative facilities. There is also a need for air embarkation operations that are comparable to and compatible with the existing AFB embarkation operations that they would be co-located. Air embarkation operations refer to loading and unloading cargo and passengers to and from aircraft, comparable to a civilian airport terminal.

4. *Waterfront functions*. The ships and assault craft associated with the proposed Marine Corps relocation are transient (visiting). The transient vessels support Marine Corps operations and transient forces that presently train on Guam and in the CNMI. These ships would continue to support Marine Corps requirements in the western Pacific after the proposed relocation, and would continue to require transient vessels support facilities on Guam. The planning criteria for harbors, regardless of usage, differ from those for land-based facilities and are therefore discussed as distinct from other training actions.

The following four action alternatives were carried forward for the proposed development of Marine Corps Main Cantonment Area functions (including housing/community support). All four of these alternatives also include areas to accommodate certain selected training functions.

- Alternative 1 represents one contiguous location for cantonment area functions and family housing/community support functions. It would include portions of NCTS Finegayan and South Finegayan, as well as acquisition or long term leasing of non- DOD lands at the former Federal Aviation Administration (FAA) parcel and the Harmon Annex parcel. A portion of the development would be constructed in the undeveloped overlay refuge.
- Alternative 2 also represents one contiguous land area for the cantonment and family housing /community support functions. It would include portions of NCTS Finegayan, portions of South Finegayan, and the acquisition or long term leasing of portions of privately-held lands in the

former FAA parcel. A portion of the development would be constructed in the undeveloped overlay refuge.

- Alternative 3 plans for the main cantonment to include portions of NCTS Finegayan, and housing would be located on three geographically separated DoD parcels, including South Finegayan, Air Force Barrigada, and Navy Barrigada. No privately held lands would be acquired under Alternative 3. Under this alternative, the housing would be located non-contiguous to the main cantonment functions. A portion of the main cantonment would be constructed in the undeveloped overlay refuge.
- Alternative 8 would include portions of NCTS Finegayan, a portion of South Finegayan, the former FAA parcel, and a portion of the housing would be located on the geographically separated Air Force Barrigada parcel. A portion of privately held lands would be acquired by purchase or long term lease under Alternative 8. A portion of the main cantonment would be constructed in the undeveloped overlay refuge. Under Alternative 8, a portion of the required housing would be non-contiguous to the Main Cantonment Area.

The emissions from these mobile sources are regulated under the CAA Title II Emission Standards for Moving Sources that establishes emission standards that manufacturers must achieve. Therefore, unlike stationary sources, no permitting requirements exist for operating mobile sources.

3.3.1 Aircraft Operational Emissions

Aircraft and helicopter engines emit criteria pollutants during all phases of operation whether climb out, approach, touch and go, GCA Box, or cruise. Based on the estimated number of additional sorties on an annual basis (Czech and Kester 2008) and on base maintenance for the addition of new aircraft at Andersen AFB North Ramp field, the annual aircraft operational emissions at Andersen AFB were estimated using the emission factors provided by Aircraft Environmental Support Office (AESO).

The proposed action for the Marine Corps Relocation to Guam would result in a change to aircraft operations at Andersen AFB. Specific changes to aircraft operations would include the following:

- Transfer of four CH-53E, six AH-1Z, and three UH-1N aircraft in support of the Marine Corps relocation to Guam.
- Transfer of a Marine F/A-18D squadron in support of the Marine Corps relocation to Guam.
- Basing of two new MV-22 squadrons.
- Increased visits by aircraft carrier airwings to Andersen AFB, resulting in a four-fold increase of transient F/A-18C, F/A-18F, SH-60B/F, EA-18G, and E-2C airfield operations.

The airfield operations associated with the proposed action would primarily take place at Andersen AFB. Air pollutants would be emitted during all phases of these operations, including on-ground parking and engine idling, maintenance testing, and flight. Future annual emissions of criteria pollutants were estimated using:

- The USEPA Mobile Sources methodology laid out in *Procedures of Emission Inventory Preparation, Volume IV: Mobile Sources* (USEPA December 1992).
- Aircraft engine emission factors developed by the Navy's Aircraft Environmental Support

Office (AESO,1999, 2000, 2001, and 2002 [multiple references for each year]) and

- The anticipated number of new aircraft sorties presented in the *Aircraft Noise Study for Guam Joint Military Master Plan at Andersen AFB* (Wyle 2008).

The airfield operations types for the No Action and proposed action scenarios include departures, straight-in (non-break) arrivals, overhead break arrivals, touch-and-go patterns, and ground controlled approach patterns.

Procedures to calculate emissions for each aircraft type typically include the following steps:

- Obtain emission factors for each aircraft engine type.
- Consider the range of operation types for each aircraft.
- Apply the applicable aircraft operating mode associated with annual flight operations.
- Calculate the emission rates for each aircrafts' type and operating mode by multiplying the respective emissions rates by annual flight operation numbers.
- Determine the total annual emissions by combining the emissions from all operations for all aircraft types.

Although air pollutant emissions occur during all phases of aircraft operation (parking, idling, and in-flight), only those emissions emitted in the lower atmosphere's mixing layer have the potential to result in ground-level ambient air quality impacts. The mixing layer is the air layer extending from ground level up to the point at which the vertical mixing of pollutants decreases significantly. The USEPA recommends that a default mixing layer of 3,000 ft (914 m) be used in aircraft emission calculations (USEPA December 1992). Consistent with this recommendation, aircraft emissions released above 3,000 ft were not included in this study. Emissions results for each aircraft type are presented in Tables I.3-28 through I.3-39, and include two summary tables that present combined aircraft emissions as described below:

- Table I.3-33: Net emissions for aircraft Associated with Aircraft Carrier Airwings (EA-18G, F-18A/C, F-18E/F, E-2C, SK70 [UH-60A]) associated with baseline conditions and alternatives.
- Table I.3-39: Total Net Emissions for Aircraft (CH-53E, AH-1Z, UH-1N, MV-22B, F/A-18D) associated with the based addition to the alternatives only.

The emissions from aircraft sorties and maintenance were calculated by aircraft type on an annual basis and are also presented in Table I.3-39. The aircraft sortie emissions estimates are summarized in Table I.3-40.

Table I.3-28. Net Emissions for EA-18G

Pollutant	*LTO Emission Rate (lbs/LTO)*	*# of LTOs (LTOs/yr)*	*LTO Emissions (lbs/yr)*	*Total Emissions (TPY)*
SORTIE EMISSIONS FROM EA-18G Straight In Arrival AIRCRAFT				
NO_x	23.04	3	69.12	0.03
HC	66.14	3	198.42	0.10
CO	264.34	3	793.02	0.40
SO_2	0.98	3	2.94	0.00
PM_{10}	18.35	3	55.05	0.03
SORTIE EMISSIONS FROM EA-18G Break at Arrival AIRCRAFT				
NO_x	23.31	48	1188.88	0.56
HC	66.66	48	3199.68	1.60
CO	265.78	48	12757.44	6.38
SO_2	0.96	48	46.08	0.02
PM_{10}	17.94	48	861.12	0.43

Note: Emission factors are obtained from AESO Report No. 9815, Revision E, November 2002 and Report No. 9933 Revision B, November 2002.

Table I.3-29. Net Emissions for F-18AC

Pollutant	*LTO Emission Rate (lbs/LTO)*	*# of LTOs (LTOs/yr)*	*LTO Emissions (lbs/yr)*	*Total Emissions (TPY)*
SORTIE EMISSIONS FROM F-18AC Straight In Arrival AIRCRAFT				
NO_x	13.09	36	471.24	0.24
HC	53.74	36	1934.64	0.97
CO	139.40	36	5018.40	2.51
SO_2	0.82	36	29.52	0.01
PM_{10}	16.17	36	58.56	0.03
SORTIE EMISSIONS FROM F-18AC Break at Arrival AIRCRAFT				
NO_x	13.49	330	4451.70	2.23
HC	54.35	330	17935.50	8.97
CO	141.32	330	46635.60	23.32
SO_2	0.82	330	270.60	0.14
PM_{10}	15.98	330	58.56	0.03

Note: Emission factors are obtained from AESO Report No. 9815, Revision E, November 2002 and Report No. 9933 Revision B, November 2002.

Table I.3-30. Net Emissions for F-18EF

Pollutant	*LTO Emission Rate (lbs/LTO)*	*# of LTOs (LTOs/yr)*	*LTO Emissions (lbs/yr)*	*Total Emissions (TPY)*
SORTIE EMISSIONS FROM F-18EF Straight In Arrival AIRCRAFT				
NO_x	23.04	42	967.68	0.48
HC	66.14	42	2777.88	1.39
CO	264.34	42	11102.28	5.55
SO_2	0.98	42	41.16	0.02
PM_{10}	18.35	42	770.70	0.39
SORTIE EMISSIONS FROM F-18EF Break at Arrival AIRCRAFT				
NO_x	23.31	393	9160.83	4.58
HC	66.66	393	26197.38	13.10
CO	265.78	393	104451.54	52.23
SO_2	0.96	393	377.28	0.19
PM_{10}	17.94	393	7050.42	3.53

Note: Emission factors are obtained from AESO Report No. 9815, Revision E, November 2002 and Report No. 9933 Revision B, November 2002.

Table I.3-31. Net Emissions for E-2C

Pollutant	*LTO Emission Rate (lbs/LTO)*	*# of LTOs (LTOs/yr)*	*LTO Emissions (lbs/yr)*	*Total Emissions (TPY)*
SORTIE EMISSIONS FROM E-2C Straight In Arrival AIRCRAFT				
NO_x	6.61	9	59.49	0.03
HC	9.37	9	84.33	0.04
CO	13.91	9	125.19	0.06
SO_2	0.41	9	3.69	0.00
PM_{10}	4.11	9	36.99	0.02
SORTIE EMISSIONS FROM E-2C Break at Arrival AIRCRAFT				
NO_x	7.92	69	546.48	0.27
HC	9.39	69	647.91	0.32
CO	13.96	69	963.24	0.48
SO_2	0.46	69	31.74	0.02
PM_{10}	4.61	69	318.09	0.16

Note: Emission factors are obtained from AESO Report No. 9920B, Revision C, April 2000 and Report No. 9943 Revision B, April 2000.

Table I.3-32. Net Emissions for SK 70 (UH-60A)

Pollutant	*LTO Emission Rate (lbs/LTO)*	*# of LTOs (LTOs/yr)*	*LTO Emissions (lbs/yr)*	*Total Emissions (TPY)*
SORTIE EMISSIONS FROM SK 70 (UH-60A) Break at Arrival AIRCRAFT				
NO_x	3.40	117	397.80	0.20
HC	1.40	117	163.80	0.08
CO	12.30	117	1439.10	0.72
SO_2	0.30	117	35.10	0.02
PM_{10}	2.30	117	269.10	0.13

Note: Emission factors are obtained from AESO Report No. 9929, February 1999 and Report No. 9933, June 1999 for Aircraft UH-60A.

Table I.3-33. Total Net Emissions for Aircraft Associated with Aircraft Carrier Airwings

	Sortie Emissions (tons/yr)											
	SO_2		*CO*		*PM_{10}*		*NO_x*		*HC*		*CO_2*	
Aircraft	Break at Arrival	Straight In Arrival	Break at Arrival	Straight In Arrival	Break at Arrival	Straight In Arrival	Break at Arrival	Straight In Arrival	Break at Arrival	Straight In Arrival	Break at Arrival	Straight In Arrival
Sortie Emissions												
EA-18G	0.02	0.00	6.38	0.40	0.43	0.03	0.56	0.03	1.60	0.10	-	-
F-18A/C	0.14	0.01	23.32	2.51	0.03	0.03	2.23	0.24	8.97	0.97	-	-
F-18E/F	0.19	0.02	52.23	5.55	3.53	0.39	4.58	0.48	13.10	1.39	-	-
E-2C	0.02	0.00	0.48	0.06	0.16	0.02	0.27	0.03	0.32	0.04	-	-
SK70 (UH-60A) BLACKH	0.02		0.72		0.13		0.20		0.08		-	
Total Emissions	0.42		91.64		4.74		8.62		26.57		-	

Table I.3-34. CH-53E Based Addition Aircraft Emissions

	Sortie Emissions													*Maintenance Emissions*			*Total CH-53E Emissions*	
Polluta	LTO Emission Rate (lbs/LTO)	# of LTO (LTOs/yr)	LTO Emissions (lbs/yr)	T&G Emissions Rate (lbs/T&G)	# of T&G (T&Gs/yr)	T&G Emissions (lbs/yr)	GCA Box Emission Rate (lbs/GCAs)	# of GCA Box (GCAs/yr)	GCA Box Emissions (lbs/yr)	FCLP Emission Rate (lbs/yr)	# of FCLP FCLPs/yr)	FCLP Emissions (lbs/yr)	Total Sortie Emissions (lbs/yr)	# of Aircrafts	Maintenance Emissions lbs/AC/yr	Total Maintenance Emissions (lbs/yr)	Lbs/yr	Tons/year
NO_x	8.90	472	4200.8	2.11	600	1266.0	4.44	120.00	532.8	2.11	20	42.2	6041.8	4	258.4	1033.60	7,075.40	3.54
HC	11.20	472	5286.4	0.13	600	78.0	0.19	120.00	22.8	0.13	20	2.6	5389.8	4	195.9	783.60	6,173.40	3.09
CO	22.90	472	10808.8	0.77	600	462.0	1.44	120.00	172.8	0.77	20	15.4	11459.0	4	402.6	1610.40	13,069.40	6.53
SO_2	0.70	472	330.4	0.11	600	66.0	0.23	120.00	27.6	0.11	20	2.2	426.2	4	20.0	80.00	506.20	0.25
PM_{10}	3.80	472	58.6	0.61	600	366.0	1.25	120.00	150.0	0.61	20	12.2	586.8	4	78.0	312.00	898.76	0.45

Note: Emission factors are obtained from AESO Report No. 9922, Revision C, February 2000 and Report No. 9960 Revision B, April 2000.

Table I.3-35. AH-1N Based Addition Aircraft Emissions

	Sortie Emissions													*Maintenance Emissions*			*Total CH-53E Emissions*	
Polluta	LTO Emission Rate (lbs/LTO)	# of LTO (LTOs/yr)	LTO Emissions (lbs/yr)	T&G Emissions Rate (lbs/T&G)	# of T&G (T&Gs/yr)	T&G Emissions (lbs/yr)	GCA Box Emission Rate (lbs/GCAs)	# of GCA Box (GCAs/yr)	GCA Box Emissions (lbs/yr)	FCLP Emission Rate (lbs/yr)	# of FCLP FCLPs/yr)	FCLP Emissions (lbs/yr)	Total Sortie Emissions (lbs/yr)	# of Aircrafts	Maintenance Emissions lbs/AC/yr	Total Maintenance Emissions (lbs/yr)	Lbs/yr	Tons/year
NO_x	2.09	2281	4767.3	0.25	3000	750.0	1.12	1500.00	1680.0	0.32	30.0	9.6	7206.9	6	15.88	95.28	7,302.17	3.65
HC	0.33	2281	752.7	0.03	3000	90.0	0.12	1500.00	180.0	0.04	30.0	1.2	1023.9	6	4.23	25.38	1,049.31	0.52
CO	7.08	2281	16149.5	0.54	3000	1620.0	2.5	1500.00	3690.0	0.79	30.0	23.7	21483.2	6	76.33	457.98	21,941.16	10.97
SO_2	0.17	2281	387.8	0.02	3000	60.0	0.08	1500.00	120.0	0.02	30.0	0.6	568.4	6	1.4	8.40	576.77	0.29
PM_{10}	1.80	2281	58.6	0.19	3000	570.0	0.88	1500.00	1320.0	0.26	30.0	7.8	1956.4	6	14.67	88.02	2,044.38	1.02

Note: Emission factors are obtained from AESO Report No. 9922, Revision C, February 2000 and Report No. 9960 Revision B, April 2000.

Table I.3-36. UH-1N Based Addition Aircraft Emissions

Polluta	*Sortie Emissions*													*Maintenance Emissions*			*Total CH-53E Emissions*	
	LTO Emission Rate (lbs/LTO)	# of LTO (LTOs/yr)	LTO Emissions (lbs/yr)	T&G Emissions Rate (lbs/T&G)	# of T&G (T&Gs/yr)	T&G Emissions (lbs/yr)	GCA Box Emission Rate (lbs/GCAs)	# of GCA Box (GCAs/yr)	GCA Box Emissions (lbs/yr)	FCLP Emission Rate (lbs/yr)	# of FCLP FCLPs/yr)	FCLP Emissions (lbs/yr)	Total Sortie Emissions (lbs/yr)	# of Aircrafts	Maintenance Emissions lbs/AC/yr	Total Maintenance Emissions (lbs/yr)	Lbs/yr	Tons/year
NO_x	1.28	768	983.0	0.19	1000	190.0	0.52	500.0	260.0	0.25	15.0	3.8	1436.8	3	20.86	62.58	1,499.37	0.75
HC	0.67	768	514.6	0.01	1000	10.0	0.02	500.0	10.0	0.02	15.0	0.3	534.9	3	21.74	65.22	600.08	0.30
CO	3.32	768	2549.8	0.13	1000	130.0	0.36	500.0	180.0	0.25	15.0	3.8	2863.5	3	99.86	299.58	3,163.09	1.58
SO_2	0.11	768	84.5	0.02	1000	20.0	0.04	500.0	20.0	0.02	15.0	0.3	124.8	3	2.09	6.27	131.05	0.07
PM_{10}	1.18	768	906.2	0.16	1000	160.0	0.45	500.0	225.0	0.22	15.0	3.3	1291.2	3	21.92	65.76	1,357.00	0.68

Note: Emission factors are obtained from AESO Report No. 9922, Revision C, February 2000 and Report No. 9960 Revision B, April 2000.

Table I.3-37. MV-22 Based Additions Aircraft Emissions

Polluta	*Sortie Emissions*													*Maintenance Emissions*			*Total CH-53E Emissions*	
	LTO Emission Rate (lbs/LTO)	# of LTO (LTOs/yr)	LTO Emissions (lbs/yr)	T&G Emissions Rate (lbs/T&G)	# of T&G (T&Gs/yr)	T&G Emissions (lbs/yr)	GCA Box Emission Rate (lbs/GCAs)	# of GCA Box (GCAs/yr)	GCA Box Emissions (lbs/yr)	FCLP Emission Rate (lbs/yr)	# of FCLP FCLPs/yr)	FCLP Emissions (lbs/yr)	Total Sortie Emissions (lbs/yr)	# of Aircrafts	Maintenance Emissions lbs/AC/yr	Total Maintenance Emissions (lbs/yr)	Lbs/yr	Tons/year
MV-22 Break at Arrival AIRCRAFT																		
NO_x	6.13	1781	10917.5	3.57	566	2020.6	5.20	707.0	3676.4	4.61	60.0	276.6	16891.2	12	525.68	6307.68	23,198.83	11.60
HC	0.05	1781	89.1	0.003	566	1.7	0.004	707.0	2.8	0.003	60.0	0.2	93.8	12	4.59	55.08	148.84	0.07
CO	3.07	1781	5467.7	0.19	566	107.5	0.260	707.0	183.8	0.22	60.0	13.2	5772.2	12	296.32	3553.32	9,325.55	4.66
SO_2	0.31	1781	552.1	0.11	566	62.3	0.16	707.0	113.1	0.14	60.0	8.4	735.9	12	26.05	312.60	1,048.49	0.52
PM_{10}	1.06	1781	1887.9	0.44	566	249.0	0.63	707.0	445.4	0.55	60.0	33.0	2615.3	12	87.27	1,047.24	3,662.55	1.83
CO_2	2498.70	1781	4450184.7	899	566	508834.0	1283	707.0	907081.0	1119.0	60.0	67140.0	5933239.7	12	209662	2,515,944.0	8,449,183.7	4,224.59
MV-22 B Straight In Arrival AIRCRAFT																		
NO_x	3087	261	1010.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	1010.1	N/A	N/A	N/A	1010.1	0.51
HC	0.05	261	13.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	13.1	N/A	N/A	N/A	13.1	0.01
CO	2.96	261	772.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	772.6	N/A	N/A	N/A	772.6	0.39
SO_2	0.24	261	62.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	62.6	N/A	N/A	N/A	62.6	0.03
PM_{10}	0.78	261	203.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	203.6	N/A	N/A	N/A	203.6	0.10
CO_2	1934.80	261	504982.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	504982.8	N/A	N/A	N/A	504982.8	252.49

Note: Emission factors are obtained from AESO Report No. 9922, Revision C, February 2000 and Report No. 9960 Revision B, April 2000.

Table I.3-38. FA-18D Based Additions Aircraft Emissions

	Sortie Emissions										*Maintenance Emissions*			*Total FA-18D Emissions*	
Pollutant	LTO Emission Rate (lbs/LTO)	# of LTO (LTOs/yr)	LTO Emissions (lbs/yr)	T&G Emissions Rate (lbs/T&G)	# of T&G (T&Gs/yr)	T&G Emissions (lbs/yr)	GCA Box Emission Rate (lbs/GCAs)	# of GCA Box (GCAs/yr)	GCA Box Emissions (lbs/yr)	Total Sortie Emissions (lbs/yr)	# of Aircrafts	Maintenance Emissions lbs/AC/yr	Total Maintenance Emissions (lbs/yr)	Lbs/yr	Tons/year
MV-22 Break at Arrival AIRCRAFT															
NO$_x$	15.95	995	15870.3	5.86	1825	10694.5	11.71	398.0	4660.6	31225.3	12	513.9	6166.80	37392.13	18.70
HC	54.43	995	54157.9	0.22	1825	401.5	0.450	398.0	179.1	54738.5	12	1622.4	19468.80	74207.25	37.10
CO	143.03	995	142314.9	1.14	1825	2080.5	2.27	398.0	903.5	145298.8	12	4460.5	53526.00	198824.81	99.41
SO$_2$	0.89	995	885.6	0.22	1825	401.5	0.45	398.0	179.1	1466.2	12	27.6	331.20	1797.35	0.90
PM$_{10}$	16.61	995	16527.0	3.05	1825	5566.3	6.11	398.0	2421.8	24525.0	12	457.4	5488.80	30013.78	15.01
MV-22 B Straight In Arrival AIRCRAFT															
NO$_x$	15.40	176	2710.40	N/A	N/A	N/A	N/A	N/A	N/A	2710.40	N/A	N/A	N/A	2710.40	1.36
HC	53.82	176	9472.32	N/A	N/A	N/A	N/A	N/A	N/A	9472.32	N/A	N/A	N/A	9472.32	4.74
CO	141.10	176	24833.60	N/A	N/A	N/A	N/A	N/A	N/A	24833.60	N/A	N/A	N/A	24833.60	12.42
SO$_2$	0.90	176	158.40	N/A	N/A	N/A	N/A	N/A	N/A	158.40	N/A	N/A	N/A	158.40	0.08
PM$_{10}$	16.86	176	2967.36	N/A	N/A	N/A	N/A	N/A	N/A	2967.36	N/A	N/A	N/A	2967.36	1.48

Note: Emission factors are obtained from AESO Report No. 9815, Revision E, November 2002, and Report No. 9933, Revision B, November 2002.

Table I.3-39. Total Net Emissions for Aircraft Associated with the Based Addition

	Sortie Emissions (tons/yr)											
	SO_2		*CO*		*PM_{10}*		*NO_x*		*HC*		*CO_2*	
Aircraft	Break at Arrival	Straight In Arrival	Break at Arrival	Straight In Arrival	Break at Arrival	Straight In Arrival	Break at Arrival	Straight In Arrival	Break at Arrival	Straight In Arrival	Break at Arrival	Straight In Arrival
Sortie Emissions												
MV-22B	0.37	0.03	2.89	0.39	1.31	0.10	8.45	0.51	0.05	0.01	2966.62	252.49
F/A-18D	0.73	0.08	72.65	12.27	12.26	1.48	15.61	1.36	27.37	4.74	-	-
CH-53E	0.21		5.73		0.29		3.02		2.69		-	
AH-1N	0.28		10.74		0.98		3.60		0.51		-	
UH-1N	0.06		1.43		0.65		0.72		0.27		-	
Total Sortie Emissions	1.77		106.09		17.07		33.26		35.63		3219.11	
Maintenance Emissions												
MV-22B	0.16	-	1.78	-	0.52	-	3.15	-	0.03	-	1257.97	-
F/A-18D	0.17	-	26.76	-	2.74	-	3.08	-	9.73	-	-	-
CH-53E	0.04		0.81		0.16		0.52		0.39		-	
AH-1N	0.00		0.23		0.04		0.05		0.01		-	
UH-1N	0.00		0.15		0.03		0.03		0.03		-	
Total Maintenance Emissions	0.37		29.72		3.50		6.83		10.20		1257.97	
Total Emissions	2.14		135.82		20.57		40.09		45.83		4,477.08	

Table I.3-40. Annual Increase in Aircraft Sortie Emissions at Andersen AFB

Activity	*Pollutant (TPY)*						
	SO_2	CO	PM_{10}	$PM_{2.5}$	NO_x	VOC	CO_2
Aircraft carrier Airwings	0.4	91.6	4.7	4.7	8.6	26.6	N/A
Based Aircraft LTO, touch and go, FCLP and GCA Box	1.8	106.1	17.1	17.1	33.3	35.6	3219.1
Based Aircraft Maintenance	0.4	29.7	3.5	3.5	6.8	10.2	1258.0
Total Operation	2.6	227.4	25.3	25.3	48.7	72.4	4,477.1

Note: CO_2 emissions are only available for MV-22 aircraft.

3.3.2 Aircraft Operational Emissions from Aircraft Carrier Berthing

The Navy proposes to construct a new deep-draft wharf with shoreside infrastructure improvements in Apra Harbor, Guam to provide for a transient nuclear powered aircraft carrier. Up to 59 aircraft including strike, surveillance, control, and other logistic and combat aircraft, would either remain onboard the ship or fly to Andersen AFB. Two locations for siting the new wharf are considered under the proposed action: 1) Polaris Point (preferred), and 2) the Former Ship Repair Facility (SRF).

The Aircraft Carrier Berthing component of the proposed action requires operational activities that have the potential to generate air emissions. Specifically, operational emissions would result from the following activities:

- Operation of the aircraft carriers' on-board diesel generators.
- Aircraft carrier routine maintenance.
- Transient aircraft operations.
- Escort vessels operations.
- Operation of the tugboats that assist in navigating the aircraft carrier through the harbor.
- Operation of the on-road vehicles transporting the aircraft carrier crew.
- Operations of the on-road trucks transporting materials to and from aircraft carriers.

The emissions inventory for one aircraft carrier homeporting for six months was taken from a U.S. Navy study (U.S. Navy July 1999). This inventory was used to prorate the aircraft carrier berthing emissions based on an increase in aircraft carrier berthing days at Apra Harbor of 49 days.

Accompanying vessel and tugboat emissions were not considered in this analysis because these operations are a function of the number of aircraft carrier visits rather than of the number of berthing days. Because the number of aircraft carrier visits at Apra Harbor would not increase, no additional emissions from vessel and tugboat operations are anticipated.

The aircraft carrier berthing-related vehicle operations would be increased due to an increase in berthing days. However, the impacts from increased on-road vehicular trips are covered in the traffic-related air quality impact analysis discussed later in this study. Aircraft carrier berthing-related emissions from operations in 2014 and beyond are shown in Table I.3-41.

Table I.3-41. Aircraft Carrier Berthing Operational Emissions

Operational Activities 2016 and after	Pollutant (TPY)						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	CO_2
Aircraft Carrier Berthing	0.1	0.2	0.1	N/A	1.1	1.3	N/A
Transient Aircraft	0.4	91.1	4.6	8.4	26.2	0.4	N/A
Total Operation	0.5	91.3	4.7	8.4	27.3	1.7	N/A

3.3.3 Aircraft Training Emissions

Five sites were considered on Guam for aviation training: Andersen AFB airfield, Northwest Field at Andersen AFB, Orote Airfield at Navy Main Base, Andersen South (including two improved helicopter landing pads), and the Naval Munitions Site. The types of aviation training and facility requirements associated with Marine Corps units that would relocate to Guam are listed in Table I.3-42. The minimum requirement for most training would be twice annually; however, the minimum Field carrier landing practice (FCLP) training requirement is 12 times annually. The majority of this training requirement would be met at Guam and surrounding airspace.

The aircraft squadrons are proposed for basing at Andersen AFB North Ramp, in a separately constructed air facility. To reduce the operationally undesirable, simultaneous mix of fixed wing and rotary wing operations at Andersen AFB, proposed Marine Corps aviation training would primarily occur at the following sites rather than North Ramp: Northwest Field at Andersen AFB, Orote Airfield at Navy Main Base, Andersen South, and Naval Munitions Site.

Table I.3-42. Aviation Training Types

Training Type		*Facility/Airspace Requirements*
FAM	Familiarization and Instrument Flight	Improved airfield with air rescue available. FAM is a daylight operation. Instrument flight is day and night.
FORM	Formation Flights	Flying in formation, often in Air Traffic Controlled Assigned Airspace (ATCAA) assigned by FAA. Also includes helicopter flying Visual Flight.Rules (VFR) in formation. Day and night use.
CAL	Confined Area Landing	Ground space, helicopter landing zones in approx. 10 locations. Day and night.
TERF	Terrain Flights	1 or more routes in ATCAA assigned by FAA over varying terrain for day and night flights at 50 to 200 ft (15 to 61 m) above ground level.
EXT	External Loads	Both unimproved and improved LZs for day and night use. Unimproved LZs at remote sites. Ground access needed to pre-position external loads that cannot be carried across public roads or populated areas.
GTR	Ground Threat Reaction	Tactical flight maneuver area or route where ground based threat simulators can be placed. Air routes similar to TERF. Day and night. Includes training on Tinian that is addressed in Volume 3.
FCLP	Field Carrier Landing Practice	Simulated ship deck paved area. Day and night.
TAC	Tactics	Routes over water or land of at least 50 nm (93 km), for chaff, flares, and .50 cal machine gun engagement. Day and night. Includes training in CNMI that is addressed in the MIRC EIS/OEIS.
AG	Aerial Gunnery	Air-to-Ground gun munitions against ground targets. Day and night. Includes training in CNMI that is addressed in the MIRC EIS/OEIS.
HIE	Helicopter Insertion and Extraction	Fast rope, rappelling, helo-casting, and parachute operations in improved fields, drop zones, and water operating areas. Day and night
DM	Defensive Maneuvers	Airspace routes similar to TERF, but at higher altitude. Day and night.

Source: NAVFAC Pacific 2009.

In addition, aviation training would occur along proposed flight corridors and SUA within and offshore Guam and integrated with MIRC training operations. Specific aviation training proposals for Guam and surrounding airspace are as follows:

Marine Air Control Group Training (MACG). MACG training involves coordination of air command and control and air defense within the Marine Aircraft Wing.

Improved Airfield Training. FCLP and familiarization and instrument flight (FAM) training require improved airfields. Approximately training operations are conducted with each FAM sortie and five training operations with each FCLP sortie. Both are conducted during both day and night. On Guam, options for aviation training at an improved airfield are North Ramp and NWF, both at Andersen AFB.

Table I.3-43 provides an estimate of aviation training that would occur at each of these sites under the proposed action based on the minimum bi-annual training requirement for FAM and monthly training requirement for FCLP for aircrews associated with the proposed action.

Table I.3-43. Estimated Annual Training Sortie Activities at Improved Airfields

Location and Training Type	*Sortie-Ops by Aircraft Type*				*Total Annual Sortie-Ops*	*Duration/Sortie-Op(Minutes)*	*Duration of Sortie-Ops by Aircraft Type (Minutes)*				*Total Annual Sortie-Op Minutes*	*% Night*	*% Below 3,000ft AGL*	*Annual Freq. Training/Location(Days)*
	CH-53	*MV-22*	*AH-1*	*UH-1*			*CH-53*	*MV-22*	*AH-1*	*UH-1*				
Andersen AFB North Ramp														
FCLP	160	480	240	120	1,000	2	320	960	480	240	2,000	50%	100%	12-18
FAM	11	48	16	4	79	3	33	144	48	12	237	10%	100%	4-6
NWF														
FCLP	160	480	240	120	1,000	2	320	960	480	240	2,000	50%	100%	12-18
FAM	11	48	16	4	79	3	33	144	48	12	237	10%	100%	4-6

Training in Military Flight Corridors, Routes, or Tactical Navigation Area. Aviation training requirements requiring military flight corridors or routes include Terrain Flight (TERF), Ground Threat Reaction (GTR), and Defensive Maneuvering (DM). All four aircraft types associated with the proposed action conduct TERF, GTR, and DM training. Table I.3-44 provides an estimate of aviation training that would occur in designated airspace in Guam based on the minimum bi-annual training requirement for TERF, GTR, and DM for aircrews associated with the proposed action. In addition, sorties associated with the transport personnel from Andersen South North Ramp to NMS or Andersen South for maneuver training is also estimated in Table I.3-44 (as MAN-LFT).

Table I.3-44. Estimated Annual Training Sortie Activity in Military Flight Corridors, Routes, or Tactical Navigation Area in Guam Based on Minimum Training Requirements

Location and Training Type	*Sortie-Ops by Aircraft Type*				*Total Annual Sortie-Ops*	*Duration/Sortie-Op(Minutes)*	*Duration of Sortie-Ops by Aircraft Type (Minutes)*				*Total Annual Sortie-Op Minutes*	*% Night*	*% Below 3,000ft AGL*
	CH-53	*MV-22*	*AH-1*	*UH-1*			*CH-53*	*MV-22*	*AH-1*	*UH-1*			
TERF	16	48	24	12	100	90	1,440	4,320	2,160	1,080	9,000	10%	90%
GTR	16	48	24	6	94	90	1,440	4,320	2,160	540	8,460	10%	80%
DM	16	48	24	6	94	90	1,440	4,320	2,160	540	8,460	10%	80%
MAN-LFT	912	0	0	0	912	10	9,120	0	0	0	9,120	10%	80%

Landing zone training. Both improved and unimproved LZs are required to support training in Confined Area Landing (CAL), External Loads (EXT), and Helicopter Insertion Extraction (HIE). CAL training is required for all four aircraft types associated with the proposed action. EXT and HIE training is required for CH-53, UH-1, and MV-22, but not AH-1 aircraft. CAL requires approximately 10 LZs in various locations. All three types of training would include both day and night operations.

Table I.3-45 provides an estimate of aviation training that would occur at NWF, Andersen South, NMS, and Orote Airfield LZs based on the minimum bi-annual training requirement for CAL, EXT, and HIE for aircrews associated with the proposed action. In addition, sorties associated with the lifts for access to Andersen South and NMS for maneuver training are also estimated in Table I.3-45 (as MAN-LFT).

The emissions from aircraft training at existing airfields were estimated using the same methods and emission factors guidance described previously for Andersen AFB Aircraft Basing Operations. Annual emission rates are shown in Table I.3-46. The training flight sorties, as shown in Table I.3-47, and flight hours defined around each airfield were based on information provided above.

Table I.3-45. Estimated Annual Training Sortie Activity at Guam LZ Sites

Location and Training Type	*Sortie-Ops by Aircraft Type*				*Total Annual Sortie-Ops*	*Duration/Sortie-Op(Minutes)*	*Duration of Sortie-Ops by Aircraft Type (Minutes)*				*Total Annual Sortie-Op Minutes*	*% Night*	*% Below 3,000ft AGL*	*Annual Freq. Training/Location(Days)*
	CH-53	*MV-22*	*AH-1*	*UH-1*			*CH-53*	*MV-22*	*AH-1*	*UH-1*				
NWF														
CAL	20	60	30	15	125	2	40	120	60	30	250	10%	100%	2-3
EXT	20	60	0	15	95	2	40	120	0	30	190	10%	100%	2-3
HIE	24	72	0	18	114	2	48	144	0	36	228	10%	100%	2-3
Orote Airfield														
EXT	20	60	0	15	95	2	40	120	0	30	190	10%	100%	1-2
Andersen South														
CAL	20	60	30	15	125	2	40	120	60	30	250	10%	100%	2-3
EXT	13	40	0	10	63	2	27	80	0	20	127	10%	100%	2-3
HIE	24	72	0	18	114	2	48	144	0	36	228	10%	100%	2-3
MAN-LFT	720	0	0	0	720	2	1,440	0	0	0	1,440	10%	80%	90
NMS														
CAL	20	60	30	15	125	2	40	120	60	30	250	10%	100%	
EXT	13	40	0	10	63	2	27	80	0	20	127	10%	100%	1-2
MAN-LFT	192				192	2	384	0	0	0	384	10%	100%	12-18

Table I.3-46. Aircraft Training Emissions Rates

Aircraft	*Operation*	*Training Type*	*Emission Rates (lb/Op)**					
			CO	*CO2*	*NOx*	*HC*	*SO2*	*PM10*
H-53	Cruise	FAM, FORM, TERF, GTR, TAC, AG, DM	9.5	-	36.1	0.67	1.8	9.9
	Rocks-and-Block	EXT	1.97	-	7.52	0.24	0.36	1
	Carrier-Controlled Approach	FCLP	2.67	-	5.33	0.74	0.29	1.59
	Special Personnel Insertion and Extraction Rig	HIE	1.28	-	3.81	0.18	0.2	1.08
	Pad Landing	CAL	1.94	-	4.03	0.52	0.22	1.19
V-22	Cruise - Airplane mode (nacellas horizontal)	FAM, FORM, TERF, GTR, TAC, AG, DM	1.99	12258.4	53.82	0.04	1.53	6.04
	Field Carrier Landing Practice	FCLP	0.22	1119	4.61	0.003	0.14	0.55
	Rocks-and-Blocks	EXT	0.63	3081	12.25	0.01	0.38	1.52
	Confined Area Landing	HIE	0.29	1899	8.87	0.01	0.24	0.94
	Special Personnel Insertion and Extraction Rig	CAL	0.32	1693	6.93	0.01	0.21	0.83
AH-1	Cruise	FAM, FORM, TERF, GTR, TAC, AG, DM	8.96	-	4.72	0.48	0.34	3.57
	Touch-and-Go	EXT	0.54	-	0.25	0.03	0.02	0.19
	Pad Landing	CAL	0.69	-	0.32	0.03	0.02	0.25
	Mountain Pad	HIE	0.76	-	0.36	0.04	0.03	0.28
	Field Carrier Landing Practice	FCLP	0.79	-	0.32	0.04	0.02	0.26
UH-1	Cruise	FAM, FORM, TERF, GTR, TAC, AG, DM	0.7	-	4.01	0.09	0.28	2.91
	Rocks-and-Block	EXT	0.39	-	0.71	0.03	0.06	0.58
	Special Personnel Insertion and Extraction Rig	HIE	0.15	-	0.4	0.01	0.03	0.31
	Pad Landing	CAL	0.13	-	0.25	0.01	0.02	0.21
	Field Carrier Landing Practice	FCLP	0.25	-	0.25	0.02	0.02	0.22

Notes: Emission Rates are lb/hr for Cruise operations.

Source: AESO Memorandum Report Nos. 9822, Revision C, February 2000; 9824, Revision A, April 30, 1999; 9904, Revision A, May 3, 1999; 9946, Revision E, January 2001; 9960, Revision B, April 2000; 9961, July 1999; 9962, July 1999; 9965, Revision B, January 2001.

Table I.3-47. Annual Sortie-Ops by Training Airspace

Aircraft	Sortie -Ops	% Sortie -Ops	Sortie -Ops /Area	Min/ Sortie -Op	% < 3,000 ft	% Sortie -Ops	Sortie -Ops /Area	Min/ Sortie -Op	% < 3,000 ft	% Sortie -Ops	Sortie -Ops /Area	Min/ Sortie -Op	% < 3,000 ft	% Sortie -Ops	Sortie -Ops /Area	Min/ Sortie -Op	% < 3,000 ft	% Sortie -Ops	Sortie -Ops /Area	Min/ Sortie -Op	% < 3,000 ft
FAM - Familiarization and Instrument Flight																					
		A AFB (North Ramp)				NWF				Tinian											
CH-53	32	33%	10.67	30	5%	33%	10.67	60	5%	33%	10.67	30	5%								
MV-22	144		48	30	5%		48	90	5%		48	30	5%								
AH-1	48		16	30	5%		16	60	5%		16	30	5%								
UH-1	12		4	30	5%		4	30	5%		4	30	5%								
FORM - Formation Flights																					
		Guam SUA				Tinian SUA															
CH-53	32	20%	6.4	30	5%	80%	25.6	60	5%												
MV-22	144		28.8	30	5%		115.2	90	5%												
AH-1	48		9.6	30	5%		38.4	60	5%												
UH-1	12		2.4	30	5%		9.6	30	5%												
CAL - Confined Area Landing																					
		NW FLD				ANDY S				NMS				TIN N							
CH-53	80	25%	20	90	75%	25%	20	90	75%	25%	20	90	75%	25%	20	90	75%				
MV-22	240		60	120	75%		60	120	75%		60	120	75%		60	120	75%				
AH-1	120		30	90	75%		30	90	75%		30	90	75%		30	90	75%				
UH-1	60		15	60	75%		15	60	75%		15	60	75%		15	60	75%				
TERF - Terrain Flights																					
		NMS				Tinian															
CH-53	32	50%	16	90	100%	50%	16	90	100%												
MV-22	96		48	120	100%		48	120	100%												
AH-1	48		24	90	100%		24	90	100%												
UH-1	24		12	60	100%		12	60	100%												
EXT - External Loads																					
		NW Field				Orote				ANDY S				NMS				Tinian			
CH-53	80	25%	20	90	100%	25%	20	90	100%	17%	13.33	90	100%	17%	13.33	90	100%	17%	13.33	90	100%
MV-22	240		60	120	100%		60	120	100%		40	120	100%		40	120	100%		40	120	100%
AH-1	120		30	90	100%		30	90	100%		20	90	100%		20	90	100%		20	90	100%
UH-1	60		15	60	100%		15	60	100%		10	60	100%		10	60	100%		10	60	100%
GTR - Ground Threat Reaction																					
		NMS				Rota/Tinian															
CH-53	32	50%	16	90	100%	50%	16	90	100%												
MV-22	96		48	120	100%		48	120	100%												

Aircraft	Sortie -Ops	% Sortie -Ops	Sortie -Ops /Area	Min/ Sortie -Op	% < 3,000 ft	% Sortie -Ops	Sortie -Ops /Area	Min/ Sortie -Op	% < 3,000 ft	% Sortie -Ops	Sortie -Ops /Area	Min/ Sortie -Op	% < 3,000 ft	% Sortie -Ops	Sortie -Ops /Area	Min/ Sortie -Op	% < 3,000 ft	% Sortie -Ops	Sortie -Ops /Area	Min/ Sortie -Op	% < 3,000 ft
AH-1	48		24	90	100%		24	90	100%												
UH-1	12		6	60	100%		6	60	100%												
FFCLP - Field Carrier Landing Practice																					
		A AFB				NW Field				Orote											
CH-53	480	33%	160	90	100%	33%	160	90	100%	33%	160	90	100%								
MV-22	1440		480	120	100%		480	120	100%		480	120	100%								
AH-1	720		240	90	100%		240	90	100%		240	90	100%								
UH-1	360		120	60	100%		120	60	100%		120	60	100%								
TAC - Tactics																					
		GUAM MOA/Route				Tinian MOA/Route															
CH-53	32	50%	16	30	5%	50%	16	60	5%												
MV-22	144		72	30	5%		72	90	5%												
AH-1	48		24	30	5%		24	60	5%												
UH-1	12		6	30	5%		6	30	5%												
AG - Aerial Gunnery																					
		WA																			
CH-53	80	100%	80	30	5%																
MV-22	240		240	30	5%																
AH-1	120		120	30	5%																
UH-1	60		60	30	5%																
HIE - Helicopter Insertion and Extraction																					
		NWF				ANDY S															
CH-53	48	50%	24	30	5%	50%	24	60	5%												
MV-22	144		72	30	5%		72	90	5%												
AH-1	72		36	30	5%		36	60	5%												
UH-1	36		18	30	5%		18	30	5%												
DM - Defensive Maneuvers																					
		NMS				Tinian															
CH-53	32	50%	16	90	100%	50%	16	90	100%												
MV-22	96		48	120	100%		48	120	100%												
AH-1	48		24	90	100%		24	90	100%												
UH-1	12		6	60	100%		6	60	100%												

The annual aircraft training flight emissions are summarized in Table I.3-48.

Table I.3-48. Aircraft Training Flight Annual Emissions at Andersen AFB

Location	*Pollutant (TPY)*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	CO_2
North							
Northwest Field	0.1	0.5	0.4	0.4	2.4	0.1	920.2
Andersen AFB	0.1	1.1	0.6	0.6	3.2	0.3	479.5
Sub Total	0.2	1.6	1.0	1.0	5.6	0.4	1399.8
Central							
Andersen South	0.1	0.5	0.5	0.5	1.9	0.1	179.5
Apra Harbor							
Orote	0.1	0.4	0.4	0.4	2.0	0.1	361.0
South							
NMS	0.3	1.4	1.8	1.8	10.6	0.1	1883.8

Note: CO_2 emissions are only available for MV-22, CH-46, and C-130 aircraft and includes operations >3000 feet.

3.3.4 Marine Vessel Training Emissions

Marine vessel training operations at Apra Harbor and Tinian would result in an increase in pollutant emissions. These emissions were estimated using emission factors, load factors, and power levels obtained from:

- Final EIS/OEIS Southern California Range Complex (US Navy 2008).
- Current Methodologies and Best Practices in Preparing Port Emission Inventories (USEPA January 2006)

Navy vessel emissions were analyzed using the U.S. Navy (2008) emission factors for each power level. For emission factors given with multiple power levels, the average level was assumed. The vessels are assumed to operate at 100% capacity for each given power level emission factor.

Barge emissions were analyzed using tugboat emission factors, load factor, and power levels presented in USEPA (January 2006). Based on the power levels presented, an average power level of 3,357 kW was assumed.

Estimated average traveling distances for each vessel were multiplied by the traveling speeds presented below to give a traveling running time.

- Open Ocean: 15.0 knots/hr
- Outer Apra Harbor: 10.0 knots/hr
- Inner Apra Harbor: 5.0 knots/hr
- Landing Craft: 6.0 knots/hr
- LCAC: 5.0 knots/hr
- Barge: 5.0 knots/hr

A total running time was calculated by adding any additional idling time that may occur. The marine vessel operational running times are presented in Table I.3-49. The total running time was then multiplied by the emission factor for each vessel. The marine vessel training operational emissions are presented in Table I.3-50. These emissions are considered to be the same for all action alternatives.

Table I.3-49. Marine Vessel Annual Operational Running Times

Marine Vessel Group	*Ship Type*	*Annual Vessel Miles Traveled*	*One Way Trip Distance Breakdown*		*Annual Vessel Transit Distances*			*Ship/Boat Speeds*				*Ship/Boat Travel Running Time*	*Ship/Boat Idle Time*	*Total Running Time*
			Outer Apra Harbor	*Inner Apra Harbor*	*Open Ocean*	*Outer Apra Harbor*	*Inner Apra Harbor*	*Open Ocean*	*Outer Apra Harbor*	*Inner Apra Harbor*	*Landing Craft*			
			Miles		*Miles*			*Miles/hr*				*hr*	*hr*	*hr*
Ships Carrying Amphibious Vehicles														
	Amphibious Assault Ship (LHD)	56	3	1.5	38	12	6	17.3	11.5	5.8	-	4.3	-	-
	Dock Landing Ship (LSD)	56	3	1.5	38	12	6	17.3	11.5	5.8	-	4.3	-	-
	Amphibious Transport Dock (LPD)	56	3	1.5	38	12	6	17.3	11.5	5.8	-	4.3	-	-
Amphibious Vehicles														
	Landing Craft, Air Cushion (LCAC)	1,280	-	-	-	-	-	5.8	-	-	-	222.46	0.18	222.6
	Amphibious Assault Vehicle (AAV)	64	-	-	-	-	-	-	-	-	6.9	9.3	-	-
Escort Combatant Ships														
	Guided Missile Cruiser (CG-47)	112	3	1.5	76	24	12	17.3	11.5	5.8	-	8.6	-	-
	Guided Missile Destroyer (DDG)	112	3	1.5	76	24	12	17.3	11.5	5.8	-	8.6	-	-
	Barge between Guam and Tinian	3,240	-	-	-	-	-	5.8	-	-	-	563.1	-	-

Table I.3-50. Marine Vessel Training Operational Emissions

Location	*Marine Vessel Group*	*Ship Type*	*Annual Vessel Transits*	*Distance*		*Annual Vessel Miles Traveled*	*Total Running Time (hr)*	*Emission Factors (lb/hr)*					*Emissions (tons/yr)*				
				Sea to Shore	*Load-Unload*			*SO_2*	*CO*	*PM*	*NO_x*	*VOC*	*SO_2*	*CO*	*PM*	*NO_x*	*VOC*
Apra Harbor	*Ships Carrying Amphibious Vehicles*																
		Amphibious Assault Ship (LHD)	4	14	-	56	4.3	120.7	6.8	24.2	40.1	5.1	0.26	0.01	0.05	0.09	0.01
		Dock Landing Ship (LSD)	4	14	-	56	4.3	32.8	1.8	6.6	10.9	1.4	0.07	0.00	0.01	0.02	0.00
		Amphibious Transport Dock (LPD)	4	14	-	56	4.3	32.8	1.8	6.6	10.9	1.4	0.07	0.00	0.01	0.02	0.00
	Amphibious Vehicles																
		Landing Craft, Air Cushion (LCAC)	320	-	4	1,280	222.6	25.4	25.4	55.3	43.3	3.9	2.83	2.83	6.16	4.82	0.43
		Amphibious Assault Vehicle (AAV)	16	-	4	64	9.3	0.1	0.6	0.3	3.8	0.2	0.00	0.00	0.00	0.02	0.00
	Escort Combatant Ships																
		Guided Missile Cruiser (CG-47)	8	14	-	112	8.6	21.0	107.8	2.6	47.1	8.8	0.09	0.46	0.01	0.20	0.04
		Guided Missile Destroyer (DDG)	8	14	-	112	8.6	17.9	104.0	2.5	48.9	8.0	0.08	0.45	0.01	0.21	0.03
	Barge between Guam and Tinian																
			24	-	135	3,240	563.1	0.6	2.5	0.3	13.0	0.3	0.20	0.81	0.10	4.20	0.09
Tinian	*Barge between Guam and Tinian*																
			24	-	135	3,240	563.1	0.6	2.5	0.3	13.0	0.3	0.20	0.81	0.10	4.20	0.09
												Total	4.21	5.38	6.45	13.78	0.70

The total annual vessel emissions during the training exercises around Apra Harbor are summarized in Table I.3-51.

Table I.3-51. Marine Vessel Training Annual Emissions

Type	*Pollutant (TPY)*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Ships Carrying Amphibious Vehicles	0.4	0.0	0.1	0.1	0.1	0.0	N/A
Amphibious Vehicles	2.8	2.8	6.2	6.2	4.8	0.4	N/A
Escort Combat Ships	0.2	0.9	0.0	0.0	0.4	0.1	N/A
Barges	0.2	0.8	0.1	0.1	4.2	0.1	N/A
Total	3.6	4.5	6.4	6.4	9.5	0.6	N/A

Legend: N/A = not available.

3.3.5 Training Vehicles Emissions

Training operations associated with the action alternative would generate emissions from ground vehicle training operations on both paved and unpaved roadways. Therefore, both vehicle exhaust emission and fugitive dust emission were estimated.

Vehicle Exhaust Emissions

Vehicle exhaust emissions were estimated using the USEPA Mobile6 emission factor model (USEPA August 2003) associated with each type of training vehicle, based on the fuel type, and at an assumed speed of 25 mph. Since Guam is exempt from using low sulfur fuel, the current typical diesel sulfur content (0.6%) was assumed in predicting both SO_2 and PM emissions from diesel-powered training vehicles. Emission factors for motor vehicles were determined for High Mobility Multipurpose Vehicle (HMMWV) that were modeled as light duty diesel trucks, light duty gasoline trucks, heavy duty diesel trucks, and diesel buses associated with default input parameters provided by the USEPA. Season sensitive emission factors were modeled for each given season (e.g., VOC and NO_x were analyzed for summer, and CO was analyzed for winter). The emission factors were then multiplied by the annual vehicle miles traveled for each type of vehicle during the training periods within specific training regions. Training vehicle operational exhaust emissions are shown in Table I.3-52 for activities on Guam and Tinian.

Vehicle Fugitive Dust Emissions

Fugitive dust emissions resulting from operations on unpaved roadways were estimated using the USEPA AP-42 (USEPA 1995) unpaved roads emission factor formula:

$$E = \frac{k(s/12)^a(S/30)^d}{(M/0.5)^c} - C$$

Where:

k, a, c, and d are empirical constants

E = size specific emission factor (lb/VMT)

s = surface material silt content (%)

M = surface material moisture content (%)

S = mean vehicle speed (mph)

C = emission factor for 1980's vehicle fleet exhaust, brake wear and tire wear.

A material silt content of 3.63% for shoreline soils in Salton Sea, CA, as presented in the AP-42 backup document Analysis of the Fine Fraction of Particulate Matter in Fugitive Dust, (WRAP October 2005), was used for this analysis because the type of soil is similar to what is found in the Guam training area roads. The analysis also assumed average moisture content for public roads of 6.52% and a vehicle speed of 25 mph. The emission factors were then multiplied by the annual vehicle miles traveled for each type of vehicle during the training periods within specific training regions. The training vehicle operational fugitive dust emissions are shown in Table I.3-53.

Table I.3-52. Training Vehicle Operational Exhaust Emissions

Activity Area	*Activity*	*Vehicle Type*	*Annual VMT*	*Emission Factors (g/mi)*							*Vehicle Emissions (tons/yr)*						
				SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Andersen South	AMVOC Course	HMMWV	2,700	1.86	0.81	0.18	0.16	0.63	0.49	596.8	0.006	0.002	0.001	0.000	0.002	0.001	1.776
	Convoy Course	HMMWV	28,125	1.86	0.81	0.18	0.16	0.63	0.49	596.8	0.058	0.025	0.006	0.005	0.020	0.015	18.50
	Vehicle-based Maneuver Training	HMMWV	25,313	1.86	0.81	0.18	0.16	0.63	0.49	596.8	0.052	0.023	0.005	0.005	0.018	0.014	16.65
	MOUT Maintenance	Heavy Truck	5,625	4.40	2.01	0.52	0.48	5.84	0.46	1417.8	0.027	0.012	0.003	0.003	0.036	0.003	8.791
		Light Truck	36,000	0.01	9.34	0.03	0.01	0.81	0.92	513.9	0.000	0.371	0.001	0.000	0.032	0.036	20.39
	Security Patrols	Light Truck	26,000	0.01	9.34	0.03	0.01	0.81	0.92	513.9	0.000	0.268	0.001	0.000	0.023	0.026	14.73
Guam Range Complex	Range Maintenance	Heavy Truck	11,250	4.40	2.01	0.52	0.48	5.84	0.46	1417.8	0.055	0.025	0.006	0.006	0.072	0.006	17.58
		Light Truck	72,000	0.01	9.34	0.03	0.01	0.81	0.92	513.9	0.001	0.741	0.002	0.001	0.065	0.073	40.79
	Security Patrols	Light Truck	11,250	0.01	9.34	0.03	0.01	0.81	0.92	513.9	0.000	0.116	0.000	0.000	0.010	0.011	6.373
Troop Transport	With increased MEU events - between Apra Harbor and Andersen South	Bus	1,800	7.28	2.96	0.73	0.70	10.87	0.34	2342.9	0.014	0.006	0.001	0.001	0.022	0.001	4.649
		HMMWV	300	1.86	0.81	0.18	0.16	0.63	0.49	596.8	0.001	0.000	0.000	0.000	0.000	0.000	0.197
		Light Truck	120	0.01	9.34	0.03	0.01	0.81	0.92	513.9	0.000	0.001	0.000	0.000	0.000	0.000	0.068
	Between NCTS Finegayan and Andersen South	HMMWV	7,425	1.86	0.81	0.18	0.16	0.63	0.49	596.8	0.015	0.007	0.001	0.001	0.005	0.004	4.885
		Bus	2,475	7.28	2.96	0.70.	0.73	10.87	0.34	2342.9	0.020	0.008	0.002	0.002	0.030	0.001	6.392
NMS Access	Maneuver Area Access Option 1	Heavy Truck	19	4.40	2.01	0.52	0.48	5.84	0.46	1417.8	0.000	0.000	0.000	0.000	0.000	0.000	0.030
		Light Truck	144	0.01	9.34	0.03	0.01	0.81	0.92	513.9	0.000	0.001	0.000	0.000	0.000	0.000	0.082
		HMMWV	192	1.86	0.81	0.18	0.16	0.63	0.49	596.8	0.000	0.000	0.000	0.000	0.000	0.000	0.126
	Maneuver Area Access Option 2	Heavy Truck	48	4.40	2.01	0.52	0.48	5.84	0.46	1417.8	0.000	0.000	0.000	0.000	0.000	0.000	0.075
		Light Truck	360	0.01	9.34	0.03	0.01	0.81	0.92	513.9	0.000	0.004	0.000	0.000	0.000	0.000	0.204
		HMMWV	480	1.86	0.81	0.18	0.16	0.63	0.49	596.8	0.000	0.000	0.000	0.000	0.000	0.000	0.316
	Maneuver Area Access Option 3	Heavy Truck	120	4.40	2.01	0.52	0.48	5.84	0.46	1417.8	0.000	0.000	0.000	0.000	0.001	0.000	0.188
		Light Truck	900	0.01	9.34	0.03	0.01	0.81	0.92	513.9	0.000	0.009	0.000	0.000	0.001	0.001	0.510
		HMMWV	1,200	1.86	0.81	0.18	0.16	0.63	0.49	596.8	0.000	0.001	0.000	0.000	0.001	0.001	0.789

Table I.3-52. Training Vehicle Exhaust Operational Emissions

Activity Area	*Activity*	*Vehicle Type*	*Annual VMT*	*Emission Factors (g/mi)*							*Vehicle Emissions (tons/yr)*						
				SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Tinian	West Field to Bivouac Area	HMMWV	10	0.16	0.81	0.18	0.16	0.63	0.49	596.8	0.000	0.000	0.000	0.000	0.000	0.000	0.007
		Bus	40	0.70	2.96	0.73	0.70	10.87	0.34	2342.9	0.000	0.000	0.000	0.000	0.000	0.000	0.103
	Bivouac Area to Ranges	Bus	128	0.70	2.96	0.73	0.70	10.87	0.34	2342.9	0.001	0.000	0.000	0.000	0.002	0.000	0.331
	Bivouac Area to San Jose	Bus	256	0.70	2.96	0.73	0.70	10.87	0.34	2342.9	0.002	0.001	0.000	0.000	0.003	0.000	0.661
	Range Maintenance	Heavy Truck	125	0.48	2.01	0.52	0.48	5.84	0.46	1417.8	0.001	0.000	0.000	0.000	0.001	0.000	0.195
		Light Truck	400	0.01	9.34	0.03	0.01	0.81	0.92	513.9	0.000	0.004	0.000	0.000	0.000	0.000	0.227
	Security Patrols	Light Truck	800	0.01	9.34	0.03	0.01	0.81	0.92	513.9	0.000	0.008	0.000	0.000	0.001	0.001	0.453
										Total	0.258	1.627	0.031	0.026	0.345	0.195	165.62

Table I.3-53. Training Vehicle Fugitive Dust Operational Emissions

Activity Area	*Activity*	*Vehicle Type*	*Annual VMT*	*Emission Factors (lb/VMT)*		*Emissions (tons/yr)*	
				PM_{10}	*$PM_{2.5}$*	*PM_{10}*	*$PM_{2.5}$*
Andersen South	MOUT Maintenance	Heavy Truck	5,625	0.297	0.0294	0.835	0.083
		Light Truck	36,000	0.297	0.0294	5.346	0.529
	Security Patrols	Light Truck	26,000	0.297	0.0294	3.861	0.382
Guam Range Complex	Range Maintenance	Heavy Truck	11,250	0.297	0.0294	1.671	0.165
		Light Truck	72,000	0.297	0.0294	10.691	1.058
	Security Patrols	Light Truck	11,250	0.297	0.0294	1.671	0.165
NMS Access	Maneuver Area Access Option 1	Heavy Truck	19	0.297	0.0294	0.003	0.000
		Light Truck	144	0.297	0.0294	0.021	0.002
		HMMWV	192	0.297	0.0294	0.029	0.003
	Maneuver Area Access Option 2	Heavy Truck	48	0.297	0.0294	0.007	0.001
		Light Truck	360	0.297	0.0294	0.053	0.005
		HMMWV	480	0.297	0.0294	0.071	0.007
	Maneuver Area Access Option 3	Heavy Truck	120	0.297	0.0294	0.018	0.002
		Light Truck	900	0.297	0.0294	0.134	0.013
		HMMWV	1,200	0.297	0.0294	0.178	0.018
Tinian	West Field to Bivouac Area	HMMWV	10	0.297	0.0294	0.001	0.000
		Bus	40	0.297	0.0294	0.006	0.001
	Bivouac Area to Ranges	Bus	128	0.297	0.0294	0.019	0.002
	Range Maintenance	Heavy Truck	125	0.297	0.0294	0.019	0.002
		Light Truck	400	0.297	0.0294	0.059	0.006
	Security Patrols	Light Truck	800	0.297	0.0294	0.119	0.012
					Total	24.812	2.455

3.3.6 On Base Vehicle Operational Emissions

On base emissions will occur from commuter vehicles traveling onto each base. The on base vehicle emissions were estimated using the same method described for the training vehicle operational emissions. Only exhaust emissions were analyzed since all roadways will be paved.

Average daily traffic trips were analyzed at each gate for each base. To be conservative, at each base the gate with the maximum amount of daily trips was chosen. Average annual vehicle miles traveled for each type of vehicle were estimated based on a 365 day per year work schedule. The different vehicle types traveling through the gates were analyzed with the following vehicle class mix as summarized in Attachment A in the Guam Implementation Strategy document:

- Class 1, 2, 3 – Motorcycles, cars, pickups, cars/pickups with trailers: 91.4%
- Class 4, 5, 6, 7 – Single unit trucks including buses: 7.8%
- Class 8 – Multi unit truck with four axles: 0.5%
- Class 9 and larger – Multi unit trucks with five or more axles: 0.3%

The estimated on base vehicle emissions are shown in Table I.3-54. On base emissions will occur from commuter vehicles traveling onto each base. The on base vehicle emissions were estimated using the same method described for the training vehicle operational emissions. Only exhaust emissions were analyzed since all roadways will be paved.

Table I.3-54. On Base Vehicle Emissions

Activity Area	*Gate*	*FHWA Vehicle Classification*	*Annual VMT*	*Emission Factors (g/mi)*							*Vehicle Emissions (tons/yr)*						
				SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
North ROI Marine Base	C8	1, 2, 3	36,411,780	0.007	5.13	0.025	0.011	0.23	0.31	368.0	0.273	205.903	0.991	0.450	12.603	9.352	14770.46
		4, 5, 6, 7	3,107,351	1.869	0.37	0.127	0.113	0.11	0.13	598.6	6.401	1.257	0.436	0.388	0.438	0.384	2050.37
		8	199,189	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.962	0.061	0.079	0.073	0.062	0.117	309.81
		9 and larger	119,514	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.577	0.037	0.047	0.044	0.037	0.070	185.89
Andersen AFB	C1 C2 C3 C8	1, 2, 3	8,241,168	0.007	5.13	0.025	0.011	0.23	0.31	368.0	0.062	46.603	0.224	0.102	2.852	2.117	3343.03
		4, 5, 6, 7	703,294	1.869	0.37	0.127	0.113	0.11	0.13	598.6	1.449	0.285	0.099	0.088	0.099	0.087	464.06
		8	45,083	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.218	0.014	0.018	0.017	0.014	0.027	70.12
		9 and larger	27,050	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.131	0.008	0.011	0.010	0.008	0.016	42.07
Central ROI Andersen South	C1 C2 C3 C8	1, 2, 3	2,245,863	0.007	5.13	0.025	0.011	0.23	0.31	368.0	0.017	12.700	0.061	0.028	0.777	0.577	911.04
		4, 5, 6, 7	191,660	1.869	0.37	0.127	0.113	0.11	0.13	598.6	0.395	0.078	0.027	0.024	0.027	0.024	126.47
		8	12,286	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.059	0.004	0.005	0.005	0.004	0.007	19.11
		9 and larger	7,372	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.036	0.002	0.003	0.003	0.002	0.004	11.47
Barrigada	C1 C2 C3 C8	1, 2, 3	10,215,138	0.007	5.13	0.025	0.011	0.23	0.31	368.0	0.077	57.765	0.278	0.126	3.536	2.624	4143.78
		4, 5, 6, 7	871,751	1.869	0.37	0.127	0.113	0.11	0.13	598.6	1.796	0.353	0.122	0.109	0.123	0.108	575.22
		8	55,882	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.270	0.017	0.022	0.020	0.017	0.033	86.92
		9 and larger	33,529	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.162	0.010	0.013	0.012	0.010	0.020	52.15
Naval Base & Polaris Point	Total	1, 2, 3	1,506,249	0.007	5.13	0.025	0.011	0.23	0.31	368.0	0.011	8.518	0.041	0.019	0.521	0.387	611.01
		4, 5, 6, 7	128,542	1.869	0.37	0.127	0.113	0.11	0.13	598.6	0.265	0.052	0.018	0.016	0.018	0.016	84.82
		8	8,240	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.040	0.003	0.003	0.003	0.003	0.005	12.82
		9 and larger	4,944	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.024	0.002	0.002	0.002	0.002	0.003	7.69
South ROI Naval Ordnance	Total	1, 2, 3	145,120	0.007	5.13	0.025	0.011	0.23	0.31	368.0	0.001	0.821	0.004	0.002	0.050	0.037	58.87
		4, 5, 6, 7	20,641	1.869	0.37	0.127	0.113	0.11	0.13	598.6	0.043	0.008	0.003	0.003	0.003	0.003	13.62
		8	1,852	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.009	0.001	0.001	0.001	0.001	0.001	2.88
		9 and larger	1,429	4.382	0.28	0.360	0.332	0.53	0.28	1411.0	0.007	0.000	0.001	0.001	0.000	0.001	2.22

On base annual commuting vehicle emissions were estimated using the methodology presented above and are summarized in Table I.3-55.

Table I.3-55. On Base Vehicle Annual Emissions within Andersen AFB

Location	*Pollutant (TPY)*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	CO_2
On Base Commuting Vehicle Emissions							
North							
Finegayan	8.2	207.3	1.6	1.0	9.9	13.1	17,316.5
Andersen AFB	1.9	46.9	0.4	0.2	2.2	3.0	3,919.3
Sub Total	10.1	254.2	1.9	1.2	12.2	16.1	21,235.8
Central							
Andersen South	0.5	12.8	0.1	0.1	0.6	0.8	1,068.1
Barrigada	2.3	58.1	0.4	0.3	2.8	3.7	4,858.1
Sub Total	2.8	70.9	0.5	0.3	3.4	4.5	5,926.1
Apra Harbor							
Naval Base & Polaris Point	0.3	8.6	0.1	0.0	0.4	0.5	716.3
South							
NMS	0.1	0.8	0.0	0.0	0.0	0.1	77.6

3.3.7 Off Base On-road Vehicle Operational Emissions and Impact

Air quality impacts would also result from the provision of on-road vehicle operations and roadway constructions associated with the proposed action. Four alternatives, Alternatives 1, 2, 3, and 8, described previously are considered for the proposed development of Marine Corps Main Cantonment Area functions.

Potential air quality impacts associated with on-road vehicle and roadway constructions are analyzed through:

- Microscale carbon monoxide (CO) concentration modeling.
- Potential particulate matter (PM) evaluation.
- Roadway construction emissions forecasts for criteria pollutants.
- Vehicle air toxic pollutants evaluation.
- Mesoscale vehicular emissions forecast for criteria pollutants.

3.3.7.1 Methodology

Microscale CO Impact Modeling

Carbon monoxide (CO) exhaust is one of the major concerns associated with on-road vehicle operations. CO is considered a site-specific pollutant with higher concentrations found adjacent to roadways, especially near congested, signalized intersections. Mobile source CO air quality impacts are typically evaluated through a microscale analysis of traffic-related emissions at selected intersections. Procedures outlined by USEPA in *A Modeling Methodology for Predicting Pollutant Concentrations Near Roadway Intersections* (USEPA September 1995) and *Mobile6 User's Guide* (USEPA August 2003) were used to perform a microscale analysis of localized traffic-related CO concentrations for this study.

The modeling analysis includes estimates of emission factors and predictions of CO concentrations for selected intersections. A screening evaluation was performed to identify which intersections within the project area are most congested and would be most affected by the build alternatives. Sites were considered to fail the screening evaluation if the level of service (LOS)[2] decreases below D in one of the build alternatives as compared to the no-action alternative, or if the delay and/or volume increase from the no-action to build alternatives scenario along with an LOS below D. CO impacts were estimated for receptor locations during weekday AM and PM peak periods.

Microscale air quality modeling was performed using the most recent version of the USEPA mobile source emission factor model (MOBILE6.2) (USEPA August 2003) and the USEPA's CAL3QHC (Version 2.0) (USEPA November 1992a). These air quality dispersion models were used to estimate future no-action (i.e., without the proposed project) and future build (i.e., with the proposed project) CO levels at selected locations in the project area. CO vehicular emissions were first estimated using the USEPA MOBILE 6.2 vehicular emission factor model (USEPA October 2002) that provides current and future estimates of emissions from highway motor vehicles by incorporating information on basic emission rates, realistic driving patterns, separation of start and running emissions, correction factors, and fleet.

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[2] LOS is graded on a letter scale from A to F, with A being the highest level of service and F being the lowest. At LOS A, traffic flows freely, while at LOS F, traffic flow is forced and the traffic volume has exceeded the capacity of the roadway to handle it. LOS D is generally considered to be the lowest tolerable level of service for roadways.

These results were then input into CAL3QHC predict CO from motor vehicles at roadway intersections USEPA November 1992b). This model assumes that the dispersion of pollutants downwind of a pollution source follow a normal distribution from the center of the pollution source.

Different emission rates occur when vehicles are stopped (idling), accelerating, decelerating, and moving at different average speeds. CAL3QHC simplifies these different emission rates into two components:

- Emissions when vehicles are stopped (idling) during the red phase of a signalized intersection.
- Emissions when vehicles are in motion during the green phase of a signalized intersection.

The CAL3QHC air quality dispersion model has undergone extensive testing by USEPA and has been found to provide reliable estimates of inert (nonreactive) pollutant concentrations resulting from motor vehicle emissions.

Particulate Matter

On March 10, 2006, the USEPA issued a Final Rule regarding the localized or "hot-spot" analysis of particulate matter less than 2.5 microns in diameter ($PM_{2.5}$) and particulate matter less than 10 microns in diameter (PM_{10}) (CFR 2006). This rule requires that $PM_{2.5}$ hotspot analysis be performed only for transportation projects with significant diesel traffic in areas not meeting $PM_{2.5}$ air quality standards. The project area is classified as an attainment area for PM_{10} and $PM_{2.5.}$ The project is also not anticipated to generate additional diesel traffic. As such, a hotspot analysis is not required.

Roadway Construction Emissions

In contrast to vehicle operational activities, construction activities are usually of short duration and produce only temporary air quality effects. However, the cumulative impacts of large-scale construction activities occurring over many years could cause adverse localized and regional air quality effects. To determine the temporary air quality impacts arising from roadway construction, a detailed construction emissions analysis was conducted. Using the estimated project schedule, along with typical equipment requirements for specific tasks, emission burden from construction activities were estimated for CO, NOx, PM_{10}, $PM_{2.5}$, SO_2 and GHG emissions in terms of CO_2 Since construction emissions would also result from other proposed activities associated with the proposed action, roadway construction related emissions are addressed separately.

Mobile Source Air Toxics (MSATs)

The USEPA also regulates air toxics, which are pollutants known or suspected to cause cancer and/or other serious health effects. Most air toxics originate from manmade sources, including on-road mobile sources, non-road mobile sources (e.g., airplanes), area sources (e.g., dry cleaners), and stationary sources (e.g., factories or refineries). The CAA identified 188 air toxics.

In 2001, USEPA identified a list of 21 Mobile Source Air Toxics (MSATs) and highlighted six of them as priority MSATs. Since 2001, USEPA has conducted an extensive review of the literature to produce a list of the compounds identified in the exhaust or evaporative emissions from on-road and non-road equipment, as well as alternative fuels. This list currently includes approximately 1,000 compounds, many of which are emitted in trace amounts. In February 2007, USEPA finalized a rule to reduce hazardous air pollutants from mobile sources (*Control of Hazardous Air Pollutants from Mobile Sources*, CFR 2008). The rule limits the benzene content of gasoline and reduces toxic emissions from passenger vehicles and gas cans.

The FHWA February 3, 2006 interim guidance establishes a three-tiered approach to determine the level of analysis needed for MSATs in a project-level study. These tiers or categories are reviewed below, using text from the guidance. Following this review, the proposed action is assessed in relation to the guidance.

Tier 1: Exempt Projects or Projects with No Meaningful Potential MSAT Effects.

The types of projects included in this category are:

- Projects qualifying as a categorical exclusion under 23 CFR 771.117(c);
- Projects exempt under the CAA conformity rule under 40 CFR 93.126; or
- Other projects with no meaningful impacts on traffic volumes or vehicle mix.

Additionally, the guidance indicates that, “for projects with no negligible traffic impacts, regardless of the class of NEPA environmental document, no MSAT analysis is required.” It is further noted in the guidance that “the types of projects categorically excluded under 23 CFR 771.117(d) or exempt from conformity rule under 40 CFR 93.127 do not warrant an automatic exemption from an MSAT analysis, but they usually will have no meaningful impact.”

Projects in this category do not require either a qualitative or a quantitative analysis for MSATs, although documentation of the project category is required.

Tier 2: Projects with Low Potential MSAT Effects

The types of projects included in this category are those that serve to improve operations of highway, transit, or freight without adding substantial new capacity or without creating a facility that is likely to meaningfully increase emissions. This category covers a broad range of projects. Examples of these types of projects are minor widening projects and new interchanges, such as those that replace a signalized intersection on a surface street or where design year traffic is not projected to meet the 140,000 to 150,000 AADT criteria specified under Category 3.

Projects in this category are to be addressed with a qualitative analysis following the guidance provided by FHWA.

Tier 3: Projects with Higher Potential MSAT Effects

The types of projects in this category must:

- Create or significantly alter a major intermodal freight facility that has the potential to concentrate high levels of diesel particulate matter in a single location; or
- Create new or add significant capacity to urban highways such as interstates, urban arterials, or urban collector-distributor routes with traffic volumes where the AADT is projected to be in the range of 140,000 to 150,000, or greater, by the design year; or
- Be proposed to be located in proximity to populated areas or in rural areas in proximity to concentrations of vulnerable populations (i.e., schools, nursing homes, hospitals).

FHWA has developed this approach because currently available technical tools do not predict project-specific health impacts of the emission changes associated with the project alternatives.

Technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and effects of this project; however, even though reliable methods do not exist to accurately estimate the health impacts of MSATs at the project level, it is possible to qualitatively assess the levels of future MSAT emissions under the project. Although a qualitative analysis cannot identify and measure health impacts from MSATs, it can give a basis for identifying and comparing the potential differences in MSAT emissions, if any, from the alternatives. The qualitative assessment presented below is derived in part from a study conducted by FHWA titled, *A Methodology for Evaluating Mobile Source Air Toxic Emissions among Transportation Project Alternatives*, found at: www.fhwa.dot.gov/environment/airtoxic/msatcompare/msatemissions.htm.

Based on the recommended tiering approach detailed in the FHWA methodology, the project falls within the Tier 3 category as a project with potential impacts on traffic volumes or vehicle mix. As shown in Table I.3-56, the project is predicted to increase daily VMT by 18% and associated regional emissions from 18% to 19% under Alternatives 1. This is considered a significant increase in traffic for the project area.

Table I.3-56. Daily Regional Emission Burdens (tpy) for Alternatives 1

Scenario	***VMT***	***Speed***	***Emission Burden (tpy)***						
			CO	**NOx**	**VOC**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**CO_2**
2030 No-Action Alternative	3,535,224	28.6	13,388	478	801	78	57	562	80,498,6
2030 Alternative 1	4,160,544	28.0	15,813	566	951	91	67	661	94,687,2
Percent Change from No-Action			18%	18%	19%	18%	18%	18%	18%

Legend: CO = carbon monoxide; VOC = volatile organic compounds; $PM_{2.5}$= particulate matter less than 2.5 microns in diameter;
PM_{10} = particulate matter less than 10 microns in diameter; tpy = tons per year; NOx = nitrogen oxides; VMT = vehicle miles traveled.

FHWA requires quantitative emissions analysis for projects that involve new or additional capacity on roadways where the traffic volume will be 140,000 to 150,000 average annual daily traffic (AADT). The 2030 average daily traffic (ADT) estimates for the three most traveled roadways under Alternative 1 are shown in Table I.3-57. Since the ADTs are less than 140,000 for the design year, a MSAT analysis is not required.

Table I.3-57. Average Daily Traffic for Major Roadways, Alternative 1

Roadway	*Alternative 1 No Build*	*Alternative 1 Build*
Route 1	95,600	95,600
Route 8	58,500	58,600
Route 18	70,500	70,500

Roadway widening may also have the effect of moving some traffic closer to nearby homes, schools, businesses, and other locations where sensitive receptors may be present. Sensitive receptors include those facilities most likely to contain large concentrations of the more sensitive population. These include hospitals, schools, licensed day cares, and elder care facilities.

Due to the project, there may be localized areas where ambient concentrations of MSATs could be higher under the action alternatives than under the no-action alternative. Dispersion studies have shown that the "roadway" air toxics start to drop off at approximately 100 m (328 ft). By 500 m (1,640 ft), most studies have found it very difficult to distinguish the roadway from background toxic concentrations in any given area; however, as discussed previously, the magnitude and duration of these potential increases compared to the baseline (no action alternative) cannot be accurately quantified because of the inherent deficiencies of current models. When new travel lanes are constructed, the localized level of MSAT emissions for the action alternatives could be higher relative to the baseline, but this could be offset due to increases in localized speeds and reductions in congestion that are associated with lower MSAT emissions. In addition, MSATs would be lower in other locations when traffic shifts away from them; however, on a regional basis, USEPA's vehicle and fuel regulations, coupled with fleet turnover, would cause region-wide MSAT levels to be significantly lower than today in almost all cases.

This air quality section includes a basic analysis of the likely MSAT emission impacts of this project; however, available technical tools do not enable us to predict project-specific health impacts of the emission changes associated with the project alternatives. As a result of these limitations, the following discussion is included in accordance with the Council on Environmental Quality's (CEQ) regulations (40 CFR 1502.22(b)) regarding incomplete or unavailable information.

Information that is Unavailable or Incomplete

Evaluating the environmental and health impacts from MSATs on a proposed roadway project would involve several key elements, including emissions modeling, dispersion modeling to estimate ambient concentrations resulting from the estimated emissions, exposure modeling to estimate human exposure to the estimated concentrations, and then a final determination of health impacts based on the estimated exposure. Each of these steps is encumbered by technical shortcomings or uncertain science that prevents a more complete determination of the MSAT health impacts of the proposed action as follows.

- **Emissions**. The USEPA tools to estimate MSAT emissions from motor vehicles are not sensitive to key variables determining emissions of MSATs in the context of roadway projects.
- **Dispersion**. The tools to predict how MSATs disperse are also limited. USEPA's current regulatory models, CALINE3 and CAL3QHC, were developed and validated more than a decade ago for the purpose of predicting episodic concentrations of CO to determine compliance with the NAAQS. The performance of dispersion models is more accurate for predicting maximum concentrations that can occur at some time at some location within a geographic area. This limitation makes it difficult to predict accurate exposure patterns at specific times at specific roadway project locations across an urban area to assess potential health risk.
- **Exposure Levels and Health Effects**. Finally, even if emission levels and concentrations of MSATs could be accurately predicted, shortcomings in current techniques for exposure assessment and risk analysis preclude reaching meaningful conclusions about project-specific health impacts. Exposure assessments are difficult because it is difficult to accurately calculate annual concentrations of MSATs near roadways and to determine the portion of a year that people are actually exposed to those concentrations at a specific location. These difficulties are magnified for 70-year (lifetime or chronic) cancer assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology, which affects emissions rates, over a 70-year period.

Summary of Existing Credible Scientific Evidence Relevant to Evaluating the Impacts of MSATs

Research into the health impacts of MSATs is ongoing. For different emission types, a variety of studies show some statistical associations with adverse health outcomes through epidemiological studies that are frequently based on emissions levels found in occupational settings or using animal studies that demonstrate adverse health outcomes when animals are exposed to large doses.

Exposure to toxics has been a focus of many USEPA efforts. Most notably, the agency conducted the National Air Toxics Assessment in 1996 to evaluate modeled estimates of human exposure applicable to the county level. While not intended for use as a measure of or benchmark for local exposure, the modeled estimates in the National Air Toxics Assessment database best illustrate the levels of various toxics when compared to a national or state level.

USEPA is in the process of assessing the risks of various kinds of exposures to these pollutants. The USEPA Integrated Risk Information System (USEPA 2009b) is a database of human health effects that may result from exposure to various substances found in the environment.

There have been other studies that address MSAT health impacts in proximity to roadways. The Health Effects Institute, a non-profit organization funded by USEPA, FHWA, and industry, has undertaken a major series of studies to research near roadway MSAT hot spots, the health implications of the entire mix of mobile source pollutants, and other topics. The final summary of the series is not expected for several years.

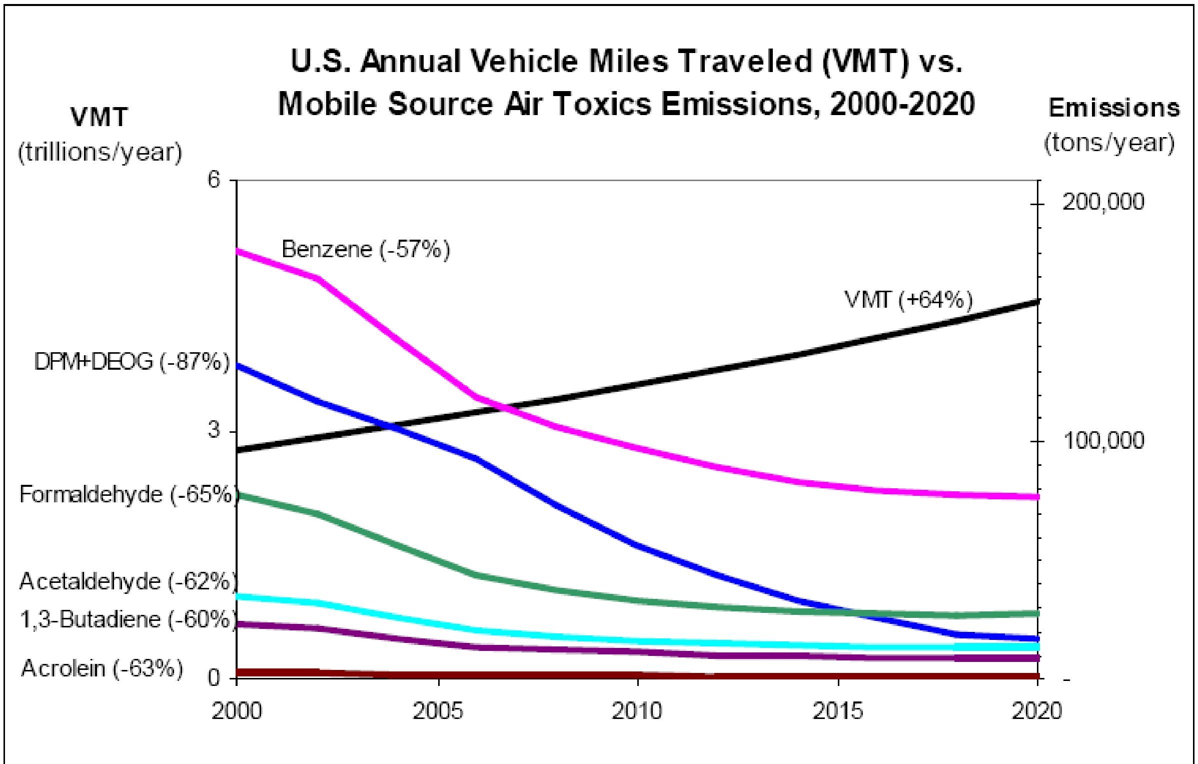
Some recent studies have reported that proximity to roadways is related to adverse health outcomes – particularly respiratory problems (South Coast Air Quality Management District 2000; The Sierra Club 2004; Yuhnke 2005). Much of this research is not specific to MSATs, but instead surveys the full spectrum of criteria and other pollutants. These studies do not provide information that would be useful to alleviate the uncertainties listed above to perform a more comprehensive evaluation of the health impacts specific to this project.

Relevance of Unavailable or Incomplete Information

Because of the uncertainties outlined above, a quantitative assessment of the effects of air toxic emission impacts on human health cannot be made at the project level. While available tools do allow for reasonably predicting relative emissions changes among alternatives for larger projects, the amount of MSAT emissions from each of the project alternatives and MSAT concentrations or exposures created by each of the project alternatives cannot be predicted with enough accuracy to be useful in estimating health impacts. (As noted above, the current emissions model is not capable of serving as a meaningful emissions analysis tool for smaller projects.) Therefore, it is not possible to make a determination of whether any of the alternatives would have a significant impact due to MSAT emissions.

Emissions would likely be lower than present levels in the design year as a result of USEPA's national control programs that are projected to reduce MSAT emissions by 57% to 87% between 2000 and 2020 (Figure 1.3-5). Local conditions on Guam may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures; however, the magnitude of the USEPA-projected reductions is so great that MSAT emissions are likely to be lower in the future in nearly all cases.

Therefore, although the proposed action may increase exposure to MSAT emissions in certain locations, the concentrations and duration of exposures are uncertain. Because of this uncertainty, the health effects from these emissions cannot be estimated.



Notes: For on-road mobile sources. Emissions factors were generated using MOBILE6.2. MTBE proportion of market for oxygenates is held constant, at 50%. Gasoline RVP and oxygenate content are held constant. VMT: *Highway Statistics 2000*, Table VM-2 for 2000, analysis assumes annual growth rate of 2.5%. "DPM +DEOG" is based on MOBILE6.2-generated factors for elemental carbon, organic carbon and SO4 from diesel-powered vehicles, with the particle size cutoff set at 10.0 microns.

Figure I.3-5. Projected MSAT Emissions and Traffic Volumes (2000-2020)

This study has provided a qualitative analysis of MSAT emissions relative to the various alternatives, and it has acknowledged that the build alternatives may increase exposure to MSAT emissions in certain locations, although the concentrations and duration of exposures are uncertain. Because of this uncertainty, the health effects from these emissions cannot be estimated.

Mesoscale Emissions for Criteria Pollutants

Vehicular criteria emissions on a meso-scale (regional) basis were estimated using the USEPA MOBILE 6.2 vehicular emission factor model (USEPA October 2002) that provides current and future estimates of emissions from highway motor vehicles by incorporating information on basic emission rates, realistic driving patterns, separation of start and running emissions, correction factors, and fleet. The forecasted roadway traffic vehicle miles traveled (VMT) under both conditions with and without the proposed action were used in association with Mobile 6.2 predicted emissions factors in order to determine the meso-scale emissions burden under the proposed action.

3.3.7.2 Alternative 1

Mesoscale Emissions Burden

For Alternatives 1, the meso-scale regional emissions are predicted to increase in the range of 18% to 19%, as compared to the no-action alternative. This is primarily due to the estimated 18% increase in vehicle miles traveled (VMT) under both alternatives as shown in Table I.3-56.

Mobile Source Air Toxics

MSAT analysis is not required as discussed previous based on the traffic volume threshold summarized in Table I-3-57 under Alternative 1.

Microscale CO Impact Analysis and Construction Emissions Estimate

North – Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project examining each ROI. As shown in Table I.3-58, 10 North ROI locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Five of these locations failed the screening criteria. The Route 1/28 intersection has the highest overall volume of all the intersections that failed the screening. This site was chosen for detailed analysis. The Route 9/Andersen Air Force Base (AFB) North Gate intersection was also chosen for analysis due to the extremely high delay predicted in the build scenario and the predicted high volumes at this location. These intersections represent the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from these sites represent the worst-case microscale CO impacts expected from the project.

Table I.3-58. Screening Analysis Locations – North, Alternative 1

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/9	1,565	B	15.8	1,650	B	14.6	2,485	C	22.5	3,525	D	52.2
Route 1/29	3,675	F	87.6	2,970	E	60.5	3,550	E	65.5	3,400	E	67.7
Route 1/28	**5,700**	**F**	**226.2**	**6,050**	**F**	**157.7**	**6,600**	**F**	**216.8**	**7,050**	**F**	**104.5**
Route 3/3A	875	A	9.5*	880	B	10.1*	910	B	11.6*	2,660	F	79.0*
Route 3/28	1,904	B	17.8	2,070	C	21.4	3,990	C	26.0	4,210	D	36.9
Route 15/29	1,760	F	****	1,575	F	683.5*	1,860	C	27.7	1,830	C	25.4
Route 3/ North (Commercial) Gate**	1,010	C	21.4*	970	C	15.7*	2,455	B	12.5	2,855	C	28.3
Route 3/ South (Main) Gate**	1,260	D	32.1*	1,200	C	20.7*	3,555	C	33.5	4,295	E	58.6
Route 3/ Control Tree Drive (Residential) Gate	1,300	C	22.1*	2,745	F	51.4*	4,085	C	26.7	4,510	B	18.5
Route 9/ Andersen AFB North Gate**	**1,480**	**E**	**39.5***	**1,385**	**D**	**35.1***	2,035	F	****	2,160	F	****

Notes: **** Delay exceeded maximum calculated value; * Unsignalized intersection.
Indicates sites that failed the screening evaluation. **Indicates site chosen for detailed CO microscale analysis.**

The results of the microscale analysis are shown in Table I.3-59 and Table I.3-60. The values in these tables represent the background CO concentration combined with the modeled results from USEPA's CAL3QHC microscale dispersion model using worst-case meteorological parameters, along with a.m. and p.m. peak traffic data. Emission factors were calculated using USEPA's MOBILE6.2 emission factor program. A background value must be added into the results of the dispersion analysis to account for others sources of CO that are not accounted for in the CAL3QHC modeling. Usually a value from a representative local ambient air quality monitor is used. Guam, however, does not have any local monitoring stations, as discussed earlier in this chapter. Due to this, values from Hawaii were examined to determine their applicability to Guam. Using the 2006-2008 monitored data from the Punchbowl monitor, (rated as a middle scale monitor) located in Honolulu, Hawaii, the second highest maximum 1-hour reading was 1.7 parts ppm. This value was conservatively rounded to 2.0 ppm and represents the background CO concentration for this analysis. A persistence factor, that accounts for hourly variation of traffic and meteorological conditions, of 0.7, as recommended by USEPA was applied to the 1-hour CO concentrations to obtain 8-hour concentrations. As shown in Table I.3-59 and Table I.3-60, no violations of the applicable NAAQS are predicted.

Table I.3-59. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – North, Alternative 1

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 1*		*No-Action*		*Alternative 1*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/25	5.5	6.0	6.2	6.2	6.9	7.3	5.6	5.8	6.0	4.2
Route 9/Andersen AFB North Gate	2.3	2.3	2.1	2.1	2.6	3.1	2.5	2.5	2.9	2.8

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-60. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – North Alternative 1

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 1*	*No-Action*	*Alternative 1*
Route 1/25	4.2	4.3	5.1	4.1	4.2
Route 9/Andersen AFB North Gate	1.6	1.5	2.2	1.8	2.0

Notes: 8-hour CO NAAQS = 9 ppm
Includes a background concentration of 1.4 ppm

North – Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed emission construction analysis was conducted. Using the estimated project schedule, along with typical equipment requirements for specific tasks, emission burden estimates of CO, NO_x, PM_{10}, and $PM_{2.5}$ were calculated. Equipment emissions were presumed to be Tier3, with high sulfur fuel as confirmed by the construction management team. Based on the preliminary schedule, the highest emissions levels per year, per month, and the year that these emissions are predicted to occur in North are shown in Table I.3-61.

Table I.3-61. Estimated Construction Emission Burden – North, Alternative 1

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	13.0	20.3	8.4	4.1	1.4	15.3	3,881
Highest Monthly Emission Burden (Tons)	4.7	7.3	1.8	1.3	0.51	5.4	1,462
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.23	0.36	0.09	0.06	0.03	0.27	73.1
	2011	2011	2011	2011	2011	2011	2011

Central- Microscale CO Analysis

A screening analysis was performed to determine which Central ROI intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-62, 34 locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Twenty-one (21) of these locations failed the screening criteria. The Route 1/8 intersection has the highest overall volume of all the intersections that failed the screening. This site was chosen for detailed analysis. The Route 4/7A intersection has the highest overall delay of any signalized intersection that failed the screening. This site was chosen for detailed analysis. The Route 16/27 intersection fails the screening criteria in other alternatives and was evaluated in this alternative for consistency. These intersections represent the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from these sites represent the worst-case microscale CO impacts expected from the project.

Table I.3-62. Screening Analysis Locations – Central, Alternative 1

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/26	5,910	E	75.8	6,060	F	229.8	6,865	E	75.8	7,295	F	156.6
Route 1/27	5,950	F	157.2	5,875	F	533.7	6,860	F	137.4	7,605	F	374.3
Route 1/ 27A	3,195	E	67.2	3,420	F	189.5	3,925	D	44.4	4,340	E	75.7
Route 1/3	5,055	F	158.4	5,400	F	306.9	4,970	D	48.5	5,845	D	50.6
Route 1/16	5,905	D	52.2	6,410	F	305.5	6,950	E	65.3	7,490	F	87.5
Route 1/14 (Upper Tumon)	5,455	F	82.8	6,165	F	361.2	5,900	E	68.0	6,535	F	82.0
Route 1/ 14A (Opposite K-Mart)	5,550	F	124.1	6,170	F	259.9	5,985	F	112.2	6,790	F	131.5
Route 1/ 10A	6,935	F	82.9	7,055	F	117.2	7,485	F	118.1	7,695	F	102.0
Route 1/ 14B	6,120	E	60.5	6,485	F	91.8	6,485	F	83.9	6,775	E	78.2
Route 1/14	6,715	F	93.3	7,705	F	212.5	7,355	F	182.5	8,455	F	275.1
Route 1/30	6,355	F	273.9	6,975	F	440.9	6,825	F	134.7	7,385	F	267.2
Route 1/8	**7,255**	**F**	**107.6**	**7,915**	**F**	**94.1**	**8,360**	**F**	**97.6**	**8,970**	**F**	**127.5**
Route 1/4	7,535	D	43.4	7,470	D	38.6	6,665	C	32.4	8,775	F	140.2
Route 1/6 (Adelup)	3,770	C	24.1	5,125	F	91.7	4,255	D	40.6	6,240	E	61.8
Route 1/6 (Westerly)	3,080	A	7.8	3,430	B	15.6	3,510	B	18.4	3,905	C	22.0
Route 4/7A	**5,040**	**F**	**298.8**	**4,855**	**F**	**196.9**	**4,765**	**F**	**607.3**	**5,515**	**F**	**534.1**
Route 4/10	4,305	F	95.5	4,365	F	115.9	4,665	F	199.5	4,705	E	65.1
Route 4/17	1,775	D	46.6	1,700	D	48.2	1,810	D	39.6	1,790	E	57.7
Route 4/4A	740	D	27.9*	925	C	21.2*	1,030	E	49.7*	1,790	F	484.3*
Route 7/7A	1,985	F	77.7*	1,745	E	114.5*	1,935	D	29.2*	2,100	F	105.1*
Route 8/33 (East)	3,655	C	31.2	4,680	F	147.3	4,315	D	54.6	4,910	F	81.7
Route 8/10	6,410	F	122.0	6,295	F	116.5	6,435	F	96.9	7,010	F	172.7
Route 10/ 15	5,550	D	49.7	5,585	F	101.1	6,245	F	196.9	6,270	F	152.3
Route 16/ 27A	2,770	C	24.3	3,130	C	26.4	3,050	C	27.4	3,680	C	34.2

Table I.3-62. Screening Analysis Locations – Central, Alternative 1

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 16/ 27	**6,590**	**F**	**275.1**	**6,970**	**F**	**486.4**	**7,665**	**F**	**345.0**	**7,790**	**F**	**288.7**
Route 16/ 10A	6,178	F	874.2	4,880	F	208.7	5,035	F	123.1	5,725	F	123.5
Route 17/ 4A	720	C	17.0*	760	C	17.9*	700	B	13.6*	790	C	18.7*
Route 26/ 25	3,180	F	270.1	3,495	E	71.7	3,415	C	31.2	3,930	D	41.0
Route 26/ 15	1,680	F	134.8*	1,790	F	2494.6*	2,015	C	27.9	2,115	C	32.1
Route 28/ 27A	2,920	F	353.1*	2,565	F	437.8*	2,735	D	35.6	2,640	D	36.6
Route 1/ Turner Street (Main Gate)	3,375	B	13.5*	3,650	F	458.6*	4,780	C	32.4	5,105	E	79.1
Route 15/ Road 1.16 M east of Route 26 (Second Gate)**	1,040	N/A	N/A	1,010	N/A	N/A	1,320	C	22.1*	1,410	C	22.6*
Route 16/ Sabana Barrigada	4,535	F	****	4,960	F	****	4,765	N/A	N/A	5,150	N/A	N/A
Route 15/ Fadian Point Drive	1,385	E	50.0*	1,625	E	44.4*	1,560	N/A	N/A	345	N/A	N/A

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.
Legend: NA = Not Applicable At The Time Of Analysis.

The results of the microscale analysis are shown in Table I.3-63 and Table I.3-64. The values in these tables, using the same analysis techniques and parameters as those applied in North, represent the predicted worst-case CO concentrations. As shown in Table I.3-63 and Table I.3-64, no violations of the applicable NAAQS are predicted.

Table I.3-63. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – Central, Alternative 1

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 1*		*No-Action*		*Alternative 1*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/8	6.0	6.4	6.1	6.4	7.3	7.6	5.8	5.4	6.2	6.4
Route 4/7A	5.3	3.8	4.8	5.4	5.1	5.6	4.6	5.0	4.6	5.1
Route 16/27	8.4	9.4	7.0	7.3	8.1	9.0	6.4	6.8	7.0	7.9

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-64. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – Central, Alternative 1

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 1*	*No-Action*	*Alternative 1*
Route 1/8	4.5	4.5	5.3	4.1	4.5
Route 4/7A	3.7	3.8	3.9	3.5	3.6
Route 16/27	6.6	5.1	6.3	4.8	5.5

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

Central - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed emission construction analysis was conducted using the same method as described for the North ROI. The highest predicted construction emissions per year, per month, and the year that these emissions are predicted to occur are shown in Table I.3-65.

Table I.3-65. Estimated Construction Emission Burden – Central, Alternative 1

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	54.6	84.2	17.2	14.4	5.9	62.4	16,707
Highest Monthly Emission Burden (Tons)	8.5	13.1	2.2	2.2	0.9	9.7	2,590
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.42	0.65	0.11	.11	0.05	0.48	129
Year Highest Monthly Emission Burden Predicted to Occur	2012	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013

Apra Harbor - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-66, three locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. One of these locations failed the screening criteria. The Route 1/2A intersection has the highest overall volume and highest delay of all the signalized intersections that failed the screening. This site was chosen for detailed analysis. This intersection represents the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from this site represent the worst-case microscale CO impacts expected from the project.

Table I.3-66. Screening Analysis Locations – Apra Harbor, Alternative 1

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/11	3,460	B	18.8	3,615	C	26.8	3,885	C	20.7	4,080	D	43.5
Route 1/ Polaris Point	3,655	A	4.3	4,680	A	6.2	3,420	A	8.2	3,900	A	7.4
Route 1/2a	**3,790**	**E**	**58.8**	**4,250**	**E**	**55.5**	4,275	E	66.8	4,780	E	57.2

Notes: * Unsignalized intersection;**** = Delay exceeded maximum calculated value
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.

The results of the microscale analysis are shown in Table I.3-67 and Table I.3-68. The values in these tables, using the same analysis techniques and parameters as those applied in North, represent the predicted worst-case CO concentrations. As shown in Table I.3-67 and Table I.3-68, no violations of the applicable NAAQS are predicted.

Table I.3-67. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – Apra Harbor, Alternative 1

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 1*		*No-Action*		*Alternative 1*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/2A	4.7	4.3	5.6	4.7	5.3	5.1	4.3	3.9	4.3	3.9

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-68. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – Apra Harbor, Alternative 1

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 1*	*No-Action*	*Alternative 1*
Route 1/2A	3.3	3.9	3.7	3.0	3.0

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

Apra Harbor - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for the North. The highest predicted construction emissions per year, per month, and the year that these emissions are predicted to occur are shown in Table I.3-69.

Table I.3-69. Estimated Construction Emission Burden – Apra Harbor, Alternative 1

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	13.5	20.9	5.0	3.7	1.2	15.4	4,199
Highest Monthly Emission Burden (Tons)	1.6	2.5	0.59	0.44	0.34	1.82	494
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.08	0.12	0.03	0.02	0.02	0.09	24.7
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

South - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-70, four locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Two of these locations failed the screening criteria. The Route 5/2A intersection has the highest overall volume and highest delay of all the signalized intersections that failed the screening. This site was chosen for detailed analysis. This intersection represents the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from this site represent the worst-case microscale CO impacts expected from the project.

Table I.3-70. Screening Analysis Locations – South, Alternative 1

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 5/ 2A	**2,885**	**D**	**53.0**	**3,115**	**C**	**22.7**	**3,280**	**F**	**96.3**	**3,335**	**C**	**26.2**
Route 5/17	3,655	D	28.9*	4,680	E	47.8*	1,035	F	56.8*	1,105	F	149.6*
Route 2/12	2,245	F	83.1	2,200	C	25.4	2,380	C	27.8	2,350	C	27.1
Route 5/ Harmon Road	347	A	9.7*	347	A	9.8*	385	A	9.5*	520	A	10.6*

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.

The results of the microscale analysis are shown in Table I.3-71 and Table I.3-72. The values in these tables, using the same analysis techniques and parameters as those applied in the North, represent the predicted worst-case CO concentrations. As shown in Table I.3-71 and Table I.3-72 no violations of the applicable NAAQS are predicted.

Table I.3-71. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – South, Alternative 1

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 1*		*No-Action*		*Alternative 1*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 5/2A	4.2	3.9	4.2	3.9	4.5	4.0	3.5	3.5	4.0	3.7

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-72. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – South, Alternative 1

Analysis Site	Existing	2014		2030	
		No-Action	Alternative 1	No-Action	Alternative 1
Route 5/2A	2.9	2.9	3.2	2.5	2.8

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

South - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for North. As shown in Table I.3-73, construction emissions are negligible.

Table I.3-73. Estimated Construction Emission Burden – South, Alternative 1

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	11.1	17.3	2.9	2.8	1.2	12.9	3310
Highest Monthly Emission Burden (Tons)	3.1	4.9	0.83	0.81	0.34	3.7	957
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.16	0.25	0.04	0.04	0.02	0.18	47.8
Year Highest Monthly Emission Burden Predicted to Occur	2012	2013	2012 & 2013	2012 & 2013	2013	2013	2013

Potential Mitigation Measures

Because the alternative is not predicted to cause a significant impact on air quality levels, no mitigation is proposed.

3.3.7.3 Alternative 2 (Preferred Alternative)

Mesoscale Emissions Burden

As shown in Table I.3-74, regional emissions are predicted to increase in the range of 18% to 19% under Alternative 2, as compared to the no-action alternative. This is primarily due to the estimated 18% increase in VMT under Alternative 2.

Table I.3-74. Daily Regional Emission Burdens (tpy), Alternative 2

Scenario	***VMT***	***Speed***	***Emission Burden (tpy)***						
			CO	**NOx**	**VOC**	**PM_{10}**	**$PM_{2.5}$**	**SO_2**	**CO_2**
2030 No-Action Alternative	3,535,224	28.6	13,388	478	801	78	57	562	80,498,6
2030 Alternative 2	4,160,544	28.0	15,813	566	951	91	67	661	94,687,2
Percent Change from No-Action			18%	18%	19%	18%	18%	18%	18%

Legend: CO = carbon monoxide; VOC = volatile organic compounds; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter;
PM_{10} = particulate matter less than 10 microns in diameter; tpy = tons per year; NOx = nitrogen oxides;
VMT = vehicle miles traveled.

Mobile Source Air Toxics

Since the ADT levels under Alternative 2 would remain the same as Alternative 1, no MSAT analysis would be required.

Microscale CO Impact Analysis and Construction Emissions Estimate

North- Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-75, 10 locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Five of these locations failed the screening criteria. The Route 1/28 intersection has the highest overall volume of all the intersections that failed the screening. This site was chosen for detailed analysis. The Route 9/Andersen AFB North Gate intersection was also chosen for analysis due to the extremely high delay predicted in the build scenario and the predicted high volumes at this location. These intersections represent the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from these sites represent the worst-case microscale CO impacts expected from the project.

Table I.3-75. Screening Analysis Locations – North, Alternative 2

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/9	1,565	B	15.8	1,650	B	14.6	2,485	C	22.5	3,525	D	52.2
Route 1/29	3,675	F	87.6	2,970	E	60.5	3,550	E	65.5	3,400	E	67.7
Route 1/28	**5,700**	**F**	**226.2**	**6,050**	**F**	**157.7**	**6,600**	**F**	**216.8**	**7,050**	**F**	**104.5**
Route 3/3A	875	A	9.5*	880	B	10.1*	910	B	11.6*	2,660	F	79.0*
Route 3/28	1,904	B	17.8	2,070	C	21.4	3,990	C	26.0	4,210	D	36.9
Route 15/29	1,760	F	****	1,575	F	683.5*	1,860	C	27.7	1,830	C	25.4
Route 3/ North (Commercial) Gate**	1,010	C	21.4*	970	C	15.7*	2,455	B	12.5	2,855	C	28.3
Route 3/ South (Main) Gate**	1,260	D	32.1*	1,200	C	20.7*	3,555	C	33.5	4,295	E	58.6
Route 3/ Control Tree Drive (Residential) Gate	1,300	C	22.1*	2,745	F	51.4*	4,085	C	26.7	4,510	B	18.5
Route 9/ Andersen AFB North Gate**	**1,480**	**E**	**39.5***	**1,385**	**D**	**35.1***	2,035	F	****	2,160	F	****

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.

Indicates sites that failed the screening evaluation.

Indicates site chosen for detailed CO microscale analysis.

The results of the microscale analysis are shown in Table I.3-76 and Table I.3-77. The values in these tables, using the same analysis techniques and parameters as those applied in North under Alternative 1, represent the predicted worst-case CO concentrations. As shown in Table I.3-76 and Table I.3-77, no violations of the applicable NAAQS are predicted.

Table I.3-76. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – North, Alternative 2

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 2*		*No-Action*		*Alternative 2*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/25	5.5	6.0	6.2	6.2	6.9	7.3	5.6	5.8	6.0	4.2
Route 9/Andersen AFB North Gate	2.3	2.3	2.1	2.1	2.6	3.1	2.5	2.5	2.9	2.8

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-77. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – North Region, Alternative 2

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 2*	*No-Action*	*Alternative 2*
Route 1/25	4.2	4.3	5.1	4.1	4.2
Route 9/Andersen AFB North Gate	1.6	1.5	2.2	1.8	2.0

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

North - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for the North (Alternative 1). The highest predicted construction emissions per year, per month, and the year that these emissions are predicted to occur are shown in Table I.3-78. These emissions were further combined with those from other project components and discussed in Volume 7 to determine the potential impact significance.

Table I.3-78. Estimated Construction Emission Burden – North, Alternative 2

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	13.0	20.3	8.4	4.1	1.4	15.3	3,881
Highest Monthly Emission Burden (Tons)	4.7	7.3	1.8	1.3	0.51	5.4	1,462
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.23	0.36	0.09	0.06	0.03	0.27	73.1
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

Central - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-79, 34 locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Twenty-one (21) of these locations failed the screening criteria. The Route 1/8 intersection has the highest overall volume of all the intersections that failed the screening. This site was chosen for detailed analysis. The Route 4/7A intersection has the highest overall delay of any signalized intersection that failed the screening. This site was chosen for detailed analysis. The Route 16/27 intersection fails the screening criteria in other alternatives and was evaluated in this alternative for consistency. These intersections represent the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from these sites represent the worst-case microscale CO impacts expected from the project.

Table I.3-79. Screening Analysis Locations – Central, Alternative 2

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/26	5,910	E	75.8	6,060	F	229.8	6,865	E	75.8	7,295	F	156.6
Route 1/27	5,950	F	157.2	5,875	F	533.7	6,860	F	137.4	7,605	F	374.3
Route 1/27A	3,195	E	67.2	3,420	F	189.5	3,925	D	44.4	4,340	E	75.7
Route 1/3	5,055	F	158.4	5,400	F	306.9	4,970	D	48.5	5,845	D	50.6
Route 1/16	5,905	D	52.2	6,410	F	305.5	6,950	E	65.3	7,490	F	87.5
Route 1/14 (Upper Tumon)	5,455	F	82.8	6,165	F	361.2	5,900	E	68.0	6,535	F	82.0
Route 1/14A (Opposite K-Mart)	5,550	F	124.1	6,170	F	259.9	5,985	F	112.2	6,790	F	131.5
Route 1/10A	6,935	F	82.9	7,055	F	117.2	7,485	F	118.1	7,695	F	102.0
Route 1/14B	6,120	E	60.5	6,485	F	91.8	6,485	F	83.9	6,775	E	78.2
Route 1/14	6,715	F	93.3	7,705	F	212.5	7,355	F	182.5	8,455	F	275.1
Route 1/30	6,355	F	273.9	6,975	F	440.9	6,825	F	134.7	7,385	F	267.2
Route 1/8	**7,255**	**F**	**107.6**	**7,915**	**F**	**94.1**	**8,360**	**F**	**97.6**	**8,970**	**F**	**127.5**
Route 1/4	7,535	D	43.4	7,470	D	38.6	6,665	C	32.4	8,775	F	140.2
Route 1/6 (Adelup)	3,770	C	24.1	5,125	F	91.7	4,255	D	40.6	6,240	E	61.8
Route 1/6 (Westerly)	3,080	A	7.8	3,430	B	15.6	3,510	B	18.4	3,905	C	22.0
Route 4/7A	**5,040**	**F**	**298.8**	**4,855**	**F**	**196.9**	**4,765**	**F**	**607.3**	**5,515**	**F**	**534.1**
Route 4/10	4,305	F	95.5	4,365	F	115.9	4,665	F	199.5	4,705	E	65.1
Route 4/17	1,775	D	46.6	1,700	D	48.2	1,810	D	39.6	1,790	E	57.7
Route 4/4A	740	D	27.9*	925	C	21.2*	1,030	E	49.7*	1,790	F	484.3*
Route 7/7A	1,985	F	77.7*	1,745	E	114.5*	1,935	D	29.2*	2,100	F	105.1*
Route 8/33 (East)	3,655	C	31.2	4,680	F	147.3	4,315	D	54.6	4,910	F	81.7
Route 8/10	6,410	F	122.0	6,295	F	116.5	6,435	F	96.9	7,010	F	172.7
Route 10/15	5,550	D	49.7	5,585	F	101.1	6,245	F	196.9	6,270	F	152.3
Route 16/ 27A	2,770	C	24.3	3,130	C	26.4	3,050	C	27.4	3,680	C	34.2
Route 16/ 27	**6,590**	**F**	**275.1**	**6,970**	**F**	**486.4**	**7,665**	**F**	**345.0**	**7,790**	**F**	**288.7**
Route 16/ 10A	6,178	F	874.2	4,880	F	208.7	5,035	F	123.1	5,725	F	123.5
Route 17/ 4A	720	C	17.0*	760	C	17.9*	700	B	13.6*	790	C	18.7*
Route 26/25	3,180	F	270.1	3,495	E	71.7	3,415	C	31.2	3,930	D	41.0
Route 26/15	1,680	F	134.8*	1,790	F	2494.6*	2,015	C	27.9	2,115	C	32.1
Route 28/27A	2,920	F	353.1*	2,565	F	437.8*	2,735	D	35.6	2,640	D	36.6
Route 1/ Turner Street (Main Gate)	3,375	B	13.5*	3,650	F	458.6*	4,780	C	32.4	5,105	E	79.1

Table I.3-79. Screening Analysis Locations – Central, Alternative 2

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 15/ Road 1.16 M east of Route 26 (Second Gate)**	1,040	N/A	N/A	1,010	N/A	N/A	1,320	C	22.1*	1,410	C	22.6*
Route 16/ Sabana Barrigada	4,535	F	****	4,960	F	****	4,765	N/A	N/A	5,150	N/A	N/A
Route 15/ Fadian Point Drive	1,385	E	50.0*	1,625	E	44.4*	1,560	N/A	N/A	345	N/A	N/A

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.
*Legend***:** NA = Not Applicable At The Time Of Analysis.

The results of the microscale analysis are shown in Table I.3-80 and Table I.3-81. The values in these tables, using the same analysis techniques and parameters as those applied in the North Region (Alternative 1), represent the predicted worst-case CO concentrations. As shown in Table I.3-80 and Table I.3-81, no violations of the applicable NAAQS are predicted.

Table I.3-80. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – Central, Alternative 2

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 2*		*No-Action*		*Alternative 2*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/8	6.0	6.4	6.1	6.4	7.3	7.6	5.8	5.4	6.2	6.4
Route 4/7A	5.3	3.8	4.8	5.4	5.1	5.6	4.6	5.0	4.6	5.1
Route 16/27	8.4	9.4	7.0	7.3	8.1	9.0	6.4	6.8	7.0	7.9

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-81. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – Central, Alternative 2

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 2*	*No-Action*	*Alternative 2*
Route 1/8	4.5	4.5	5.3	4.1	4.5
Route 4/7A	3.7	3.8	3.9	3.5	3.6
Route 16/27	6.6	5.1	6.3	4.8	5.5

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

Central - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed emission construction analysis was conducted using the same method as described for North (Alternative 1). The highest emissions per year, per month, and the year that these emissions are predicted to occur are shown in Table I.3-82. These emissions were further combined with those from other project components and discussed in Volume 7 to determine the potential impact significance.

Table I.3-82. Estimated Construction Emission Burden – Central, Alternative 2

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	54.6	84.2	17.2	14.4	5.9	62.4	16,707
Highest Monthly Emission Burden (Tons)	8.5	13.1	2.2	2.2	0.9	9.7	2,590
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.42	0.65	0.11	.11	0.05	0.48	129
Year Highest Monthly Emission Burden Predicted to Occur	2012	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013

Apra Harbor - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-83, three locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. One of these locations failed the screening criteria. The Route 1/2A intersection has the highest overall volume and highest delay of all the signalized intersections that failed the screening. This site was chosen for detailed analysis. This intersection represents the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from this site represent the worst-case microscale CO impacts expected from the project.

Table I.3-83. Screening Analysis Locations – Apra Harbor, Alternative 2

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/11	3,460	B	18.8	3,615	C	26.8	3,885	C	20.7	4,080	D	43.5
Route 1/ Polaris Point	3,655	A	4.3	4,680	A	6.2	3,420	A	8.2	3,900	A	7.4
Route 1/2A	**3,790**	**E**	**58.8**	**4,250**	**E**	**55.5**	4,275	E	66.8	4,780	E	57.2

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.

The results of the microscale analysis are shown in Table I.3-84 and Table I.3-85. The values in these tables, using the same analysis techniques and parameters as those applied in the North Region (Alternative 1), represent the predicted worst-case CO concentrations. As shown in Table I.3-84 and Table I.3-85, no violations of the applicable NAAQS are predicted.

Table I.3-84. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – Apra Harbor, Alternative 2

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 2*		*No-Action*		*Alternative 2*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/2A	4.7	4.3	5.6	4.7	5.3	5.1	4.3	3.9	4.3	3.9

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-85. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – Apra Harbor, Alternative 2

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 2*	*No-Action*	*Alternative 2*
Route 1/2A	3.3	3.9	3.7	3.0	3.0

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

Apra Harbor - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for North (Alternative 1). The highest predicted construction emissions per year, per month, and the year that these emissions are predicted to occur are shown in Table I.3-86. These emissions were further combined with those from other project components and discussed in Volume 7 to determine the potential impact significance.

Table I.3-86. Estimated Construction Emission Burden – Apra Region, Alternative 2

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	13.5	20.9	5.0	3.7	1.2	15.4	4,199
Highest Monthly Emission Burden (Tons)	1.6	2.5	0.59	0.44	0.34	1.82	494
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.08	0.12	0.03	0.02	0.02	0.09	24.7
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

South -Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-87, four locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Two of these locations failed the screening criteria. The Route 5/2A intersection has the highest overall volume and highest delay of all the signalized intersections that failed the screening. This site was chosen for detailed analysis. This intersection represents the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from this site represent the worst-case microscale CO impacts expected from the project.

Table I.3-87. Screening Analysis Locations – South, Alternative 2

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 5/ 2A	**2,885**	**D**	**53.0**	**3,115**	**C**	**22.7**	**3,280**	**F**	**96.3**	**3,335**	**C**	**26.2**
Route 5/17	3,655	D	28.9*	4,680	E	47.8*	1,035	F	56.8*	1,105	F	149.6*
Route 2/12	2,245	F	83.1	2,200	C	25.4	2,380	C	27.8	2,350	C	27.1
Route 5/ Harmon Road	347	A	9.7*	347	A	9.8*	385	A	9.5*	520	A	10.6*

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.

The results of the microscale analysis are shown in Table I.3-88 and Table I.3-89. The values in these tables, using the same analysis techniques and parameters as those applied for North (Alternative 1), represent the predicted worst-case CO concentrations. As shown in Table I.3-88 and Table I.3-89, no violations of the applicable NAAQS are predicted.

Table I.3-88. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – South, Alternative 2

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 2*		*No-Action*		*Alternative 2*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 5/2A	4.2	3.9	4.2	3.9	4.5	4.0	3.5	3.5	4.0	3.7

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-89. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – South, Alternative 2

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 2*	*No-Action*	*Alternative 2*
Route 5/2A	2.9	2.9	3.2	2.5	2.8

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

South - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for North (Alternative 1). As shown in Table I.3-90, construction emissions are negligible.

Table I.3-90. Estimated Construction Emission Burden – South, Alternative 2

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	11.1	17.3	2.9	2.8	1.2	12.9	3310
Highest Monthly Emission Burden (Tons)	3.1	4.9	0.83	0.81	0.34	3.7	957
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.16	0.25	0.04	0.04	0.02	0.18	47.8
Year Highest Monthly Emission Burden Predicted to Occur	2012	2013	2012 & 2013	2012 & 2013	2013	2013	2013

Potential Mitigation Measures

Because the alternative is not predicted to cause a significant impact on air quality levels, no mitigation is proposed.

3.3.7.4 Alternative 3

Mesoscale Emissions Burden

As shown in Table I.3-91, regional emissions are predicted to increase in the range of 20% to 23% under Alternative 3, as compared to the no-action alternative. This is primarily due to the estimated 20% increase in VMT under Alternative 3.

Table I.3-91. Daily Regional Emission Burdens (tpy), Alternative 3

Scenario	*VMT*	*Speed*	*Emission Burden (tpy)*						
			CO	NOx	VOC	PM_{10}	$PM_{2.5}$	SO_2	CO_2
2030 No-Action Alternative	3,535,224	28.6	13,388	478	801	78	57	562	80,498,6
2030 Alternative 2	4,249,190	27.4	16,211	580	982	93	68	675	96,704,7
Percent Change from No-Action			21%	21%	23%	20%	20%	20%	20%

Legend: CO = carbon monoxide; VOC = volatile organic compounds; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter;
PM_{10} = particulate matter less than 10 microns in diameter; tpy = tons per year; NOx = nitrogen oxides; VMT = vehicle miles traveled.

Mobile Source Air Toxics

FHWA requires quantitative emissions analysis for projects that involve new or additional capacity on roadways where the traffic volume will be 140,000 to 150,000 average annual daily traffic (AADT). The 2030 average daily traffic (ADT) estimates for the three most traveled roadways under Alternative 3 are shown in Table I.3-92. Since the ADTs are less than 140,000 for the design year, a MSAT analysis is not required.

Table I.3-92. Average Daily Traffic for Major Roadways, Alternative 3

Roadway	*Alternative 3 No Build*	*Alternative 3 Build*
Route 1	95,100	93,100
Route 8	59,000	60,400
Route 18	83,600	89,200

Microscale CO Impact Analysis and Construction Emissions Estimate

North – Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-93, 10 locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Nine of these locations failed the screening criteria. The Route 1/28 intersection has the highest overall volume of all the intersections that failed the screening. This site was chosen for detailed analysis. The Route 9/Andersen AFB North Gate intersection was also chosen for analysis due to the extremely high delay predicted in the build scenario and the predicted high volumes at this location. These intersections represent the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from these sites represent the worst-case microscale CO impacts expected from the project.

Table I.3-93. Screening Analysis Locations – North, Alternative 3

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/9	1,565	B	15.8	1,650	B	14.6	2,540	C	24.4	3,525	D	53.0
Route 1/29	3,675	F	87.6	2,970	E	60.5	4,025	F	85.3	3,895	F	90.5
Route 1/28	5,700	F	226.2	6,050	F	157.7	6,885	F	198.5	7,390	F	139.5
Route 3/3A	875	A	9.5*	880	B	10.1*	2,225	E	47.2*	2,340	F	100.7*
Route 3/28	1,904	B	17.8	2,070	C	21.4	5,680	F	90.2	6,025	D	53.9
Route 15/ 29*	1,760	F	****	1,575	F	683.5*	1,945	F	161.4	1,985	C	26.2
Route 3/ North (Commercial) Gate	1,010	C	21.4*	970	C	15.7*	3,935	F	91.6	3,375	D	39.9
Route 3/ South (Main) Gate	1,260	D	32.1*	1,200	C	20.7*	5,945	D	51.6	6,275	F	149.6
Route 3/ Control Tree Drive (Residential) Gate	1,300	C	22.1*	2,745	F	51.4*	5,525	F	114.6	5,680	F	87.3
Route 9/ Andersen AFB North Gate	**1,480**	**E**	**39.5***	**1,385**	**D**	**35.1***	**2,035**	**F**	**1031.0***	**2,160**	**F**	**9051.1***

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.

The results of the microscale analysis are shown in Table I.3-94 and Table I.3-95. The values in these tables, using the same analysis techniques and parameters as those applied for North (Alternative 1), represent the predicted worst-case CO concentrations. As shown in Table I.3-94 and Table I.3-95, no violations of the applicable NAAQS are predicted.

Table I.3-94. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – North, Alternative 3

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 3*		*No-Action*		*Alternative 3*	
	a.m.	*p.m*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/25	5.5	6.0	6.2	6.2	7.1	7.5	5.6	5.8	5.6	5.9
Route 9/Andersen AFB North Gate	2.3	2.3	2.1	2.1	2.7	3.3	2.5	2.5	2.9	2.8

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-95. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – North, Alternative 3

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 3*	*No-Action*	*Alternative 3*
Route 1/25	4.2	4.3	5.3	4.1	4.1
Route 9/Andersen AFB North Gate	1.6	1.5	2.3	1.8	2.0

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

North - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for North under Alternative 1. The highest predicted construction emissions per year, per month, and the year that these emissions re predicted to occur are shown in Table I.3-96.

Table I.3-96. Estimated Construction Emission Burden – North, Alternative 3

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	13.0	20.3	8.4	4.1	1.4	15.3	3,881
Highest Monthly Emission Burden (Tons)	4.7	7.3	1.8	1.3	0.51	5.4	1,462
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.23	0.36	0.09	0.06	0.03	0.27	73.1
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

Central - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-97, 34 locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Twenty-eight (28) of these locations failed the screening criteria. The Route 16/27 intersection has the highest overall volume of all the intersections that failed the screening. This site was chosen for detailed analysis. The Route 4/7A intersection has the highest overall delay of any signalized intersection that failed the screening. This site was chosen for detailed analysis. These intersections represent the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from these sites represent the worst-case microscale CO impacts expected from the project.

Table I.3-97. Screening Analysis Locations – Central, Alternative 3

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/26	5,910	E	75.8	6,060	F	229.8	7,120	F	89.4	7,615	F	209.1
Route 1/27	5,950	F	157.2	5,875	F	533.7	6,705	F	151.1	7,625	F	399.6
Route 1/ 27A	3,195	E	67.2	3,420	F	189.5	4,160	F	120.2	4,435	F	157.1
Route 1/3	5,055	F	158.4	5,400	F	306.9	7,815	F	341.3	8,030	F	474.4
Route 1/16	5,905	D	52.2	6,410	F	305.5	8,270	F	232.2	8,540	F	340.3
Route 1/14 (Upper Tumon)	5,455	F	82.8	6,165	F	361.2	5,775	E	66.6	6,355	E	71.5

Table I.3-97. Screening Analysis Locations – Central, Alternative 3

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/ 14A (Opposite K-Mart)	5,550	F	124.1	6,170	F	259.9	5,860	E	71.0	6,435	F	112.3
Route 1/ 10A	6,935	F	82.9	7,055	F	117.2	7,515	F	129.6	8,170	F	193.6
Route 1/ 14B	6,120	E	60.5	6,485	F	91.8	6,480	E	79.8	6,965	E	78.5
Route 1/14	6,715	F	93.3	7,705	F	212.5	7,355	F	176.8	8,635	F	315.8
Route 1/30	6,355	F	273.9	6,975	F	440.9	6,795	F	148.5	7,475	F	253.3
Route 1/8	**7,255**	**F**	**107.6**	**7,915**	**F**	**94.1**	**7,835**	**F**	**102.7**	**8,965**	**F**	**155.5**
Route 1/4	7,535	D	43.4	7,470	D	38.6	6,565	C	30.5	7,440	F	107.2
Route 1/6 (Adelup)	3,770	C	24.1	5,125	F	91.7	4,265	C	29.7	7,850	F	958.7
Route 1/6 (Westerly)	3,080	A	7.8	3,430	B	15.6	3,945	C	27.4	3,910	C	23.0
Route 4/ 7A	**5,040**	**F**	**298.8**	**4,855**	**F**	**196.9**	**4,830**	**F**	**586.7**	**5,240**	**F**	**339.2**
Route 4/10	4,305	F	95.5	4,365	F	115.9	4,705	F	199.7	4,700	E	65.9
Route 4/17	1,775	D	46.6	1,700	D	48.2	1,785	D	39.6	1,785	E	55.9
Route 4/ 4A*	740	D	27.9*	925	C	21.2*	1,005	E	44.3*	960	C	21.9*
Route 7/ 7A*	1,985	F	77.7*	1,745	D	28.3*	1,920	D	28.3*	2,085	F	87.7*
Route 8/33 (East)	3,655	C	31.2	4,680	E	64.3	4,335	D	52.9	2,250	C	29.1
Route 8/10	6,410	F	122.0	6,295	F	265.3	6,495	F	137.9	7,090	F	171.9
Route 10/ 15	5,550	D	49.7	5,585	F	197.9	6,230	F	197.9	6,245	F	147.2
Route 16/ 27A	2,770	C	24.3	3,130	F	99.9	4,905	D	44.9	5,405	F	80.6
Route 16/ 27	**6,590**	**F**	**275.1**	**6,970**	**F**	**587.3**	**9,380**	**F**	**455.3**	**9,825**	**F**	**470.0**
Route 16/ 10A	6,178	F	874.2	4,880	F	459.9	5,570	F	210.3	7,710	F	524.0
Route 17/ 4A*	720	C	17.0*	760	C	16.5*	710	C	16.5*	785	C	18.5*
Route 26/ 25*	3,180	F	270.1	3,495	F	369.5	4,125	F	85.4	4,365	E	62.3
Route 26/ 15	1,680	F	134.8*	1,790	F	3450.7*	2,235	C	30.2	2,375	C	25.4
Route 28/ 27A	2,920	F	353.1*	2,565	F	528.0*	3,075	D	41.4	3,390	E	65.2
Route 1/ Turner Street (Main Gate)	3,375	B	13.5*	3,650	C	32.4	4,780	C	32.4	5,105	E	79.5

Table I.3-97. Screening Analysis Locations – Central, Alternative 3

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 15/ Road 1.16 M east of Route 26 (Second Gate)	1,040	N/A	N/A	1,010	C	22.1*	1,320	C	22.1*	1,410	C	21.1*
Route 16/ Sabana Barrigada	4,535	F	****	4,960	D	48.1	7,230	D	48.1	7,740	F	94.2
Route 15/ Fadian Point Drive	1,385	E	50.0*	1,625	E	44.4*	1,795	E	73.5	2,125	F	209.1

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.
*Legend***:** NA = Not Applicable At The Time Of Analysis.

The results of the microscale analysis are shown in Table I.3-98 and Table I.3-99. The values in these tables, using the same analysis techniques and parameters as those applied for North (Alternative 1), represent the predicted worst-case CO concentrations. As shown in Table I.3-98 and Table I.3-99 no violations of the applicable NAAQS are predicted.

Table I.3-98. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – Central, Alternative 3

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 3*		*No-Action*		*Alternative 3*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/8	6.0	6.4	6.1	6.4	7.3	7.6	5.8	5.4	6.2	6.4
Route 4/7A	5.3	3.8	4.8	5.4	5.1	5.6	4.6	5.0	4.6	5.1
Route 16/27	8.4	9.4	7.0	7.3	8.1	9.0	6.4	6.8	7.0	7.9

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-99. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – Central, Alternative 3

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 3*	*No-Action*	*Alternative 3*
Route 1/8	4.5	4.5	5.3	4.1	4.5
Route 4/7A	3.7	3.8	3.9	3.5	3.6
Route 16/27	6.6	5.1	6.3	4.8	5.5

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

Central - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for North (Alternative 1). The highest predicted construction emissions per year, per month, and the year that these emissions are predicted to occur are shown in Table I.3-100.

Table I.3-100. Estimated Construction Emission Burden – Central, Alternative 3

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	54.6	84.2	17.2	14.4	5.9	62.4	16,707
Highest Monthly Emission Burden (Tons)	8.5	13.1	2.2	2.2	0.9	9.7	2,590
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.42	0.65	0.11	.11	0.05	0.48	129
Year Highest Monthly Emission Burden Predicted to Occur	2012	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013

Apra Harbor - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-101, three locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. One of these locations failed the screening criteria. The Route 1/2A intersection has the highest overall volume and highest delay of all the signalized intersections that failed the screening. This site was chosen for detailed analysis. This intersection represents the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from this site represent the worst-case microscale CO impacts expected from the project.

Table I.3-101. Screening Analysis Locations – Apra Harbor, Alternative 3

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/11	3,460	B	18.8	3,615	C	26.8	3,710	B	18.4	4,080	D	40.1
Route 1/ Polaris Pt	3,655	A	4.3	4,680	A	6.2	3,530	A	5.8	3,900	A	7.4
Route 1/2A	**3,790**	**E**	**58.8**	**4,250**	**E**	**55.5**	**4,270**	**E**	**67.5**	**4,755**	**D**	**54.1**

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.

The results of the microscale analysis are shown in Table I.3-102 and Table I.3-103. The values in these tables, using the same analysis techniques and parameters as those applied for North (Alternative 1), represent the predicted worst-case CO concentrations. As shown in Table I.3-102 and Table I.3-103 no violations of the applicable NAAQS are predicted.

Table I.3-102. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – Apra Harbor, Alternative 3

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 3*		*No-Action*		*Alternative 3*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/2A	4.7	4.3	5.6	4.7	5.3	5.1	4.3	3.9	4.3	3.8

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-103. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – Apra Harbor, Alternative 3

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 3*	*No-Action*	*Alternative 3*
Route 1/2A	3.3	3.9	3.7	3.0	3.0

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

Apra Harbor - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for North (Alternative 1). The highest predicted construction emissions per year, per month, and the year that these emissions are predicted to occur are shown in Table I.3-104.

Table I.3-104. Estimated Construction Emission Burden – Apra Harbor, Alternative 3

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	13.5	20.9	5.0	3.7	1.2	15.4	4,199
Highest Monthly Emission Burden (Tons)	1.6	2.5	0.59	0.44	0.34	1.82	494
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.08	0.12	0.03	0.02	0.02	0.09	24.7
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

South - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-105, four locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Two of these locations failed the screening criteria. The Route 5/2A intersection has the highest overall volume of all the signalized intersections that failed the screening. This site was chosen for detailed analysis. This intersection represents the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from this site represent the worst-case microscale CO impacts expected from the project.

Table I.3-105. Screening Analysis Locations – South, Alternative 3

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 5/2A	**2,885**	**D**	**53.0**	**3,115**	**C**	**22.7**	**2,960**	**E**	**55.1**	**3,235**	**C**	**22.8**
Route 5/17*	3,655	D	28.9*	4,680	E	47.8*	1,045	E	42.5*	1,080	F	128.5*
Route 2/12	2,245	F	83.1	2,200	C	25.4	2,385	C	30.6	2,355	C	24.9
Route 5/ Harmon Road*	347	A	9.7*	347	A	9.8*	385	A	9.5*	520	A	10.6*

Notes: * Unsignalized intersection; NA = Not Applicable At The Time Of Analysis; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.

The results of the microscale analysis are shown in Table I.3-106 and Table I.3-107. The values in these tables, using the same analysis techniques and parameters as those applied for North (Alternative 1), represent the predicted worst-case CO concentrations As shown in Table I.3-106 and Table I.3-107, no violations of the applicable NAAQS are predicted.

Table I.3-106. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – South, Alternative 3

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 3*		*No-Action*		*Alternative 3*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 5/2A	4.2	3.9	4.2	3.9	4.5	3.9	3.5	3.5	3.8	3.5

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-107. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – South, Alternative 3

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 3*	*No-Action*	*Alternative 3*
Route 5/2A	2.9	2.9	3.2	2.5	2.7

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

South - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for North (Alternative 1). As shown in Table I.3-108 construction emissions are negligible.

Table I.3-108. Estimated Construction Emission Burden – South, Alternative 3

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	11.1	17.3	2.9	2.8	1.2	12.9	3310
Highest Monthly Emission Burden (Tons)	3.1	4.9	0.83	0.81	0.34	3.7	957
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.16	0.25	0.04	0.04	0.02	0.18	47.8
Year Highest Monthly Emission Burden Predicted to Occur	2012	2013	2012 & 2013	2012 & 2013	2013	2013	2013

Potential Mitigation Measures

Because the alternative is not predicted to cause a significant impact on air quality levels, no mitigation is proposed.

3.3.7.5 Alternative 8

Mesoscale Emissions Burden

As shown in Table I.3-109 regional emissions are predicted to increase in the range of 20% to 21% under Alternative 8, as compared to the no-action alternative. This is primarily due to the estimated 20% increase in VMT under Alternative 8.

Table I.3-109. Daily Regional Emission Burdens (tpy), Alternative 8

Scenario	*VMT*	*Speed*	*Emission Burden (tpy)*						
			CO	NOx	VOC	PM_{10}	$PM_{2.5}$	SO_2	CO_2
2030 No-Action Alternative	3,535,224	28.6	13,388	478	801	78	57	562	80,498,6
2030 Alternative 8	4,247,334	28.0	16,143	578	971	93	68	675	96,662,4
Percent Change from No-Action			21%	21%	21%	20%	20%	20%	20%

Legend: CO = carbon monoxide; VOC = volatile organic compounds; $PM_{2.5}$ = particulate matter less than 2.5 microns in diameter;
PM_{10} = particulate matter less than 10 microns in diameter; tpy = tons per year; NOx = nitrogen oxides;
VMT = vehicle miles traveled.

Mobile Source Air Toxics

FHWA requires quantitative emissions analysis for projects that involve new or additional capacity on roadways where the traffic volume will be 140,000 to 150,000 average annual daily traffic (AADT). The 2030 average daily traffic (ADT) estimates for the three most traveled roadways under Alternative 8 are shown in Table I.3-110 Since the ADTs are less than 140,000 for the design year, a MSAT analysis is not required.

Table I.3-110. Average Daily Traffic for Major Roadways, Alternative 8

Roadway	*Alternative 8 No Build*	*Alternative 8 Build*
Route 1	96,100	95,300
Route 8	58,800	59,700
Route 18	75,100	75,100

Microscale CO Impact Analysis and Construction Emissions Estimate

North - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-111, 10 locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Five of these locations failed the screening criteria. The Route 1/28 intersection has the highest overall volume of all the intersections that failed the screening. This site was chosen for detailed analysis. The Route 9/Andersen AFB North Gate intersection was also chosen for analysis due to the extremely high delay predicted in the build scenario and the predicted high volumes at this location. These intersections represent the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from these sites represent the worst-case microscale CO impacts expected from the project.

Table I.3-111. Screening Analysis Locations – North, Alternative 8

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/9	1,565	B	15.8	1,650	B	14.6	2,540	C	24.4	3,525	D	53.0
Route 1/29	3,675	F	87.6	2,970	E	60.5	4,025	F	85.3	3,895	F	90.5
Route 1/28	5,700	F	226.2	6,050	F	157.7	6,885	F	198.5	7,390	F	139.5
Route 3/3A	875	A	9.5*	880	B	10.1*	2,020	D	27.0*	2,550	F	140.7*
Route 3/28	1,904	B	17.8	2,070	C	21.4	4,635	C	33.2	4,595	D	47.5
Route 15/29*	1,760	F	****	1,575	F	683.5*	1,915	C	32.9	1,880	C	30.0
Route 3/ North (Commercial) Gate	1,010	C	21.4*	970	C	15.7*	3,310	C	31.3	3,090	D	42.0
Route 3/ South (Main) Gate	1,260	D	32.1*	1,200	C	20.7*	5,085	E	58.7	4,950	F	81.7
Route 3/ Control Tree Drive (Residential) Gate	1,300	C	22.1*	2,745	F	51.4*	4,525	D	41.4	4,750	C	30.3
Route 9/ Andersen AFB North Gate	1,480	E	39.5*	1,385	D	35.1*	2,035	C	24.4	2,160	F	****

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.

The results of the microscale analysis are shown in Table I.3-112 and Table I.3-113. The values in these tables, using the same analysis techniques and parameters as those applied for North (Alternative 1), represent the predicted worst-case CO concentrations. As shown in Table I.3-112 and Table I.3-113 no violations of the applicable NAAQS are predicted.

Table I.3-112. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – North, Alternative 8

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 8*		*No-Action*		*Alternative 8*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/25	5.5	6.0	6.2	6.2	7.1	7.4	5.6	5.8	5.8	5.7
Route 9/Andersen AFB North Gate	2.3	2.3	2.1	2.1	2.6	3.1	2.5	2.5	2.9	2.8

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-113. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – North, Alternative 8

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 8*	*No-Action*	*Alternative 8*
Route 1/25	4.2	4.3	5.2	4.1	4.1
Route 9/Andersen AFB North Gate	1.6	1.5	2.2	1.8	2.0

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

North - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted. Using the estimated project schedule along with typical equipment requirements for specific tasks, emission burden estimates of CO, NOx, PM10, and PM2.5 were calculated. Equipment emissions were presumed to be Tier3, with high sulfur fuel as confirmed by the construction management team. Based on the preliminary schedule, the highest emissions per year, per month, and the year that these emissions are predicted to occur are shown in Table I.3-114.

Table I.3-114. Estimated Construction Emission Burden – North, Alternative 8

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	13.0	20.3	8.4	4.1	1.4	15.3	3,881
Highest Monthly Emission Burden (Tons)	4.7	7.3	1.8	1.3	0.51	5.4	1,462
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.23	0.36	0.09	0.06	0.03	0.27	73.1
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

Central - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-115, 34 locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. Twenty (20) of these locations failed the screening criteria. The Route 16/27 intersection has the third highest overall volume and the worst delay of the three highest volume intersections. This site was chosen for detailed analysis. The Route 4/7A intersection has the highest overall delay of any signalized intersection that failed the screening. This site was chosen for detailed analysis. These intersections represent the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from these sites represent the worst-case microscale CO impacts expected from the project.

Table I.3-115. Screening Analysis Locations – Central, Alternative 8

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/26	5,910	E	75.8	6,060	F	229.8	7,845	F	145.9	8,010	F	250.6
Route 1/27	5,950	F	157.2	5,875	F	533.7	7,640	F	178.8	7,540	F	329.4
Route 1/ 27A	3,195	E	67.2	3,420	F	189.5	4,775	D	53.9	4,900	D	51.2

Table I.3-115. Screening Analysis Locations – Central, Alternative 8

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/3	5,055	F	158.4	5,400	F	306.9	5,455	E	70.5	6,335	E	64.7
Route 1/16	5,905	D	52.2	6,410	F	305.5	7,070	E	57.0	7,785	F	103.9
Route 1/14 (Upper Tumon)	5,455	F	82.8	6,165	F	361.2	5,855	E	69.6	6,465	E	77.6
Route 1/ 14A (Opposite K-Mart)	5,550	F	124.1	6,170	F	259.9	5,860	E	74.2	6,460	F	126.0
Route 1/10A	6,935	F	82.9	7,055	F	117.2	7,565	F	126.1	8,340	F	186.0
Route 1/14B	6,120	E	60.5	6,485	F	91.8	6,545	F	90.4	7,160	E	79.5
Route 1/14	6,715	F	93.3	7,705	F	212.5	7,430	F	113.6	8,830	F	267.2
Route 1/30	6,355	F	273.9	6,975	F	440.9	6,915	F	146.3	7,715	F	285.3
Route 1/8	7,255	F	107.6	7,915	F	94.1	8,060	E	77.8	9,545	F	150.4
Route 1/4	7,535	D	43.4	7,470	D	38.6	6,665	C	33.6	7,605	D	35.5
Route 1/6 (Adelup)	3,770	C	24.1	5,125	F	91.7	4,245	D	38.1	4,835	D	44.9
Route 1/6 (Westerly)	3,080	A	7.8	3,430	B	15.6	3,510	B	18.4	3,905	C	22.0
Route 4/7A	**5,040**	**F**	**298.8**	**4,855**	**F**	**196.9**	**4,915**	**F**	**372.9**	**5,680**	**F**	**654.2**
Route 4/10	4,305	F	95.5	4,365	F	115.9	4,655	F	198.7	4,695	E	71.0
Route 4/17	1,775	D	46.6	1,700	D	48.2	1,790	D	40.1	1,775	E	56.2
Route 4/ 4A*	740	D	27.9*	925	C	21.2*	1,020	E	47.4*	950	C	24.0*
Route 7/ 7A*	1,985	F	77.7*	1,745	D	28.3*	2,325	F	174.7*	2,520	F	300.8*
Route 8/33 (East)	3,655	C	31.2	4,680	E	64.3	4,220	D	45.5	4,820	E	77.8
Route 8/10	6,410	F	122.0	6,295	F	265.3	6,890	F	177.3	7,530	F	218.4
Route 10/ 15	5,550	D	49.7	5,585	F	197.9	6,170	F	197.9	6,500	F	178.1
Route 16/ 27A	2,770	C	24.3	3,130	F	99.9	3,490	C	31.4	4,120	D	35.5
Route 16/ 27	**6,590**	**F**	**275.1**	**6,970**	**F**	**587.3**	**8,105**	**F**	**361.1**	**8,470**	**F**	**336.6**
Route 16/ 10A	6,178	F	874.2	4,880	F	459.9	7,085	F	582.9	7,655	F	488.7
Route 17/ 4A*	720	C	17.0*	760	C	16.5*	695	C	16.1*	785	C	18.6*
Route 26/ 25*	3,180	F	270.1	3,495	F	369.5	5,045	F	113.1	5,045	F	119.3
Route 26/ 15	1,680	F	134.8*	1,790	F	3450.7*	3,215	F	154.9	3,155	F	168.2
Route 28/ 27A	2,920	F	353.1*	2,565	F	528.0*	2,765	C	31.3	3,010	E	59.6

Table I.3-115. Screening Analysis Locations – Central, Alternative 8

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/ Turner Street (Main Gate)	3,375	B	13.5*	3,650	C	32.4	4,780	C	32.4	5,105	E	78.8
Route 15/ Road 1.16 M east of Route 26 (Second Gate)	1,040	N/A	N/A	1,010	C	22.1*	1,320	C	22.1*	1,410	C	22.6*
Route 16/ Sabana Barrigada	4,535	F	****	4,960	D	48.1	4,765	N/A	N/A	5,830	N/A	N/A
Route 15/ Fadian Point Drive	1,385	E	50.0*	1,625	E	44.4*	1,560	N/A	N/A	2,350	N/A	N/A

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.
Legend: NA = Not Applicable At The Time Of Analysis

The results of the microscale analysis are shown in Table I.3-116 and Table I.3-117. The values in these tables, using the same analysis techniques and parameters as those applied for North (Alternative 1), represent the predicted worst-case CO concentrations. As shown in Table I.3-116 and Table I.3-117, no violations of the applicable NAAQS are predicted.

Table I.3-116. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – Central, Alternative 8

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 8*		*No-Action*		*Alternative 8*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/8	6.0	6.4	6.1	6.4	7.3	7.4	5.8	5.4	5.6	6.0
Route 4/7A	5.3	3.8	4.8	5.4	5.2	5.3	4.6	5.0	4.6	5.0
Route 16/27	8.4	9.4	7.0	7.3	8.3	9.4	6.4	6.8	7.1	8.0

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-117. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – Central, Alternative 8

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 8*	*No-Action*	*Alternative 8*
Route 1/8	4.5	4.5	5.2	4.1	4.2
Route 4/7A	3.7	3.8	3.7	3.5	3.5
Route 16/27	6.6	5.1	6.6	4.8	5.6

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

Central - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for North (Alternative 1). The highest predicted construction emissions per year, per month, and the year that these emissions are predicted to occur are shown in Table I.3-118.

Table I.3-118. Estimated Construction Emission Burden – Central, Alternative 8

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	54.6	84.2	17.2	14.4	5.9	62.4	16,707
Highest Monthly Emission Burden (Tons)	8.5	13.1	2.2	2.2	0.9	9.7	2,590
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.42	0.65	0.11	0.11	0.05	0.48	129
Year Highest Monthly Emission Burden Predicted to Occur	2012	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013

Apra Harbor - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-119, three locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. One of these locations failed the screening criteria. The Route 1/2A intersection has the highest overall volume and highest delay of all the signalized intersections that failed the screening. This site was chosen for detailed analysis. This intersection represents the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from this site represent the worst-case microscale CO impacts expected from the project.

Table I.3-119. Screening Analysis Locations – Apra Harbor, Alternative 8

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 1/11	3,460	B	18.8	3,615	C	26.8	3,695	B	14.3	4,165	D	43.3
Route 1/ Polaris Pt	3,655	A	4.3	4,680	A	6.2	3,605	A	6.8	3,910	A	7.5
Route 1/2A	**3,790**	**E**	**58.8**	**4,250**	**E**	**55.5**	**4,285**	**E**	**67.5**	**4,785**	**E**	**57.5**

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.
Indicates site chosen for detailed CO microscale analysis.

The results of the microscale analysis are shown in Table I.3-120 and Table I.3-121. The values in these tables, using the same analysis techniques and parameters as those applied for North (Alternative 1), represent the predicted worst-case CO concentrations. As shown in Table I.3-120 and Table I.3-121, no violations of the applicable NAAQS are predicted.

Table I.3-120. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – Apra Harbor, Alternative 8

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 8*		*No-Action*		*Alternative 8*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 1/2A	4.7	4.3	5.6	4.7	5.3	5.1	4.3	3.9	4.3	3.9

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-121. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – Apra Harbor, Alternative 8

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 8*	*No-Action*	*Alternative 8*
Route 1/2A	3.3	3.9	3.7	3.0	3.0

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

Apra Harbor - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed construction emissions analysis was conducted using the same method as described for North (Alternative 1). The highest predicted construction emissions per year, per month, and the year that these emissions are predicted to occur are shown in Table I.3-122.

Table I.3-122. Estimated Construction Emission Burden – Apra Harbor, Alternative 8

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	13.5	20.9	5.0	3.7	1.2	15.4	4,199
Highest Monthly Emission Burden (Tons)	1.6	2.5	0.59	0.44	0.34	1.82	494
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.08	0.12	0.03	0.02	0.02	0.09	24.7
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

South - Microscale CO Analysis

A screening analysis was performed to determine which intersections could potentially degrade air quality levels due to increased delay, volume, or worsening LOS due to the project. As shown in Table I.3-123 four locations were screened based on changes in intersection volumes, delay, and LOS between the no-action and build alternatives. One of these locations failed the screening criteria. The Route 5/2A intersection has the highest overall volume of all the signalized intersections that failed the screening. This site was chosen for detailed analysis. This intersection represents the worst-case combination of volumes, LOS, and delay of the intersections screened. As such, the predicted CO levels from this site represent the worst-case microscale CO impacts expected from the project.

Table I.3-123. Screening Analysis Locations – South Region, Alternative 8

Intersection	*No-Action*						*Build*					
	a.m.			*p.m.*			*a.m.*			*p.m.*		
	Volume	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*	*Volume*	*LOS*	*Delay*
Route 5/ 2A	2,885	D	53.0	3,115	C	22.7	3,115	E	79.9	3,335	C	25.9
Route 5/ 17*	3,655	D	28.9*	4,680	E	47.8*	1,040	B	14.8*	1,100	E	42.4*
Route 2/12	2,245	F	83.1	2,200	C	25.4	2,380	C	30.7	2,355	C	27.0
Route 5/ Harmon Road*	347	A	9.7*	347	A	9.8*	385	A	9.5*	520	A	10.6*

Notes: * Unsignalized intersection; **** = Delay exceeded maximum calculated value.
Indicates sites that failed the screening evaluation.

The results of the microscale analysis are shown in Table I.3-124 and Table I.3-125. The values in these tables, using the same analysis techniques and parameters as those applied for North (Alternative 1), represent the predicted worst-case CO concentrations. As shown in Table I.3-124 and Table I.3-125 no violations of the applicable NAAQS are predicted.

Table I.3-124. Predicted Worst-Case 1-Hour CO Concentrations (ppm) – South Region, Alternative 8

Analysis Site	*Existing*		*2014*				*2030*			
			No-Action		*Alternative 8*		*No-Action*		*Alternative 8*	
	a.m.	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*	*a.m.*	*p.m.*
Route 5/2A	4.2	3.9	4.2	3.9	4.5	4.0	3.5	3.5	3.9	3.7

Notes: 1-hour CO NAAQS = 35 ppm.
Includes a background concentration of 2 ppm.

Table I.3-125. Predicted Worst-Case 8-Hour CO Concentrations (ppm) – South Region, Alternative 8

Analysis Site	*Existing*	*2014*		*2030*	
		No-Action	*Alternative 8*	*No-Action*	*Alternative 8*
Route 5/2A	2.9	2.9	3.2	2.5	2.7

Notes: 8-hour CO NAAQS = 9 ppm.
Includes a background concentration of 1.4 ppm.

South - Construction Emissions Estimate

To determine the temporary air quality impacts arising from construction of the project, a detailed emission construction analysis was conducted using the same method as described for North (Alternative 1). As shown in Table I.3-126, construction emissions are negligible.

Table I.3-126. Estimated Construction Emission Burden – South, Alternative 8

	CO	*NO_x*	*PM_{10}*	*$PM_{2.5}$*	*VOC*	*SO_2*	*CO_2*
Maximum Yearly Value (Tons)	11.1	17.3	2.9	2.8	1.2	12.9	3310
Highest Monthly Emission Burden (Tons)	3.1	4.9	0.83	0.81	0.34	3.7	957
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.16	0.25	0.04	0.04	0.02	0.18	47.8
Year Highest Monthly Emission Burden Predicted to Occur	2012	2013	2012 & 2013	2012 & 2013	2013	2013	2013

Potential Mitigation Measures

Because the alternative is not predicted to cause a significant impact on air quality levels, no mitigation is proposed.

3.4 Construction Activity Emissions

Construction-related emissions were estimated for each component of the proposed action. The different construction activities associated with different components of the proposed action are described below:

Marine Corps Relocation to Guam (Volume 2 of EIS/OEIS) proposes the following five land use functions: Airfield Operations, Waterfront Operations, Main Cantonment, Family Housing, and Training. For the training function, the facilities can be further divided into three categories: firing ranges, non-fire maneuver ranges, and aviation training ranges. Among the four alternatives, these proposed training facilities vary depending on the land use function, location, and quantity of non-DoD land to be acquired. Most project components that would affect potential air quality conditions remain the same for each alternative including:

- The scale of construction
- Airfield operations
- Waterfront operations
- Aviation training operations
- The scale of ground training

The construction effort for all airfield, waterfront, and training projects is assumed to be the same, regardless of location. Therefore, the air emissions for these projects calculated for Alternative 1 are assumed to be representative of the other three alternatives (i.e., Alternatives 2, 3, and 8). Although the total building space does not vary by alternative for the main cantonment project component, the total size of earth disturbance under each alternative does vary slightly. As a result, the pollutant emissions associated with the main cantonment construction activity were estimated individually for each alternative.

Construction activities, including the operation of construction equipment, trucks, and workers' commuting vehicles, may have short-term air quality impacts. In estimating construction-related criteria pollutants and CO2 emissions, the usage of equipment, the likely duration of each activity, and manpower estimates for the construction were based on the information described in the EIS/OEIS Volume 2 (U.S. Navy and Joint Guam Program Office in progress) for future project-associated construction activities. It is assumed for the emissions estimate purposes that major construction activities would begin in 2011 and last through 2014 with minimal effort during 2010 for all projects except for the construction of main cantonment. The construction of main cantonment is assumed to occur from 2011 to 2016 based on the construction cost profile projected for the proposed action.

Marine Corps Relocation - Training on Tinian (Volume 3 of EIS/OEIS) would require the construction of a Range Training Area (RTA) under each alternative considered which consists of four proposed live fire ranges (platoon battle course, automated combat pistol range, rifle known distance range, and field firing range). Construction activities such as the operation of construction equipment and trucks may have short-term air quality impacts. Although the emissions from construction workers' commuting vehicles are considered part of the overall construction emissions, it is anticipated they are negligible given the scale of construction activities and the relatively low level of emissions as compared to trucks. As such, the emission component from workers' commuting vehicles is not considered here, as it is relatively small and cannot be reasonably predicted.

Aircraft Carrier Berthing (Volume 4 of EIS/OEIS) focuses on the proposed construction of a new deep-draft wharf with shoreside infrastructure improvements, creating the capability to support a transient nuclear powered aircraft carrier in Apra Harbor, Guam. Under the proposed action with a transient-capable port, there would be approximately three visits per year for up to approximately 21 days per visit, or combination thereof, for a total of approximately 63 days in port. The longer transient visits would interfere with existing munitions operations and therefore require a new deep-draft wharf that can accommodate the transient aircraft carrier.

Estimates on construction activities were calculated to identify equipment, material, and manpower requirements for the construction associated with the proposed aircraft carrier berthing project at Polaris Point. Assumptions were made to develop a list of major construction items, necessary equipment, and productivity levels necessary for the completed construction of Polaris Point or Former Ship Repair Facility (SRF) including, but not limited to: shoreside structure prototypes, a bermed fuel tank, an electric substation, stormwater management, the Morale, Welfare and Recreation (MWR) area, a sewer pump station, a Bilge Oily Waste Treatment System (BOWTS) pump station, a BOWTS pump station prototype, and the wharf and related dredging activities.

Army Air and Missile Defense Task Force (Volume 5 of EIS/OEIS) proposes the following three missile components: The Terminal High Altitude Area Defense (THAAD) system is a long-range, land based theater defense weapon which acts as the upper tier of defense against ballistic missiles; Patriot Missiles target short-range ballistic missiles which threaten the THAAD or other civilian or military assets on Guam; and Surface-Launched Advanced Medium-Range Air-to-Air Missile (SLAMRAAM) engages targets to beyond line-of-sight and defends against the air threat from unmanned aerial vehicles and cruise missiles.

Three key elements of the proposed action include personnel, facilities, and operations requiring construction of the administration and maintenance facilities, bachelor housing, family housing, and roads associated with facilities at the proposed sites. Assumptions were made to develop a list of major construction items, necessary equipment, and productivity levels necessary for the completed installation of the Army AMDTF within the Marine Corps site on Guam. This list includes prototype structures for administration and maintenance components, and prototypes including unique elements for munitions storage and the weapons emplacement components. The calculated total construction emissions from equipment and trucks with potential to occur between 2011 and 2014 are assumed to be evenly distributed among those years.

Connected Actions – Utilities and Off Base Roadway Projects on Guam (Volume 6 of EIS/OEIS) would increase the demand on power, water, wastewater and solid waste utilities as part of the proposed military buildup on Guam associated with the relocation of the Marine Corps, the Navy aircraft carrier berthing, and Army Air and Missile Defense Task Force (AMDTF). The Navy conducted utility studies for power, water, wastewater, and solid waste that assumed that the construction workforce would reside off-base and would be served by Guam public utilities at their place of residence. Construction activities involving the operation of construction equipment, trucks, and workers' commuting vehicles may have short-term air quality impacts. Given the lack of a specific construction schedule for each applicable project during the early planning stage, the overall length of utility construction for each project is assumed to be four years from 2011 through 2014.

To determine the temporary air quality impacts arising from the construction of off base roadway projects a detailed emission construction analysis was conducted. Using the estimated project schedule, along with typical equipment requirements for specific tasks, emission burden estimates of CO, NO_x, PM_{10}, and

$PM_{2.5}$ were calculated. Emission equipment emissions have been regulated to be Tier 3 or better as discussed in section 3.3.7. Based on the preliminary schedule, the highest emissions levels per year, per month, and the year that these emissions are predicted to occur are shown in Tables I.3-186 through I.3-189.

Because no specific information regarding sizes or types of construction is provided in the case of certain components, a series of construction prototypes was developed to represent these components. Estimates were developed for those components for which adequate specific information is available; however when the construction was considered similar to one of the prototypes, the prototype and scaling method were used.

Each prototype is designed to be general enough to accommodate the more traditional development types specified in the Military's planning facility codes or Command Code Numbers (CCN), and the diverse facilities required to implement the proposed action and associated action components. The prototypes used include:

- **Office Building –** Buildings of this type generally have a masonry envelope, decorative exterior veneer, and glazing. There is significant subdivision of the interior space by drywall partitions into finished areas to provide offices and/or classroom facilities. Significant mechanical systems are associated with this building type, primarily heating, ventilation, and air-conditioning (HVAC), electrical systems, and water/sewerage service.
- **Commercial Building –** Buildings of this type are generally of steel frame construction with masonry envelope and decorative exterior veneer, providing large, high, clear areas for both merchandise display and inventory storage. There is generally minimal glazing (except for the entrance areas). The main retail and storage areas typically have minimal finishes along the exterior walls only. A relatively small (~10%) portion of the overall floor area is finished in an office-type manner, providing space for administrative and support functions (store manager's office, restrooms, etc.). Significant mechanical systems are associated with this building type, primarily HVAC systems. Water/sewerage systems are of relatively small scale, as they only support the limited amount of office-type space.
- **Pre-Engineered Structures –** Buildings of this type are generally light-weight steel-frame and sheet metal-clad structure, often providing enclosed storage areas. Minimal mechanical systems are usually provided, generally just enough to provide adequate lighting and protection against temperature or humidity extremes. Given the climate on Guam, it is assumed that protection against temperature extremes is not required.
- **Industrial Building –** Buildings of this type are generally of single-level steel frame construction (to allow for roof-mounting of lifting equipment) with masonry envelope and lightweight cladding as veneer, minimal glazing, and large, high, clear spaces to allow for the installation of heavy equipment. A relatively small (~10%) portion of the overall floor area would be finished in an office-type manner, providing space for administrative and support functions. Significant mechanical systems are associated with this building type, primarily HVAC, high-capacity electricity supply, and often additional mechanical systems such as steam and compressed air. Water/sewerage systems are generally of a smaller scale, sufficient to service the administration area only.
- **Hangar –** Buildings of this type are generally of tall, single-level steel frame construction with masonry envelope and lightweight cladding as veneer, and have one open side to permit

aircraft entry, no glazing, and large, high, clear interior spans provided through the use of a truss-type lightweight roof. A small office-type administration area (~10% of the overall floor space) is usually provided. Significant mechanical systems are associated with this building type, primarily HVAC, high-capacity electricity supply, and often additional mechanical systems such as steam and compressed air. Water/sewerage systems are generally of a smaller scale to service the administration area only.

- **Warehouse Building –** Buildings of this type are generally large-footprint, single-level construction with masonry envelope and lightweight cladding as veneer, and large, high, clear interior spans provided through the use of a truss-type lightweight roof. Minimal mechanical systems are usually provided, often sufficient only to provide adequate lighting and protection against temperature or humidity extremes.
- **Residential (Multiple Unit) Building –** Buildings of this type are generally of multi-level, steel frame construction with masonry envelope, decorative exterior veneer, and glazing, with significant subdivision of the interior space by drywall partition into finished areas to provide enclosed living quarters. There are significant mechanical systems associated with this building type, including HVAC systems designed to support a residential building use, and electricity, natural gas and water/sewerage service provided to each unit.
- **Residential (Single-family Units) Building –** These are assumed to be two-story single-family residences, without basement facilities, of wood-frame construction on on-grade slab. Each unit is assumed to be 1,735 square feet (ft^2) (161 square meters). There are significant mechanical systems associated with this building type, including HVAC systems designed to support a residential building use, and electricity, natural gas and water/sewerage service.
- **Site Preparation –** It is assumed that typical site clearing and rough and fine grading would be done as a single zone-wide job, with the specific needs of individual structures reflected in the final overall grading plans. It is also assumed that none of the structures constructed in the Main Cantonment incorporate basement levels, so no mass excavation would be required.
- **Utility and Road/Sidewalk Installation –** Because site construction, including grading, is expected to be done on a zone-wide basis in the Main Cantonment, an underground utility infrastructure can be economically installed during road construction without the need for separate trenching and backfilling. Zone-wide utilities to be installed would include electricity, water, natural gas, sanitary and storm sewerage, and telecommunications infrastructure. It is assumed that any covered site area outside of building footprint can be treated as a finished roadway. This roadway is assumed to be a 50-foot (15-meter) wide flexible asphalt pavement with curbs, gutters and an 8-foot (2.4-meter) wide concrete sidewalk on either side (66-foot [20-meter] total average width), with three manholes (one each for sanitary sewer, storm sewer, and energy/communications infrastructure access), eight storm drains, and four fire hydrants every 1,000 linear feet (305 linear meters) of roadway.
- **Vehicle Pavement** – This type of pavement is used for parking areas and access roads intended for general automotive use (including large, wheel mounted maintenance and military equipment). Generally, this would include rough grading, a 6” thick base course and a 3” thick asphalt wearing course.

- **Aircraft Pavement** – This type of pavement is associated with airfield developments, and is used to handle the higher loads associated with aircraft traffic. Generally, this would include rough grading, an 8”-thick sub-base course, a 6”-thick base course, a 4”-thick asphalt binder course, and a 3”-thick asphalt wearing course.

To complete the construction estimate, the CCN Code data and planning area specifications provided for each alternative in the EIS/OEIS were used to determine the distinct structural elements required in the proposed action. Accordingly, each element was then extrapolated on a square-footage basis and associated with one of the 12 prototypes described above.

The *2003 RSMeans Facilities Construction Cost Data* (RS Means 2003a) manual was used to assign construction materials, equipment use and duration and manpower requirements to each prototype. The manual provides planning level estimates for construction materials, equipment use and duration information, and manpower requirements for construction and development. If construction material information, equipment use and duration, and manpower requirements were available then that information was used.

For illustrative purposes, the following paragraphs detail the assumptions made in developing one prototype, the Office Building prototype. Other prototypes were developed in a similar manner.

Construction Activity Assumptions

First, the dimensions of the buildings were estimated. In this case, the prototype office building would be 100 ft by 200 ft (units are only provided in the U.S. customary system for ease), for a total surface area of 20,000 ft^2. Forty percent of the space would be subdivided into offices (assumed to be 20 ft by 20 ft each) and the remainder would be divided into larger, 60 ft by 40 ft. “open” workspaces. Thus, there would be a total of 20 offices with 80 linear feet (LF) of wall each, and 5 common areas with 200 LF of wall each. The total wall length, therefore, would 2,600 LF. This in turn should be divided by two to account for double-sided walls, so the total wall length to be installed would be 1,300 LF.

Next, assumptions for construction materials, equipment use and duration, and manpower requirements were developed using the *RSMeans* data, as presented below.

- Foundation:
  - o Footprint site preparation: assumes gravel placed over entire building footprint, 12” thick lift x 20,000 ft^2 = 741 cy, use gravel, bank run, compacted, 12" deep
  - o Assumes base slab concrete is formed in 40-ft by 20-ft sections, creating 25 “panels” to be laid, with 1,200 LF (6 x 200 LF) of forming along long edges and 600 LF (6 x 100 LF) of forming along short edges for a total of 1,800 LF forms. Wood edge forms to be used for depressed slabs to 24” high
  - o Add rebar, assumes 8 LF of #8 rebar per ft^2 of slab = 21.36 lb/SF; total = 427,200 lb = 214 tons. Use typical in place rebar over 50 ton lots
  - o For concrete, assumes 15” thick slab. 20,000 ft^2 x 15 in. = 25,000 CF = 926 CY. Use slab on grade over 6” thick, pumped
- Enclosure:
  - o Primary enclosure square footage is 2 x (200 LF + 100 LF) x 20 ft (assumed building. height) = 12,000 ft^2; use concrete block 3,500 psi, high strength, 8"x16", 8" thick

  - External finish, use standard red bricks, running bond, 12,000 ft^2
  - Windows; assumes one every 6.25-ft O.C. = 96 windows, use solid vinyl, premium quality, double-insulated glass
- Roof:
  - Steel framing, SLH spans to 200’, 80SLH20, 75 lb/f, assumes spans are 8.5-ft O.C. along long dimension, so 27 lines x 100 LF = 2,700 LF
  - Steel roofing on steel frame, flat profile, 1-3/4” standing seams 10” wide, 22 gallons (ga)., 20,000 ft^2
- Mechanical systems:
  - Hot water: commercial gas fired 260 MBH input 250 gph
  - Boiler for heating system: Gas boiler, hot water, 2,856 Btus in thousands (MBH) output
  - Air conditioning: rooftop, 300 ton unit Heat & AC distribution – assumes forced air, assumes 4 lb per LF of duct, 5 lines of ductwork along long dimension = 5 x (200 LF + 20 LF riser) = 1,100 LF x 4 pounds (lb)/LF = 4,400 lbs. Use galvanized steel ductwork, over 5,000 lb
  - Sprinkler system: assumes 5 lines along 200-ft length of building. 5 lines x (200 ft per line + 20 ft. riser) = 1,100. Use schedule 40 steel pipe with couplings and hangars, 2” diameter
- Interior construction and finishes:
  - Interior wall assembly, use 1/2" interior gypsum, taped both sides, 25 ga metal studs, assumes 1,300 LF x 15’ high walls (remainder for mechanical space) = 19,500 ft^2
  - Door assemblies – assumes 2 per office x 20 offices = 40 doors, birch solid core pre-hung door
  - Subfloor – use ½” thick plywood, CDX, pneumatic nailed, 20,000 ft^2
  - Flooring – use vinyl tile, 12" x 12", 0.050" thick, 20,000 ft^2
  - Ceiling – use suspended ceiling, regular 2’ x 2’ x 5/8” tile on 9/16” grid, 20,000 ft^2
- Interior utility installations (for those based on wall length, already calculated at 1,300 LF):
  - Electrical wiring, use 600 volt BX cable, 3 conductor, solid, wall length
  - Assumes one electrical outlet every 3 LF of wall, round to 433 electrical outlets, use square 4" outlet box for Romex (brand of insulated wire) or BX cable (armored cable with flexible steel or aluminum sheath over conductors), with bracket as equivalent measure
  - Assumes lighting provided on 10-ft centers along long axis of building, thus 9 lines of 200-ft each = 1,800 LF plus (2) 100-ft long transverse lines + (2) 20 ft risers = 2,040 LF total
    - Conduit, use 1-1/2” galvanized steel
    - Electrical wiring, use 600 volt BX cable, 3 conductor, solid

        - Fixtures – Use pendent mounted industrial, 4' long 2-60 watt HO, 50 per line (450 total), 450 units
    - Category (Cat) 5 unshielded twisted pair (UTP) (telecom), assumes 5 lines per office and 25 per common area, average run of 150 LF; total = 33,750 LF
    - Cat 5 UTP jacks, RJ-45, assumes 5 per office and 25 per common area = 225 jacks
    - Coaxial cable, RG 59, fire rated, 75 ohm
    - Assumes 4 plumbed rooms (kitchen, restrooms, utility closet), 20 fixture installations per restroom and 5 each in the kitchen and utility room = 50 fixtures, use lavatories, white trim, 20"x 18" as equivalent measure
    - Internal water plumbing, 2,600 LF (cold & hot water) Type L tubing, couplings & hangers 10' O.C., 1"
    - Internal sanitary plumbing, PVC pipe, 4", hangers & couplings 10' O.C., schedule 40

Given the aggregate floor area ratios (1.56 for the entire Main Cantonment, exclusive of the Family Housing Areas), it was assumed that all structures except residential structures are single-story. The floor area ratio of 1.56 includes several multiple-unit type residential structures that are described as being three or four stories in height. Although some non-residential spaces are described as multi-story, the aggregate numbers suggest that the floor area ratio for non-residential structures is closer to 1.0 than to 1.56. However, the prototypes were pro-rated on the basis of entire building area (not just the building footprint), thereby capturing the materials and effort necessary to construct the entire project. Any error introduced by the assumption of single-story construction (such as productivity losses from working above ground) are expected to be minimal, because only 5 of the 150 proposed buildings classified as non-residential in the Main Cantonment are three-story structures (i.e., there are no buildings taller than three stories).

The weekly duration for each activity was assumed to be eight hours per day, five days per week. All construction equipment was assumed to be diesel powered unless otherwise noted. Pieces of equipment to be used for the construction and demolition activities include, but are not limited to:

- Backhoe loaders
- Chain saws
- Chipping machines
- Compressors
- Concrete pumps
- Cranes
- Drill rig and augurs
- Dozers
- Dump trucks
- Excavators
- Front end loaders

- Gas engine vibrators
- Gas welding machines
- Generators
- Gradalls
- Graders
- Hammers
- Pavement removers
- Pavement breakers
- Pavers
- Pumps
- Rammers/tampers
- Rollers
- Trenchers
- Tug boats

Equipment Emission Estimate

Estimates of the operational emissions from construction equipment were developed based on the estimated hours of equipment use and the emission factors for each type of equipment. Emission factors for VOC, NO_x, and CO were taken from USEPA's NONROAD emission factor model and the national default model inputs for nonroad engines, equipment, and vehicles of interest provided with the model (USEPA December 2008). Emission factors for SO_2 and PM were based on USEPA's NONROAD emission factor model incorporating the use of high sulfur content (i.e., 0.6 %) fuel given Guam's exempt status from the use of low sulfur fuel. The average equipment horsepower (hp) values and equipment power load factors were obtained in association with the NONROAD emission factors. Because the operational activity data presented in RSMeans' cost data books are generated based on the overall length of equipment presence duration on site, an actual running time factor (i.e., actual usage factor) was employed to determine actual equipment usage hours for the purpose of estimating equipment emissions. The usage factor for each equipment type was obtained from Federal Highway Administration's (FHWA) *Roadway Construction Noise Model User's Guide* (FHWA January 2006). Emission factors related to construction-associated delivery trucks were obtained using the USEPA Mobile6 emission factor model (USEPA October 2002) which provides an emission factor database for various truck classifications.

Emission factors (in grams of pollutant per hour per horsepower) were multiplied by the estimated running time and equipment average horsepower to calculate the total grams of pollutant from each piece of equipment. Finally, the total grams of pollutant were converted to tons of pollutant.

The USEPA recommends the following formula to calculate hourly emissions from nonroad engine sources including cranes, backhoes, etc.:

M_i = N x HP x LF x EF_i

where:

M_i = mass of emissions of *i*th pollutants during inventory period;

N = source population (units);

HP = average rated horsepower;

LF = typical load factor; and

EF_i = average emissions of *i*th pollutant per unit of use (e.g., grams per horsepower-hour).

Typical load factor values were obtained from *Nonroad Engine Emissions Model Worksheet* (USEPA December 2008). Equipment running times were estimated based on an 8 hour per day schedule. A sample calculation for NO_x emissions from a 90-ton crane engine during the Marine Corps installation to Guam follows:

Operational Hours = 90 hours (1 crane x 14.1 weeks x 5 days x 8 hr/day)

Operational Emissions = 90 hours x 231 hp x 43% x 5.14 grams/hp-hr

= 0.051 tons

Table I.3-127 provides the emissions estimates associated with Marine Corps for Airfield/North.

Vehicle Emission Estimate

Truck and commuting vehicle operations also would result in indirect emissions. Emission factors for trucks (including dump, delivery, tractor, and tractor trucks that were modeled as heavy-duty diesel vehicles) for years 2011-2014 using the USEPA Mobile 6.2 Emission Factor model (USEPA October 2002). Statewide default input parameters for the summer and winter seasons for San Diego, California were used, as these were considered the most similar parameters available. The modeled emission factors were then multiplied by the vehicle operation hours to determine total emissions. Total trucks were estimated based on a round trip assumption of 20 miles. Table I.3-128 provides estimates of Marine Corps truck emissions for Airfield/North.

Asphalt Curing Emission Estimate

Asphalt curing-related VOC emissions were calculated based on the amount of paving anticipated. The following assumptions were used:

- Hot Mix Emulsified emission factor of 0.040 lbs/ton (California Air Resources Board). The Emulsified Emission Factor used for primary and tack coats was 17.9 lbs/ton.
- Hot Mix application rate of 0.060 gal/SY. (USACE 2000).
- Primary and Tack Coat Application rates of 0.25 gal/SY and 0.30 gal/SY. (FHWA, Guideline for Using Prime and Tack Coats July 2005).
- The density of asphalt (8.34 lb/gal) was obtained from: USEPA's Emission Inventory Improvement Program (EIIP), (USEPA January 2001).
- Conservative 4-inch paving thickness (RS Means 2006).

The calculation of asphalt concrete paving VOC emissions is provided below:

Pavement area = 473826 yd^2

Asphalt concrete density = 8.34 lb/gal

Total VOC = 473826 yd^2 x ((0.040 lbs/ton x 0.060 gal/yd^2) + (17.9 lbs/ton x 0.25 gal/yd^2) + (17.9 lbs/ton x 0.30 gal/yd^2) x 8.34 lb/gal /2000/2000

= 2.432 tons per year (Table I.3-129)

3.4.1 Construction Emissions: Marine Corps Relocation – Guam

Table I.3-127. Marine Corps Construction Equipment Emissions – Airfield / North

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Construction																				
Asphalt paver, 130 HP	1	9.2	50	183	130	59	1.68	2.07	0.46	0.45	4.59	0.38	550.19	0.026	0.032	0.007	0.007	0.071	0.006	8.505
Compressor, 250 cfm	1	23.2	40	371	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.026	0.035	0.008	0.008	0.079	0.008	8.349
Concrete pump, small	1	7.7	50	153	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.007	0.012	0.003	0.003	0.024	0.003	2.167
Crane, 90-ton	1	14.1	16	90	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.016	0.013	0.003	0.003	0.051	0.003	5.257
Crane, SP, 12 ton	1	9.1	16	58	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.010	0.008	0.002	0.002	0.033	0.002	3.374
Diesel hammer, 41k ft-lb	1	4.2	40	34	200	59	1.64	1.93	0.50	0.48	4.72	0.33	539.34	0.012	0.020	0.004	0.003	0.040	0.003	3.853
Dozer, 300 HP	1	6.2	40	98	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.032	0.037	0.007	0.007	0.091	0.006	10.345
Front end loader, 1.5 cy	1	6.2	40	98	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.004	0.014	0.003	0.003	0.014	0.003	1.409
Gas engine vibrator	1	15.3	20	122	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.289	0.000	0.000	0.001	0.011	0.454
Gas welding machine	1	5.6	40	90	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.747	0.000	0.000	0.004	0.013	1.157
Grader, 30,000 lb	1	13.4	40	214	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.047	0.041	0.010	0.010	0.121	0.009	15.243
Pneumatic wheel roller	1	9.2	50	183	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.019	0.027	0.006	0.006	0.052	0.005	6.133
Roller, vibratory	1	6.2	20	49	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.005	0.007	0.002	0.002	0.014	0.001	1.649
Rollers, steel wheel	1	9.7	20	78	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.008	0.012	0.002	0.002	0.022	0.002	2.600
Tandem roller, 10 ton	1	4.3	20	34	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.004	0.005	0.001	0.001	0.010	0.001	1.153
Total Annual Construction Emissions Between 2011- 2014														0.215	1.298	0.059	0.057	0.626	0.077	71.647

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-128. Marine Corps Van & Truck Emissions – Airfield / North

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Construction	43194	25	432	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.111	0.000	0.000	0.010	0.011	6.117
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	225883	25	2,259	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.274	0.125	0.032	0.030	0.364	0.029	88.212
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.274	0.236	0.033	0.030	0.373	0.040	94.329

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-129. Marine Corps Pavement Emissions – Airfield / North

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*# of years of construction*	*Emissions Rate VOC (tons/year)*
473,826	0.04	17.90	0.06	0.25	0.30	2.1E-05	9.73	4	2.432
Total Annual Paving VOCs Between 2011-2014									2.432

Source: 1. California Air Resources Board.
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-130. Marine Corps Total Construction Emissions – Airfield / North

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.5	1.5	0.1	0.1	1.0	2.5	166.0

Table I.3-131. Marine Corps Construction Equipment Emissions – Main Cantonment / North and Central

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor*[1] *%*	*Hours*	*Horse power*[2] *(hp)*	*Load Factor*[2] *(%)*	*Emission Factor*[2] *(grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Construction																				
Asphalt paver, 130 HP	1	138	50	2755	130	59	1.68	2.07	0.46	0.45	4.59	0.38	550.19	0.392	0.481	0.108	0.105	1.069	0.089	128.048
Backhoe loader, 48hp	1	927	40	14831	48	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.334	1.058	0.215	0.209	1.120	0.241	109.040
Compressor, 250 cfm	1	11,026	40	176410	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	12.147	16.596	3.973	3.854	37.498	3.771	3967.747
Centrif. water pump, 6"	1	4	50	80	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.003	0.006	0.001	0.001	0.012	0.002	1.130
Chain saws, 36"	1	766	20	6129	48	59	2.00	349.18	12.63	11.62	0.91	69.87	686.61	0.378	66.104	2.391	2.199	0.172	13.227	129.985
Chipping machine	1	383	50	7661	144	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.880	1.283	0.303	0.294	3.120	0.309	287.436
Concrete pump, small	1	577	50	11537	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.500	0.873	0.213	0.207	1.780	0.217	163.416
Crane, 90-ton	1	408	16	2613	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.466	0.370	0.092	0.090	1.470	0.101	152.203
Crane, SP, 12 ton	1	2,789	16	17848	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	3.183	2.529	0.631	0.612	10.040	0.690	1039.739
Drill rig & augers	1	4	20	32	176	43	1.65	2.36	0.56	0.54	6.68	0.57	539.15	0.004	0.006	0.001	0.001	0.018	0.002	1.431
Dozer, 300 HP	1	203	40	3246	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.000	1.221	0.000	0.000	2.987	0.206	341.245
Front end loader, 1.5 cy	1	586	40	9374	93	21	1.65	6.42	0.38	0.37	6.80	1.47	662.28	1.045	1.302	0.242	0.235	1.378	0.297	134.195
Gas engine vibrator	1	1,343	20	10744	6	55	2.03	696.11	1.31	1.27	2.78	26.08	1093.00	0.411	25.368	0.265	0.257	0.101	0.951	39.832
Gas welding machine	1	600	40	9596	17	68	0.22	642.74	0.18	0.17	3.24	11.35	996.20	0.008	79.961	0.007	0.006	0.404	1.412	123.934
Gradall, 3 ton, 1/2 cy	1	344	40	5510	171	59	0.21	1.64	0.11	0.10	4.25	0.32	541.49	0.026	1.006	0.014	0.013	2.605	0.196	331.929
Grader, 30,000 lb	1	942	40	15070	204	59	1.66	1.45	0.38	0.37	4.26	0.32	537.25	1.016	2.909	0.232	0.225	8.525	0.639	1075.393
Pneumatic wheel roller	1	138	50	2755	92	59	1.64	2.49	0.36	0.35	4.77	0.42	558.97	3.292	0.411	0.721	0.699	0.788	0.070	92.331
Roller, vibratory	1	203	20	1623	92	59	1.76	2.49	0.59	0.57	4.77	0.42	558.97	0.000	0.242	0.000	0.000	0.464	0.041	54.385
Rollers, steel wheel	1	275	20	2201	92	59	1.76	2.49	0.59	0.57	4.77	0.42	558.97	0.000	0.328	0.000	0.000	0.630	0.056	73.752
Tandem roller, 10 ton	1	0.2	20	1.7	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.283	0.000	0.088	0.085	0.000	0.000	0.056
Total Annual Construction Emissions Between 2011 – 2016, Alternative 1														24.761	202.055	9.618	9.209	74.181	22.516	8247.229
Total Annual Construction Emissions Between 2011 – 2016, Alternative 2 (1.9% increase)														25.232	205.904	9.801	9.384	75.594	22.945	8404.319
Total Annual Construction Emissions Between 2011 – 2016, Alternative 3 (4.8% increase)														25.940	211.677	10.076	9.647	77.714	23.588	8639.954
Total Annual Construction Emissions Between 2011 – 2016, Alternative 8 (2.9% increase)														25.468	207.829	9.893	9.472	76.301	23.159	8482.864

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-132. Marine Corps Van & Truck Emissions – Main Cantonment / North and Central

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Alternative 1	1,703,686	25	68,147	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.018	17.540	0.047	0.022	1.529	1.724	965.100
Alternative 2 (no increase)											0.018	17.540	0.047	0.022	1.529	1.724	965.100
Alternative 3 (1.0% increase)											0.018	17.712	0.048	0.022	1.544	1.741	974.562
Alternative 8 (no increase)											0.018	17.540	0.047	0.022	1.529	1.724	965.100
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Alternative 1	6,676,676	25	267,067	0.243	0.111	0.029	0.026	0.322	0.025	78.104	32.395	14.801	1.558	1.261	42.988	3.400	10429.537
Alternative 2 (1.0% increase)											32.706	14.943	1.573	1.273	43.402	3.433	10529.821
Alternative 3 (2.9% increase)											33.329	15.227	1.603	1.297	44.228	3.498	10730.389
Alternative 8 (1.0% increase)											32.706	14.943	1.573	1.273	43.402	3.433	10529.821
Total Annual Motor Vehicle Emissions, Between 2011-2016, Alternative 1											32.416	32.341	1.605	1.283	44.517	5.124	11394.637
Total Annual Motor Vehicle Emissions, Between 2011-2016, Alternative 2 (1.0% increase)											32.724	32.483	1.620	1.295	44.930	5.157	11494.921
Total Annual Motor Vehicle Emissions, Between 2011-2016, Alternative 3 (2.9% increase)											33.347	32.940	1.651	1.319	45.772	5.239	11704.951
Total Annual Motor Vehicle Emissions, Between 2011-2016, Alternative 8 (1.0% increase)											32.724	32.483	1.620	1.295	44.930	5.157	11494.921

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-133. Marine Corps Pavement Emissions – Main Cantonment / North and Central

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*Emissions Rate VOC (tons/year)*
3,153,937	0.04	17.90	0.06	0.25	0.30	2.1E-05	64.76	64.756
Total Annual Paving VOCs Between 2011-2016, Alternative 1								64.756
Total Annual Paving VOCs Between 2011-2016, Alternative 2 (1.9% increase)								65.990
Total Annual Paving VOCs Between 2011-2016, Alternative 3 (4.8% increase)								67.840
Total Annual Paving VOCs Between 2011-2016, Alternative 8 (2.9% increase)								66.606

Source: 1. California Air Resources Board.
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-134. Marine Corps Total Construction Emissions – Main Cantonment / North and Central

	Construction Activity	*Pollutant*						
	Total Annual Emissions (TPY)	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Alternative 1, North	2011 (11%)	6.3	25.8	1.5	1.4	13.1	10.2	2,160.6
	2012 (18%)	10.3	42.2	2.4	2.3	21.4	16.6	3,535.5
	2013 (23%)	13.1	53.9	3.1	2.9	27.3	21.3	4,517.6
	2014 (23%)	13.1	53.9	3.1	2.9	27.3	21.3	4,517.6
	2015 (17%)	9.7	39.8	2.3	2.2	20.2	15.7	3,339.1
	2016 (8%)	4.6	18.8	1.1	1.0	9.5	7.4	1,571.3
Alternative 2, North	2011 (11%)	6.4	26.2	1.5	1.4	13.3	10.4	2,188.9
	2012 (18%)	10.4	42.9	2.5	2.3	21.7	16.9	3,581.9
	2013 (23%)	13.3	54.8	3.2	3.0	27.7	21.6	4,576.8
	2014 (23%)	13.3	54.8	3.2	3.0	27.7	21.6	4,576.8
	2015 (17%)	9.9	40.5	2.3	2.2	20.5	16.0	3,382.9
	2016 (8%)	4.6	19.1	1.1	1.0	9.6	7.5	1,591.9
Alternative 3, North	2011 (11%)	4.3	17.6	1.0	1.0	8.9	6.9	1,461.4
	2012 (18%)	7.0	28.8	1.7	1.6	14.5	11.4	2,391.3
	2013 (23%)	8.9	36.7	2.1	2.0	18.5	14.5	3,055.6
	2014 (23%)	8.9	36.7	2.1	2.0	18.5	14.5	3,055.6
	2015 (17%)	6.6	27.2	1.6	1.5	13.7	10.7	2,258.5
	2016 (8%)	3.1	12.8	0.7	0.7	6.5	5.0	1,062.8
Alternative 3, Central	2011 (11%)	2.3	9.3	0.5	0.5	4.7	3.7	776.6
	2012 (18%)	3.7	15.3	0.9	0.8	7.7	6.0	1,270.7
	2013 (23%)	4.7	19.5	1.1	1.1	9.9	7.7	1,623.7
	2014 (23%)	4.7	19.5	1.1	1.1	9.9	7.7	1,623.7
	2015 (17%)	3.5	14.4	0.8	0.8	7.3	5.7	1,200.1
	2016 (8%)	1.6	6.8	0.4	0.4	3.4	2.7	564.8
Alternative 8, North	2011 (11%)	5.2	21.3	1.2	1.2	10.7	8.4	1,769.0
	2012 (18%)	8.4	34.8	2.0	1.9	17.6	13.8	2,894.8

Table I.3-134. Marine Corps Total Construction Emissions – Main Cantonment / North and Central

	2013 (23%)	10.8	44.5	2.6	2.4	22.4	17.6	3,698.9
	2014 (23%)	10.8	44.5	2.6	2.4	22.4	17.6	3,698.9
	2015 (17%)	8.0	32.9	1.9	1.8	16.6	13.0	2,734.0
	2016 (8%)	3.7	15.5	0.9	0.8	7.8	6.1	1,286.6
Alternative 8, Central	2011 (11%)	1.2	5.2	0.3	0.3	2.6	2.0	428.5
	2012 (18%)	2.0	8.4	0.5	0.5	4.3	3.3	701.2
	2013 (23%)	2.6	10.8	0.6	0.6	5.4	4.3	896.0
	2014 (23%)	2.6	10.8	0.6	0.6	5.4	4.3	896.0
	2015 (17%)	1.9	8.0	0.5	0.4	4.0	3.1	662.3
	2016 (8%)	0.9	3.7	0.2	0.2	1.9	1.5	311.7

Table I.3-135. Marine Corps Construction Equipment Emissions – Waterfront / Apra Harbor

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Asphalt paver, 130 HP	1	1.4	50	27	130	59	1.68	2.07	0.46	0.45	4.59	0.38	550.19	0.004	0.005	0.001	0.001	0.010	0.001	1.255
Backhoe loader, 48hp	1	2.4	40	38	48	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.001	0.003	0.001	0.001	0.003	0.001	0.282
Chain saws, 36"	1	1.0	20	8	48	59	2.00	349.18	12.63	11.62	0.91	69.87	686.61	0.000	0.086	0.003	0.003	0.000	0.017	0.170
Chipping machine	1	0.5	50	10	144	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.001	0.002	0.000	0.000	0.004	0.000	0.375
Compressor, 250 cfm	1	6.7	40	106	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.007	0.010	0.002	0.002	0.023	0.002	2.393
Concrete pump, small	1	2.0	50	40	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.002	0.003	0.001	0.001	0.006	0.001	0.567
Crane, 90-ton	1	16.8	16	107	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.019	0.015	0.004	0.004	0.060	0.004	6.245
Crane, SP, 12 ton	1	12.7	16	81	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.014	0.011	0.003	0.003	0.046	0.003	4.716
Vibratory hammer and generator	1	5.6	50	112	50	43	1.74	3.02	0.72	0.70	6.14	0.80	567.43	0.005	0.008	0.002	0.002	0.016	0.002	1.492
Diesel hammer, 41k ft-lb	1	0.3	20	2	329	59	1.64	2.75	0.50	0.48	5.60	0.42	537.08	0.001	0.001	0.000	0.000	0.003	0.000	0.275
Dozer, 75 HP	1	0.5	40	8	75	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.001	0.001	0.000	0.000	0.002	0.000	0.210
Dozer, 300 HP	1	1.4	40	22	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.007	0.008	0.002	0.002	0.020	0.001	2.271
Front end loader, 1.5 cy	1	3.5	40	56	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.002	0.008	0.002	0.002	0.008	0.002	0.802
Gas engine vibrator	1	5.9	20	47	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.111	0.000	0.000	0.000	0.004	0.174
Gas welding machine	1	2.8	40	45	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.373	0.000	0.000	0.002	0.007	0.579
Gradall, 3 ton, 1/2 cy	1	0.1	40	1	171	59	10.67	1.22	0.37	0.36	3.38	0.25	536.04	0.001	0.000	0.000	0.000	0.000	0.000	0.048
Grader, 30,000 lb	1	3.9	40	62	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.013	0.012	0.003	0.003	0.035	0.003	4.396
Hydraulic excavator, 3.5 cy	1	1.9	40	30	62	43	1.76	2.43	0.59	0.57	5.41	0.56	576.01	0.002	0.002	0.001	0.001	0.005	0.000	0.513
Pneumatic wheel roller	1	1.4	50	27	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.003	0.004	0.001	0.001	0.008	0.001	0.905
Roller, vibratory	1	1.4	20	11	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.002	0.000	0.000	0.003	0.000	0.362
Rollers, steel wheel	1	2.5	20	20	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.002	0.003	0.001	0.001	0.006	0.001	0.670
Tandem roller, 10 ton	1	0.1	20	1	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.000	0.000	0.027
Tug boat, 500 HP	1	1.8	50	36	500	30	140.62	0.78	0.25	0.24	7.92	0.01	524.78	0.836	0.005	0.001	0.001	0.047	0.000	3.121
Total Annual Construction Emissions Between 2011 - 2014														0.923	0.673	0.027	0.026	0.307	0.050	31.846

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-136. Marine Corps Van & Truck Emissions – Waterfront / Apra Harbor

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	20417	25	204	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.053	0.000	0.000	0.005	0.005	2.891
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	116262	25	1163	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.141	0.064	0.017	0.015	0.187	0.015	45.403
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.141	0.117	0.017	0.015	0.192	0.020	48.294

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-137. Marine Corps Pavement Emissions – Waterfront / Apra Harbor

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*# of years of construction*	*Emissions Rate VOC (tons/year)*
62,611	0.04	17.90	0.06	0.25	0.30	2.1E-05	1.29	4	0.321
Total Annual Paving VOCs Between 2011-2014									0.321

Source: 1. California Air Resources Board.
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-138. Marine Corps Total Construction Emissions – Waterfront / Apra Harbor

	Pollutant						
Construction Activity	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	1.1	0.8	0.0	0.0	0.5	0.4	80.1

Table I.3-139. Marine Corps Construction Equipment Emissions – Training / South & North

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	CO	PM_{10}	$PM_{2.5}$	NO_x	VOC	CO_2	SO_2	CO	PM_{10}	$PM_{2.5}$	NO_x	VOC	CO_2
Construction																				
Compressor, 250 cfm	1	0.3	40	4	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.000	0.000	0.000	0.000	0.001	0.000	0.100
Concrete pump, small	1	1.7	50	34	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.001	0.003	0.001	0.001	0.005	0.001	0.480
Crane, 90-ton	1	0.5	16	3	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.001	0.000	0.000	0.000	0.002	0.000	0.170
Crane, SP, 12 ton	1	0.1	16	1	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.000	0.000	0.000	0.000	0.001	0.000	0.055
Dozer, 75 HP	1	0.1	40	2	75	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.000	0.000	0.000	0.000	0.001	0.000	0.062
Dozer, 300 HP	1	0.0	40	1	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.000	0.000	0.000	0.000	0.001	0.000	0.082
Front end loader, 1.5 cy	1	0.0	40	1	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.000	0.000	0.000	0.000	0.000	0.000	0.011
Gas engine vibrator	1	2.2	20	18	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.042	0.000	0.000	0.000	0.002	0.065
Gas welding machine	1	0.5	40	9	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.072	0.000	0.000	0.000	0.001	0.111
Grader, 30,000 lb	1	0.0	40	1	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.000	0.000	0.000	0.000	0.000	0.000	0.056
Hydraulic excavator, 3.5 cy	1	0.3	40	5	62	43	1.76	2.43	0.59	0.57	5.41	0.56	576.01	0.001	0.001	0.000	0.000	0.003	0.000	0.301
Roller, vibratory	1	0.0	20	0	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.000	0.000	0.013
Total Annual Construction Emissions Between 2011 – 2014														0.004	0.119	0.001	0.001	0.014	0.004	1.506

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA , Dec. 31, 2008.

Table I.3-140. Marine Corps Van & Truck Emissions – Training / South & North

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	SO_2	CO	PM_{10}	$PM_{2.5}$	NO_x	VOC	CO_2	SO_2	CO	PM_{10}	$PM_{2.5}$	NO_x	VOC	CO_2
Construction	3871	25	19	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.005	0.000	0.000	0.000	0.000	0.274
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	28878	25	144	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.018	0.008	0.002	0.002	0.023	0.002	5.639
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.018	0.013	0.002	0.002	0.024	0.002	5.913

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-141. Marine Corps Total Construction Emissions – Training / South & North

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.0	0.1	0.0	0.0	0.0	0.0	7.4

Table I.3-142. Guam Military Relocation Construction Equipment Emissions - Firing Training Option A / Central

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Asphalt paver, 130 HP	1	0.5	50	10	130	59	1.68	2.07	0.46	0.45	4.59	0.38	550.19	0.001	0.002	0.000	0.000	0.004	0.000	0.465
Backhoe loader, 48hp	1	17.6	40	281	48	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.006	0.020	0.004	0.004	0.021	0.005	2.064
Chain saws, 36"	1	11.5	20	92	48	59	2.00	349.18	12.63	11.62	0.91	69.87	686.61	0.006	0.992	0.036	0.033	0.003	0.199	1.951
Chipping machine	1	5.8	50	115	144	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.013	0.019	0.005	0.004	0.047	0.005	4.315
Compressor, 250 cfm	1	3.2	40	50	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.003	0.005	0.001	0.001	0.011	0.001	1.134
Concrete pump, small	1	1.1	50	21	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.001	0.002	0.000	0.000	0.003	0.000	0.297
Crane, 90-ton	1	37.3	16	239	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.043	0.034	0.008	0.008	0.134	0.009	13.906
Crane, SP, 12 ton	1	14.4	16	92	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.016	0.013	0.003	0.003	0.052	0.004	5.369
Dozer, 200 HP	1	40.1	40	641	200	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.138	0.161	0.032	0.031	0.393	0.027	44.914
Dozer, 300 HP	1	0.6	40	9	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.003	0.003	0.001	0.001	0.008	0.001	0.925
Front end loader, 1.5 cy	1	12.1	40	193	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.008	0.027	0.005	0.005	0.028	0.006	2.760
Gas engine vibrator	1	2.1	20	17	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.040	0.000	0.000	0.000	0.001	0.062
Gas welding machine	1	0.8	40	13	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.107	0.000	0.000	0.001	0.002	0.165
Gradall, 3 ton, 1/2 cy	1	1.2	40	19	183	59	10.67	1.22	0.37	0.36	3.38	0.25	536.04	0.024	0.003	0.001	0.001	0.008	0.001	1.224
Grader, 30,000 lb	1	11.7	40	187	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.041	0.036	0.009	0.009	0.106	0.008	13.359
Pneumatic wheel roller	1	0.5	50	10	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.001	0.000	0.000	0.003	0.000	0.335
Roller, vibratory	1	0.6	20	4	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.001	0.000	0.000	0.001	0.000	0.147
Rollers, steel wheel	1	1.0	20	8	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.001	0.000	0.000	0.002	0.000	0.268
Total Annual Construction Emissions Between 2011 – 2014														0.306	1.466	0.107	0.102	0.825	0.269	93.662

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-143. Guam Military Relocation Truck Emissions - Firing Training Option A / Central

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	13121	25	131	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.034	0.000	0.000	0.003	0.003	1.858
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	110956	25	1110	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.135	0.061	0.016	0.016	0.179	0.014	43.331
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.135	0.095	0.016	0.016	0.182	0.017	45.189

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-144. Guam Military Relocation Pavement Emissions - Firing Training Option A / Central

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*# of years of construction*	*Emissions Rate VOC (tons/year)*
45,494	0.04	17.90	0.06	0.25	0.30	2.1E-05	0.93	4	0.234
Total Annual Paving VOCs Between 2011-2014									0.234

Source: 1. California Air Resources Board.
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-145. Guam Military Relocation Total Construction Emissions - Firing Training Option A / Central

	Pollutant						
Construction Activity	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.4	1.6	0.1	0.1	1.0	0.5	138.9

Table I.3-146. Guam Military Relocation Construction Equipment Emissions - Firing Training Option B / Central

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Asphalt paver, 130 HP	1	0.1	50	2	130	59	1.68	2.07	0.46	0.45	4.59	0.38	550.19	0.000	0.000	0.000	0.000	0.001	0.000	0.093
Backhoe loader, 48hp	1	2.2	40	35	48	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.001	0.003	0.001	0.000	0.003	0.001	0.259
Chain saws, 36"	1	10.4	20	83	48	59	2.00	349.18	12.63	11.62	0.91	69.87	686.61	0.005	0.897	0.032	0.030	0.002	0.180	1.765
Chipping machine	1	5.2	50	104	144	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.012	0.017	0.004	0.004	0.042	0.004	3.902
Compressor, 250 cfm	1	3.2	40	50	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.003	0.005	0.001	0.001	0.011	0.001	1.134
Concrete pump, small	1	1.1	50	21	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.001	0.002	0.000	0.000	0.003	0.000	0.297
Crane, 90-ton	1	6.4	16	41	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.007	0.006	0.001	0.001	0.023	0.002	2.386
Crane, SP, 12 ton	1	1.8	16	12	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.002	0.002	0.000	0.000	0.006	0.000	0.671
Dozer, 200 HP	1	69.7	40	1115	200	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.239	0.280	0.055	0.054	0.684	0.047	78.165
Dozer, 300 HP	1	0.2	40	2	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.001	0.001	0.000	0.000	0.002	0.000	0.252
Front end loader, 1.5 cy	1	8.4	40	134	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.006	0.019	0.004	0.004	0.020	0.004	1.924
Gas engine vibrator	1	2.1	20	17	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.040	0.000	0.000	0.000	0.001	0.062
Gas welding machine	1	0.8	40	13	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.107	0.000	0.000	0.001	0.002	0.165
Gradall, 3 ton, 1/2 cy	1	0.2	40	2	183	59	10.67	1.22	0.37	0.36	3.38	0.25	536.04	0.003	0.000	0.000	0.000	0.001	0.000	0.153
Grader, 30,000 lb	1	10.2	40	163	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.036	0.032	0.008	0.008	0.092	0.007	11.646
Pneumatic wheel roller	1	0.1	50	2	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.001	0.000	0.067
Roller, vibratory	1	0.2	20	1	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.000	0.000	0.040
Rollers, steel wheel	1	0.2	20	2	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.000	0.000	0.054
Total Annual Construction Emissions Between 2011 – 2014														0.317	1.410	0.108	0.103	0.893	0.250	103.036

***Source*:** 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-147. Guam Military Relocation Van & Truck Emissions - Firing Training Option B / Central

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	25997	25	260	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.067	0.000	0.000	0.006	0.007	3.682
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	403596	25	4036	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.490	0.224	0.058	0.053	0.650	0.051	157.613
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.490	0.291	0.058	0.053	0.655	0.058	161.295

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-148. Guam Military Relocation Pavement Emissions - Firing Training Option B / Central

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*# of years of construction*	*Emissions Rate VOC (tons/year)*
5,287	0.04	17.90	0.06	0.25	0.30	2.1E-05	0.11	4	0.027
Total Annual Paving VOCs Between 2011-2014									0.027

Source: 1. California Air Resources Board.
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-149. Guam Military Relocation Total Construction Emissions - Firing Training Option B / Central

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.8	1.7	0.2	0.2	1.5	0.3	264.3

Table I.3-150. Guam Military Relocation Construction Equipment Emissions - C3 & Non Firing Training / North & Central

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Construction																				
Asphalt paver, 130 HP	1	6.8	50	68	130	59	1.68	2.07	0.46	0.45	4.59	0.38	550.19	0.010	0.012	0.003	0.003	0.026	0.002	3.137
Backhoe loader, 48hp	1	11.5	40	92	48	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.002	0.007	0.001	0.001	0.007	0.001	0.673
Chain saws, 36"	1	8.6	20	34	48	59	2.00	349.18	12.63	11.62	0.91	69.87	686.61	0.002	0.371	0.013	0.012	0.001	0.074	0.730
Chipping machine	1	4.3	50	43	144	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.005	0.007	0.002	0.002	0.018	0.002	1.613
Compressor, 250 cfm	1	5.1	40	40	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.003	0.004	0.001	0.001	0.009	0.001	0.909
Concrete pump, small	1	1.8	50	18	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.001	0.001	0.000	0.000	0.003	0.000	0.248
Crane, 90-ton	1	7.8	16	25	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.004	0.004	0.001	0.001	0.014	0.001	1.445
Crane, SP, 12 ton	1	9.4	16	30	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.005	0.004	0.001	0.001	0.017	0.001	1.752
Dozer, 300 HP	1	3.7	40	30	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.010	0.011	0.002	0.002	0.027	0.002	3.112
Front end loader, 1.5 cy	1	12.3	40	98	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.004	0.014	0.003	0.003	0.014	0.003	1.403
Gas engine vibrator	1	3.6	20	14	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.034	0.000	0.000	0.000	0.001	0.053
Gas welding machine	1	1.3	40	10	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.087	0.000	0.000	0.000	0.002	0.134
Gradall, 3 ton, 1/2 cy	1	0.8	40	6	183	59	10.67	1.22	0.37	0.36	3.38	0.25	536.04	0.008	0.001	0.000	0.000	0.003	0.000	0.408
Grader, 30,000 lb	1	16.3	40	130	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.028	0.025	0.006	0.006	0.074	0.006	9.277
Pneumatic wheel roller	1	6.8	50	68	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.007	0.010	0.002	0.002	0.019	0.002	2.262
Roller, vibratory	1	3.7	20	15	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.002	0.002	0.000	0.000	0.004	0.000	0.496
Rollers, steel wheel	1	6.5	20	26	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.003	0.004	0.001	0.001	0.007	0.001	0.871
Tandem roller, 10 ton	1	3.5	20	14	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.002	0.000	0.000	0.004	0.000	0.469
Total Annual Construction Emissions Between 2011 – 2014														0.095	0.599	0.038	0.036	0.247	0.100	28.992

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-151. Guam Military Relocation Van & Truck Emissions - C3 & Non Firing Training / North & Central

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Construction	9428	25	47	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.012	0.000	0.000	0.001	0.001	0.668
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	100646	25	503	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.061	0.028	0.007	0.007	0.081	0.006	19.652
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.061	0.040	0.007	0.007	0.082	0.008	20.320

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-152. Guam Military Relocation Pavement Emissions - C3 & Non Firing Training / North & Central

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*# of years of construction*	*Emissions Rate VOC (tons/year)*
158,510	0.04	17.90	0.06	0.25	0.30	2.1E-05	3.25	4	0.814
Total Annual Paving VOCs Between 2011-2014									0.814

Source: 1. California Air Resources Board.
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-153. Guam Military Relocation Total Construction Emissions - C3 & Non Firing Training / North & Central

Construction Activity	*Pollutant*						
	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Total Annual Emissions (TPY)	0.2	0.6	0.0	0.0	0.3	0.9	49.3

3.4.2 Construction Emissions Marine Corps Relocation – CNMI

Table I.3-154. CNMI Construction Equipment Emissions - Alternatives 1 and 2

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	CO	PM_{10}	$PM_{2.5}$	NO_x	VOC	CO_2	SO_2	CO	PM_{10}	$PM_{2.5}$	NO_x	VOC	CO_2
Construction																				
Asphalt paver, 130 HP	1	0.4	50	8	130	59	1.68	2.07	0.46	0.45	4.59	0.38	550.19	0.001	0.001	0.000	0.000	0.003	0.000	0.372
Backhoe loader, 48hp	1	28.7	40	459	48	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.010	0.033	0.007	0.006	0.035	0.007	3.376
Compressor, 250 cfm	1	4.5	40	71	83	43	1.76	2.40	0.57	0.56	5.42	0.59	573.27	0.005	0.007	0.002	0.002	0.015	0.002	1.601
Chain saws, 36"	1	33.3	20	266	7	70	2.00	349.2	12.63	11.62	0.911	69.87	686.61	0.003	0.488	0.018	0.016	0.001	0.098	0.959
Chipping machine	1	16.7	50	333	144	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.038	0.056	0.013	0.013	0.136	0.013	12.494
Concrete pump, small	1	1.6	50	31	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.001	0.002	0.001	0.001	0.005	0.001	0.439
Crane, 90-ton	1	3.6	16	23	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.004	0.003	0.001	0.001	0.013	0.001	1.342
Crane, SP, 12 ton	1	3.0	16	19	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.003	0.003	0.001	0.001	0.011	0.001	1.100
Dozer, 75 HP	1	0.2	40	2	75	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.000	0.000	0.000	0.000	0.001	0.000	0.063
Dozer, 200 HP	1	0.5	40	7	200	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.002	0.002	0.000	0.000	0.004	0.000	0.505
Dozer, 300 HP	1	0.8	40	12	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.004	0.005	0.001	0.001	0.011	0.001	1.262
Front end loader, 1.5 cy	1	17.2	40	274	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.012	0.038	0.008	0.008	0.040	0.009	3.928
Gas engine vibrator	1	3.6	20	28	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.067	0.000	0.000	0.000	0.003	0.105
Gas welding machine	1	1.3	40	21	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.173	0.000	0.000	0.001	0.003	0.269
Gradall, 3 ton, 1/2 cy	1	0.1	40	1	171	59	1.66	1.64	0.38	0.37	4.25	0.32	541.49	0.000	0.000	0.000	0.000	0.000	0.000	0.048
Grader, 30,000 lb	1	2.4	40	38	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.008	0.007	0.002	0.002	0.022	0.002	2.740
Hydraulic excavator, 3.5 cy	1	54.4	40	870	62	43	1.76	2.43	0.59	0.57	5.41	0.56	576.01	0.045	0.062	0.015	0.014	0.138	0.014	14.684
Paving machinery & equipment	1	1.0	50	19	70	21	1.70	2.64	0.57	0.55	5.00	0.47	555.84	0.001	0.001	0.000	0.000	0.002	0.000	0.171
Pneumatic wheel roller	1	0.4	50	8	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.001	0.000	0.000	0.002	0.000	0.268
Roller, vibratory	1	0.5	20	4	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.001	0.000	0.000	0.001	0.000	0.134
Tandem roller, 10 ton	1	0.7	20	6	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.001	0.000	0.000	0.002	0.000	0.188
Total Annual Construction Emissions Between 2011 – 2014														0.140	0.951	0.068	0.065	0.442	0.154	46.048

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-155. CNMI Van & Truck Emissions - Alternatives 1 and 2

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	18470	25	185	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.048	0.000	0.000	0.004	0.005	2.616
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	153798	25	1538	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.187	0.085	0.022	0.020	0.248	0.020	60.061
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.187	0.133	0.022	0.020	0.252	0.024	62.677

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-156. CNMI Pavement Emissions - Alternatives 1 and 2

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*# of years of construction*	*Emissions Rate VOC (tons/year)*
30,622	0.04	17.90	0.06	0.25	0.30	2.1E-05	0.63	4	0.157
Total Annual Paving VOCs Between 2011-2014									0.157

Source: 1. California Air Resources Board.
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-157. CNMI Total Construction Emissions - Alternatives 1 and 2

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.3	1.1	0.1	0.1	0.7	0.3	108.7

3.4.3 Construction Emissions: Marine Corps Relocation – Aircraft Carrier Berthing

Table I.3-158. Aircraft Carrier Berthing Construction Equipment Emissions – Alternative 1 and Alternative 2 - Apra Harbor

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor*[1] *%*	*Hours*	*Horse power*[2] *(hp)*	*Load Factor*[2] *(%)*	*Emission Factor*[2] *(grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Asphalt paver, 130 HP	1	0.4	50	8	130	59	1.68	2.07	0.46	0.45	4.59	0.38	550.19	0.001	0.001	0.000	0.000	0.003	0.000	0.372
Backhoe loader, 48hp	1	29.7	40	475	48	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.011	0.034	0.007	0.007	0.036	0.008	3.494
Chain saws, 36"	1	0.7	20	6	48	59	1.99	349.18	12.63	11.62	0.91	69.87	686.61	0.000	0.060	0.002	0.002	0.000	0.012	0.119
Chipping machine	1	0.4	50	7	144	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.001	0.001	0.000	0.000	0.003	0.000	0.263
Compressor, 250 cfm	1	0.4	40	6	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.000	0.001	0.000	0.000	0.001	0.000	0.144
Concrete pump, small	1	2.3	50	46	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.002	0.003	0.001	0.001	0.007	0.001	0.652
Crane, 90-ton	1	17.1	16	109	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.020	0.016	0.004	0.004	0.062	0.004	6.375
Crane, SP, 12 ton	1	39.3	16	252	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.045	0.036	0.009	0.009	0.141	0.010	14.652
Diesel hammer, 41k ft-lb	1	14.1	20	113	329	59	1.64	2.75	0.50	0.48	5.60	0.42	537.08	0.040	0.066	0.012	0.012	0.135	0.010	12.934
Dozer, 200 HP	1	0.1	40	1	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.000	0.000	0.000	0.000	0.001	0.000	0.084
Dozer, 300 HP	1	0.3	40	5	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.002	0.002	0.000	0.000	0.004	0.000	0.505
Front end loader, 1.5 cy	1	0.3	40	5	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.000	0.001	0.000	0.000	0.001	0.000	0.069
Gas engine vibrator	1	8.2	20	66	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.155	0.000	0.000	0.001	0.006	0.243
Gas welding machine	1	6.7	40	106	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.887	0.000	0.000	0.004	0.016	1.374
Gradall, 3 ton, 1/2 cy	1	0.7	40	10	171	59	1.66	1.64	0.38	0.37	4.25	0.32	541.49	0.002	0.002	0.000	0.000	0.005	0.000	0.626
Grader, 30,000 lb	1	1.0	40	15	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.003	0.003	0.001	0.001	0.009	0.001	1.085
Hydraulic excavator, 3.5 cy	1	5.9	40	94	171	59	1.66	1.64	0.38	0.37	4.25	0.32	541.49	0.017	0.017	0.004	0.004	0.045	0.003	5.686
Pneumatic wheel roller	1	0.4	50	8	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.001	0.000	0.000	0.002	0.000	0.268
Roller, vibratory	1	0.3	20	2	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.001	0.000	0.080
Rollers, steel wheel	1	0.8	20	6	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.001	0.000	0.000	0.002	0.000	0.214
Total Annual Construction Emissions Between 2011 - 2014														0.146	1.287	0.042	0.040	0.462	0.072	49.239

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-159. Aircraft Carrier Berthing (Dredging) Construction Equipment Emissions – Alternative 1 and Alternative 2 - Apra Harbor

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Dredging – ODMDS option																				
Crane, 90-ton	1	19.0	16	122	231	43	1.63	1..30	0.32	0.31	5.14	0.35	532.78	0.022	0.017	0.004	0.004	0.068	0.005	7.084
Hydraulic dredge and booster pump (equiv. 2 generators)	2	5.3	50	212	2822	59	1.71	3.02	0.72	0.70	6.14	0.80	567.43	0.665	1.176	0.280	0.271	2.387	0.309	220.584
Support and propulsion, mechanical dredge	1	19.0	51	380	2000	30	0.10	7.92	1.01	0.25	0.24	9.88	524.78	0.024	1.989	0.254	0.063	0.061	2.481	131.773
Tug to ODMDS	1	19.0	51	380	2000	30	0.10	7.92	1.01	0.25	0.24	9.88	524.78	0.024	1.989	0.254	0.063	0.061	2.481	131.773
Total Annual Dredging Emissions Between 2014 – 2015, ODMDS option														0.735	5.170	0.793	0.402	2.578	5.276	491.214
Dredging – Upland Site option																				
Crane, 90-ton	1	19.0	16	122	231	43	1.63	1..30	0.32	0.31	5.14	0.35	532.78	0.022	0.017	0.004	0.004	0.068	0.005	7.084
Hydraulic dredge and booster pump (equiv. 2 generators)	2	5.3	50	212	2822	59	1.71	3.02	0.72	0.70	6.14	0.80	567.43	0.665	1.176	0.280	0.271	2.387	0.309	220.584
Support and propulsion, mechanical dredge	1	19.0	51	380	2000	30	0.10	7.92	1.01	0.25	0.24	9.88	524.78	0.024	1.989	0.254	0.063	0.061	2.481	131.773
Total Annual Dredging Emissions Between 2014 – 2015, Upland Site														0.711	3.182	0.539	0.339	2.517	2.795	359.441

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-160. Aircraft Carrier Berthing Van &Truck Emissions – Alternative 1 and Alternative 2 – Apra Harbor

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	19743	25	197	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.051	0.000	0.000	0.004	0.005	2.796
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	171304	25	1713	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.208	0.095	0.024	0.023	0.276	0.022	66.898
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.208	0.146	0.025	0.023	0.280	0.027	69.694

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-161. Aircraft Carrier Berthing (Dredging) Van &Truck Emissions – Alternative 1 and Alternative 2 – Apra Harbor

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Dredging – ODMDS option	972	25	19	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.005	0.000	0.000	0.000	0.000	0.275
Dredging – Upland Site option	972	25	19	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.005	0.000	0.000	0.000	0.000	0.275
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Dredging – ODMDS option	0	25	0	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Dredging – Upland Site option	37900	25	758	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.092	0.042	0.011	0.010	0.122	0.010	29.602
Total Annual Motor Vehicle Emissions, Between 2011-2014, ODMDS option											0.000	0.005	0.000	0.000	0.000	0.000	0.275
Total Annual Motor Vehicle Emissions, Between 2011-2014, Upland Site option											0.092	0.047	0.011	0.010	0.122	0.010	29.877

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-162. Aircraft Carrier Berthing Pavement Emissions – Alternative 1 and Alternative 2 – Apra Harbor

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*# of years of construction*	*Emissions Rate VOC (tons/year)*
21,932	0.04	17.90	0.06	0.25	0.30	2.1E-05	0.45	4	0.113
Total Annual Paving VOCs Between 2011-2014									0.113

Source: 1. California Air Resources Board..
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-163. Aircraft Carrier Berthing Total Construction Emissions – Alternative 1 and Alternative 2 – Apra Harbor

	Pollutant						
Construction Activity	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.4	1.4	0.1	0.1	0.7	0.2	118.9
Total Annual Emissions for Dredging – ODMDS option (TPY)	0.7	5.2	0.8	0.4	2.6	5.3	491.5
Total Annual Emissions for Dredging - Upland Site option (TPY)	0.8	3.2	0.5	0.3	2.6	2.8	389.3

3.4.4 Construction Emissions: Marine Corps Relocation –Army Air and Missile Defense Task

Table I.3-164. AMDTF Construction Equipment Emissions – Alternative 1 - North

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Asphalt paver, 130 HP	1	1.2	50	24	130	59	1.68	2.07	0.46	0.45	4.59	0.38	550.19	0.003	0.004	0.001	0.001	0.009	0.001	1.115
Backhoe loader, 48hp	1	18.6	40	297	48	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.007	0.021	0.004	0.004	0.022	0.005	2.182
Centrif. water pump, 6"	1	0.1	50	2	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.000	0.000	0.000	0.000	0.000	0.000	0.028
Chain saws, 36"	1	3.1	20	25	48	59	2.00	349.18	12.63	11.62	0.91	69.87	686.61	0.002	0.267	0.010	0.009	0.001	0.054	0.526
Chipping machine	1	1.6	50	31	144	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.004	0.005	0.001	0.001	0.013	0.001	1.163
Compressor, 250 cfm	1	214.3	40	3430	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.236	0.323	0.077	0.075	0.729	0.073	77.136
Concrete pump, small	1	16.3	50	326	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.014	0.025	0.006	0.006	0.050	0.006	4.619
Crane, 90-ton	1	15.4	16	99	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.018	0.014	0.003	0.003	0.055	0.004	5.739
Crane, SP, 12 ton	1	33.9	16	217	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.039	0.031	0.008	0.007	0.122	0.008	12.631
Drill rig & augers	1	0.1	20	1	176	43	1.71	2.36	0.56	0.54	6.68	0.57	539.15	0.000	0.000	0.000	0.000	0.000	0.000	0.036
Dozer, 300 HP	1	2.6	40	42	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.014	0.016	0.003	0.003	0.039	0.003	4.421
Front end loader, 1.5 cy	1	5.9	40	95	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.004	0.013	0.003	0.003	0.014	0.003	1.357
Gas engine vibrator	1	34.5	20	276	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.651	0.000	0.000	0.003	0.024	1.023
Gas welding machine	1	15.5	40	249	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.001	2.071	0.000	0.000	0.010	0.037	3.211
Gradall, 3 ton, 1/2 cy	1	1.3	40	20	171	59	1.66	1.64	0.38	0.37	4.25	0.32	541.49	0.004	0.004	0.001	0.001	0.009	0.001	1.205
Grader, 30,000 lb	1	5.5	40	88	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.019	0.017	0.004	0.004	0.050	0.004	6.253
Pneumatic wheel roller	1	1.2	50	24	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.002	0.004	0.001	0.001	0.007	0.001	0.804
Roller, vibratory	1	2.6	20	21	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.002	0.003	0.001	0.001	0.006	0.001	0.691
Rollers, steel wheel	1	2.2	20	18	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.002	0.003	0.001	0.001	0.005	0.000	0.590
Tandem roller, 10 ton	1	0.1	20	1	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.000	0.000	0.027
Total Annual Construction Emissions Between 2011 – 2014														0.370	3.472	0.124	0.120	1.145	0.225	124.756

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-165. AMDTF Van & Truck Emissions – Alternative 1 - North

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	130580	25	1,306	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.336	0.001	0.000	0.029	0.033	18.493
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	794982	25	7,950	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.964	0.441	0.114	0.105	1.280	0.101	310.457
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.965	0.777	0.115	0.105	1.309	0.134	328.950

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-166. AMDTF Pavement Emissions – Alternative 1 - North

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*# of years of construction*	*Emissions Rate VOC (tons/year)*
103,106	0.04	17.90	0.06	0.25	0.30	2.1E-05	2.12	4	0.529
Total Annual Paving VOCs Between 2011-2014									0.529

Source: 1. California Air Resources Board.
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-167. AMDTF Total Construction Emissions – Alternative 1 - North

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	1.3	4.2	0.2	0.2	2.5	0.9	453.7

Table I.3-168. AMDTF Construction Equipment Emissions –Alternative 2 –Central

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Asphalt paver, 130 HP	1	1.1	50	21	130	59	0.12	2.07	0.36	0.35	4.59	0.38	550.19	0.003	0.004	0.001	0.001	0.008	0.001	0.976
Backhoe loader, 48hp	1	18.6	40	297	48	21	0.14	6.42	1.01	0.98	6.80	1.47	662.28	0.007	0.021	0.004	0.004	0.022	0.005	2.182
Centrif. water pump, 6"	1	0.1	50	2	53	43	0.12	3.03	0.57	0.56	6.18	0.75	567.14	0.000	0.000	0.000	0.000	0.000	0.000	0.028
Chain saws, 36"	1	2.9	20	23	48	59	0.14	349.18	9.76	8.98	0.91	69.87	686.61	0.001	0.250	0.009	0.008	0.001	0.050	0.492
Chipping machine	1	1.5	50	29	144	43	0.12	2.46	0.45	0.43	5.98	0.59	550.61	0.003	0.005	0.001	0.001	0.012	0.001	1.088
Compressor, 250 cfm	1	214.2	40	3427	83	43	0.12	2.40	0.44	0.43	5.42	0.54	573.27	0.236	0.322	0.077	0.075	0.728	0.073	77.083
Concrete pump, small	1	15.4	50	308	53	43	0.12	3.03	0.57	0.56	6.18	0.75	567.14	0.013	0.023	0.006	0.006	0.048	0.006	4.363
Crane, 90-ton	1	15.2	16	97	231	43	0.11	1.30	0.25	0.24	5.14	0.35	532.78	0.017	0.014	0.003	0.003	0.055	0.004	5.648
Crane, SP, 12 ton	1	33.8	16	216	231	43	0.11	1.30	0.25	0.24	5.14	0.35	532.78	0.039	0.031	0.008	0.007	0.122	0.008	12.602
Drill rig & augers	1	0.1	20	1	176	43	0.12	2.36	0.43	0.42	6.68	0.57	539.15	0.000	0.000	0.000	0.000	0.000	0.000	0.036
Dozer, 300 HP	1	2.5	40	39	300	59	0.12	1.93	0.30	0.29	4.72	0.33	539.34	0.013	0.015	0.003	0.003	0.036	0.002	4.121
Front end loader, 1.5 cy	1	5.3	40	85	93	21	0.14	6.42	1.01	0.98	6.80	1.47	662.28	0.004	0.012	0.002	0.002	0.012	0.003	1.214
Gas engine vibrator	1	33.3	20	266	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.629	0.000	0.000	0.003	0.024	0.988
Gas welding machine	1	15.3	40	244	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.001	2.033	0.000	0.000	0.010	0.036	3.151
Gradall, 3 ton, 1/2 cy	1	1.3	40	20	171	59	0.12	1.64	0.29	0.28	4.25	0.32	541.49	0.004	0.004	0.001	0.001	0.009	0.001	1.205
Grader, 30,000 lb	1	5.2	40	82	204	59	0.12	1.45	0.28	0.27	4.26	0.32	537.25	0.018	0.016	0.004	0.004	0.047	0.003	5.880
Pneumatic wheel roller	1	1.1	50	21	92	59	0.12	2.49	0.41	0.40	4.77	0.42	558.97	0.002	0.003	0.001	0.001	0.006	0.001	0.704
Roller, vibratory	1	2.5	20	20	92	59	0.12	2.49	0.41	0.40	4.77	0.42	558.97	0.002	0.003	0.001	0.001	0.006	0.000	0.657
Rollers, steel wheel	1	1.9	20	15	92	59	0.12	2.49	0.41	0.40	4.77	0.42	558.97	0.002	0.002	0.000	0.000	0.004	0.000	0.509
Tandem roller, 10 ton	1	0.1	20	1	92	59	0.12	2.49	0.41	0.40	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.000	0.000	0.027
Total Annual Construction Emissions Between 2011 – 2014														0.365	3.387	0.122	0.118	1.130	0.218	122.954

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-169. AMDTF Van & Truck Emissions –Alternative 2 –Central

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Construction	128444	25	1284	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.331	0.001	0.000	0.029	0.032	18.190
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	778980	25	7,790	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.945	0.432	0.111	0.103	1.254	0.099	304.208
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.945	0.762	0.112	0.103	1.283	0.132	322.398

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-170. AMDTF Pavement Emissions –Alternative 2 –Central

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*# of years of construction*	*Emissions Rate VOC (tons/year)*
90135	0.04	17.90	0.06	0.25	0.30	2.1E-05	1.85	4	0.463
Total Annual Paving VOCs Between 2011-2014									0.463

Source: 1. California Air Resources Board.
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-171. AMDTF Total Construction Emissions –Alternative 2 –Central

Construction Activity	*Pollutant*						
	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Total Annual Emissions (TPY)	1.3	4.1	0.2	0.2	2.4	0.8	445.4

Table I.3-172. AMDTF Construction Equipment Emissions – Alternative 3 - North

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Construction																				
Asphalt paver, 130 HP	1	0.9	50	18	130	59	1.68	2.07	0.46	0.45	4.59	0.38	550.19	0.003	0.003	0.001	0.001	0.007	0.001	0.837
Backhoe loader, 48hp	1	18.6	40	297	48	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.007	0.021	0.004	0.004	0.022	0.005	2.182
Chain saws, 36"	1	2.5	20	20	48	59	1.74	349.18	0.74	0.72	0.91	69.87	686.61	0.001	0.216	0.008	0.007	0.001	0.043	0.424
Chipping machine	1	1.3	50	25	144	43	2.00	2.46	12.63	11.62	5.98	0.59	550.61	0.003	0.004	0.001	0.001	0.010	0.001	0.938
Compressor, 250 cfm	1	40.0	40	640	83	43	1.69	2.40	0.58	0.56	5.42	0.54	573.27	0.044	0.060	0.014	0.014	0.136	0.014	14.394
Concrete pump, small	1	13.6	50	271	53	43	1.76	3.03	0.57	0.56	6.18	0.75	567.14	0.012	0.021	0.005	0.005	0.042	0.005	3.840
Crane, 90-ton	1	13.9	16	89	231	43	1.74	1.30	0.74	0.72	5.14	0.35	532.78	0.016	0.013	0.003	0.003	0.050	0.003	5.199
Crane, SP, 12 ton	1	33.8	16	216	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.039	0.031	0.008	0.007	0.122	0.008	12.602
Dozer, 300 HP	1	1.8	40	28	300	59	1.63	1.93	0.32	0.31	4.72	0.33	539.34	0.009	0.011	0.002	0.002	0.026	0.002	2.951
Front end loader, 1.5 cy	1	3.7	40	60	93	21	1.71	6.42	0.56	0.54	6.80	1.47	662.28	0.003	0.008	0.002	0.002	0.009	0.002	0.853
Gas engine vibrator	1	26.5	20	212	6	55	1.65	696.11	0.38	0.37	2.78	26.08	1093.00	0.000	0.500	0.000	0.000	0.002	0.019	0.785
Gas welding machine	1	8.8	40	141	17	68	2.03	642.74	1.31	1.27	3.24	11.35	996.20	0.000	1.178	0.000	0.000	0.006	0.021	1.826
Gradall, 3 ton, 1/2 cy	1	1.3	40	20	171	59	0.22	1.64	0.18	0.17	4.25	0.32	541.49	0.004	0.004	0.001	0.001	0.009	0.001	1.205
Grader, 30,000 lb	1	4.2	40	67	204	59	0.21	1.45	0.11	0.10	4.26	0.32	537.25	0.015	0.013	0.003	0.003	0.038	0.003	4.768
Pneumatic wheel roller	1	0.9	50	18	92	59	1.66	2.49	0.38	0.37	4.77	0.42	558.97	0.002	0.003	0.001	0.001	0.005	0.000	0.603
Roller, vibratory	1	1.7	20	13	92	59	1.64	2.49	0.36	0.35	4.77	0.42	558.97	0.001	0.002	0.000	0.000	0.004	0.000	0.449
Rollers, steel wheel	1	1.6	20	13	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.002	0.000	0.000	0.004	0.000	0.429
Tandem roller, 10 ton	1	0.1	20	1	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.000	0.000	0.027
Total Annual Construction Emissions Between 2011 – 2014														0.159	2.089	0.054	0.052	0.493	0.128	54.311

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-173. AMDTF Van & Truck Emissions – Alternative 3 - North

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Construction	59109	25	591	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.152	0.000	0.000	0.013	0.015	8.371
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	590301	25	5,903	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.716	0.327	0.084	0.078	0.950	0.075	230.525
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.716	0.479	0.085	0.078	0.963	0.090	238.896

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-174. AMDTF Pavement Emissions – Alternative 3 - North

Total Pavement (square yards)	*Hot Mix Emission Factor[1] (lbs/ton)*	*Emulsified Emission Factor[1] (lbs/ton)**	*Hot Mix Application Rate[2] (gal/SY)*	*Primary Coat Application Rate[3] (gal/SY)*	*Tack Coat Application Rate[3] (gal/SY)*	*Hot Mix, Primary & Tack Coat asphalt (tons VOC/SY)*	*Total VOC (tons)*	*# of years of construction*	*Emissions Rate VOC (tons/year)*
73921	0.04	17.90	0.06	0.25	0.30	2.1E-05	1.52	4	0.379
Total Annual Paving VOCs Between 2011-2014									0.379

Source: 1. California Air Resources Board.
2. USCOE, Hot Mix Asphalt Paving Handbook, 2000.
3. FHWA, Road and Bridge Specifications, 2002.

Table I.3-175. AMDTF Total Construction Emissions – Alternative 3 - North

Construction Activity	*Pollutant*						
	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Total Annual Emissions (TPY)	0.9	2.6	0.1	0.1	1.5	0.6	293.2

Table I.3-176. AMDTF Construction Equipment Emissions – Alternative 3 - Central

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Centrif. water pump, 6"	1	0.1	50	2	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.000	0.000	0.000	0.000	0.000	0.000	0.028
Compressor, 250 cfm	1	174.4	40	2790	82.8	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.192	0.262	0.063	0.061	0.593	0.060	62.743
Concrete pump, small	1	2.8	50	55	52.7	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.002	0.004	0.001	0.001	0.008	0.001	0.779
Crane, 90-ton	1	1.5	16	9	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.002	0.001	0.000	0.000	0.005	0.000	0.541
Drill rig & augers	1	0.1	20	1	176	43	1.71	2.36	0.56	0.54	6.68	0.57	539.15	0.000	0.000	0.000	0.000	0.000	0.000	0.036
Dozer, 300 HP	1	0.7	40	10	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.003	0.004	0.001	0.001	0.010	0.001	1.093
Front end loader, 1.5 cy	1	0.7	40	10	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.000	0.001	0.000	0.000	0.002	0.000	0.149
Gas engine vibrator	1	8.0	20	64	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.151	0.000	0.000	0.001	0.006	0.237
Gas welding machine	1	6.7	40	107	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.893	0.000	0.000	0.005	0.016	1.384
Grader, 30,000 lb	1	0.7	40	10	204.4	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.002	0.002	0.000	0.000	0.006	0.000	0.742
Roller, vibratory	1	0.7	20	5	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.001	0.000	0.000	0.001	0.000	0.174
Total Annual Construction Emissions Between 2011 – 2014														0.203	1.321	0.066	0.064	0.631	0.084	67.907

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-177. AMDTF Van & Truck Emissions – Alternative 3 - Central

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	71307	25	713	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.184	0.000	0.000	0.016	0.018	10.098
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	203401	25	2034	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.247	0.113	0.029	0.027	0.327	0.026	79.432
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.247	0.296	0.030	0.027	0.343	0.044	89.531

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-178. AMDTF Total Construction Emissions – Alternative 3 - Central

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.5	1.6	0.1	0.1	1.0	0.1	157.4

3.4.5 Construction Emissions: Marine Corps Relocation – Connected Actions/Utilities Projects

Table I.3-179. Utilities Construction Equipment Emissions – Interim Power Alternative 1

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Chain saws, 36"	1	0.2	20	2	6.8	70	2.00	349.18	12.63	11.62	0.91	69.87	686.61	0.000	0.003	0.000	0.000	0.000	0.001	0.006
Chipping machine	1	0.1	50	2	143.9	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.000	0.000	0.000	0.000	0.001	0.000	0.075
Compressor, 250 cfm	1	0.1	40	2	82.8	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.000	0.000	0.000	0.000	0.000	0.000	0.036
Crane, 90-ton	1	37.5	16	240	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.043	0.034	0.008	0.008	0.135	0.009	13.981
Crane, 33 ton	1	5.6	16	36	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.006	0.005	0.001	0.001	0.020	0.001	2.069
Dozer, 300 HP	1	0.2	20	2	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.001	0.001	0.000	0.000	0.001	0.000	0.168
Front end loader, 1.5 cy	1	37.8	40	604	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.026	0.084	0.017	0.017	0.089	0.019	8.646
Gas engine vibrator	1	18.8	20	150	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.104	0.000	0.000	0.001	0.004	0.164
Gas welding machine	1	24.3	40	388	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.001	3.233	0.001	0.001	0.016	0.057	5.011
Generator	1	24.3	50	485	50	43	1.74	3.02	0.72	0.70	6.14	0.80	567.43	0.020	0.034	0.008	0.008	0.070	0.009	6.460
Grader, 30,000 lb	1	0.4	40	6	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.001	0.001	0.000	0.000	0.004	0.000	0.457
Roller, vibratory	1	0.2	20	1	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.000	0.000	0.040
Total Annual Construction Emissions Between 2011 - 2014														0.099	3.750	0.036	0.035	0.338	0.110	37.506

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-180. Utilities Van & Truck Emissions - Interim Power Alternative 1

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	11482	25	115	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.030	0.000	0.000	0.003	0.003	1.626
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	32825	25	328	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.040	0.018	0.005	0.004	0.053	0.004	12.819
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.040	0.048	0.005	0.004	0.055	0.007	14.445

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-181. Utilities Total Construction Emissions - Interim Power Alternative 1

	Pollutant						
Construction Activity	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.1	3.8	0.0	0.0	0.4	0.1	52.0

Table I.3-182. Utilities Construction Equipment Emissions – Interim Power Alternative 2

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Crane, 33 ton	1	15.0	16	96	231	43	23.21	1.30	0.42	0.41	5.14	0.35	532.78	0.244	0.014	0.004	0.004	0.054	0.004	5.592
Gas welding machine	1	15.0	40	240	17	68	2.92	642.74	0.14	0.13	3.24	11.35	996.20	0.009	2.000	0.000	0.000	0.010	0.035	3.100
Generator	1	15.0	50	300	50	43	24.72	3.02	0.93	0.90	6.14	0.80	567.43	0.174	0.021	0.007	0.006	0.043	0.006	3.996
Total Annual Construction Emissions Between 2011 - 2014														0.427	2.035	0.011	0.011	0.107	0.045	12.688

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-183. Utilities Van & Truck Emissions - Interim Power Alternative 2

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	8100	25	81	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.021	0.000	0.000	0.002	0.002	1.147
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	6000	25	60	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.007	0.003	0.001	0.001	0.010	0.001	2.343
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.007	0.024	0.001	0.001	0.011	0.003	3.490

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-184. Utilities Total Construction Emissions - Interim Power Alternative 2

	Pollutant						
Construction Activity	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	CO_2
Total Annual Emissions (TPY)	0.4	2.1	0.0	0.0	0.1	0.0	16.2

Table I.3-185. Utilities Construction Equipment Emissions – Interim Power Alternative 3

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Crane, 33 ton	1	21.6	16	138	231	43	23.21	1.30	0.42	0.41	5.14	0.35	532.78	0.351	0.020	0.006	0.006	0.078	0.005	8.053
Gas welding machine	1	21.6	40	346	17	68	2.92	642.74	0.14	0.13	3.24	11.35	996.20	0.013	2.880	0.001	0.001	0.015	0.051	4.463
Generator	1	21.6	50	432	50	43	24.72	3.02	0.93	0.90	6.14	0.80	567.43	0.251	0.031	0.009	0.009	0.062	0.008	5.754
Total Annual Construction Emissions Between 2011 – 2014														0.615	2.930	0.016	0.016	0.155	0.064	18.271

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-186. Utilities Van & Truck Emissions - Interim Power Alternative 3

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	11664	25	117	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.030	0.000	0.000	0.003	0.003	1.652
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	8640	25	86	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.010	0.005	0.001	0.001	0.014	0.001	3.374
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.011	0.035	0.001	0.001	0.017	0.004	5.026

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-187. Utilities Total Construction Emissions - Interim Power Alternative 3

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.6	3.0	0.0	0.0	0.2	0.1	23.3

Table I.3-188. Utilities Construction Equipment Emissions –Potable Water Alternative 1

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor*[1] *%*	*Hours*	*Horse power*[2] *(hp)*	*Load Factor*[2] *(%)*	*Emission Factor*[2] *(grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
Construction																				
Backhoe loader, 48hp	1	290.7	40	4650	48	21	1.99	6.42	1.31	1.27	6.80	1.47	662.28	0.103	0.331	0.067	0.065	0.351	0.076	34.191
Chain saws, 36"	1	1.0	20	8	6.8	70	2.00	349.2	12.63	11.62	0.911	69.87	686.61	0.000	0.015	0.001	0.000	0.000	0.003	0.029
Chipping machine	1	0.5	50	10	144	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.001	0.002	0.000	0.000	0.004	0.000	0.375
Compressor, 250 cfm	1	3.0	40	47	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.003	0.004	0.001	0.001	0.010	0.001	1.062
Concrete pump, small	1	5.2	50	104	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.005	0.008	0.002	0.002	0.016	0.002	1.473
Crane, 90-ton	1	6.7	16	43	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.008	0.006	0.002	0.001	0.024	0.002	2.498
Crane, SP, 12 ton	1	294.6	16	1885	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.336	0.267	0.067	0.065	1.060	0.073	109.816
Vibratory hammer and generator	1	3.6	50	72	50	43	1.74	3.02	0.72	0.70	6.14	0.80	567.43	0.003	0.005	0.001	0.001	0.010	0.001	0.959
Drill rig & augers	1	34.2	20	274	176	43	1.65	2.36	0.56	0.54	6.68	0.57	539.15	0.038	0.054	0.013	0.012	0.152	0.013	12.266
Dozer, 300 HP	1	0.1	40	1	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.001	0.001	0.000	0.000	0.001	0.000	0.168
Front end loader, TM, 2.5 cy	1	0.6	40	10	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.000	0.001	0.000	0.000	0.001	0.000	0.137
Gas engine vibrator	1	13.6	20	108	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.256	0.000	0.000	0.001	0.010	0.402
Gas welding machine	1	6.0	40	96	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.800	0.000	0.000	0.004	0.014	1.240
Grader, 30,000 lb	1	1.1	40	96	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.004	0.003	0.001	0.001	0.010	0.001	1.256
Hydraulic excavator, 3.5 cy	1	9.4	40	150	62	43	7.96	0.45	0.57	0.57	2.43	0.12	576.01	0.035	0.002	0.003	0.003	0.011	0.001	2.540
Roller, vibratory	1	0.1	20	1	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.000	0.000	0.018
Tug, 500 HP	1	0.6	50	12	500	80	140.66	0.781	0.25	0.25	7.923	0.07	524.77	0.744	0.004	0.001	0.001	0.042	0.000	2.774
Total Annual Construction Emissions Between 2011 - 2014														1.280	1.760	0.159	0.154	1.699	0.197	171.203

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-189. Utilities Van & Truck Emissions –Potable Water Alternative 1

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	42740	25	427	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.110	0.000	0.000	0.010	0.011	6.053
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	629007	25	6270	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.763	0.349	0.090	0.083	1.012	0.080	245.641
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.763	0.459	0.090	0.083	1.022	0.091	251.693

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-190. Utilities Total Construction Emissions - Potable Water Alternative 1

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.3	2.2	0.2	0.2	2.7	0.3	422.9

Table I.3-191. Utilities Construction Equipment Emissions – Potable Water Alternative 2

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Backhoe loader, 48hp	1	284.2	40	4546	48	21	1.99	6.42	1.31	1.27	6.80	1.47	662.28	0.101	0.343	0.066	0.064	0.343	0.074	33.426
Chain saws, 36"	1	0.7	20	6	6.8	70	2.00	349.2	12.63	11.62	0.911	69.87	686.61	0.000	0.010	0.000	0.000	0.000	0.002	0.020
Chipping machine	1	0.4	50	7	144	43	1.69	2.46	0.58	0.56	5.98	0.59	550.61	0.001	0.01	0.000	0.000	0.003	0.000	0.263
Compressor, 250 cfm	1	2.0	40	31	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.002	0.003	0.001	0.001	0.007	0.001	0.702
Concrete pump, small	1	4.6	50	91	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.004	0.007	0.002	0.002	0.014	0.002	1.289
Crane, 90-ton	1	2.8	16	18	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.003	0.002	0.001	0.001	0.010	0.001	1.025
Crane, SP, 12 ton	1	287.7	16	1841	231	43	1.63	1.30	0.32	0.31	5.14	0.35	532.78	0.328	0.261	0.065	0.063	1.036	0.071	107.262
Drill rig & augers	1	34.2	20	274	176	43	1.65	2.36	0.56	0.54	6.68	0.57	539.15	0.038	0.054	0.013	0.012	0.152	0.013	12.266
Dozer, 300 HP	1	0.1	40	1	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.000	0.000	0.000	0.000	0.001	0.000	0.084
Front end loader, TM, 2.5 cy	1	0.4	40	6	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.000	0.001	0.000	0.000	0.001	0.000	0.092
Gas engine vibrator	1	11.9	20	95	6	55	0.22	696.11	0.18	0.17	2.78	26.08	1093.00	0.000	0.225	0.000	0.000	0.001	0.008	0.353
Gas welding machine	1	5.4	40	86	17	68	0.21	642.74	0.11	0.10	3.24	11.35	996.20	0.000	0.720	0.000	0.000	0.004	0.013	1.116
Grader, 30,000 lb	1	0.7	40	11	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.002	0.002	0.001	0.001	0.006	0.000	0.799
Hydraulic excavator, 3.5 cy	1	8.4	40	134	62	43	7.96	0.45	0.57	0.57	2.43	0.12	576.01	0.031	0.002	0.002	0.002	0.010	0.000	2.269
Roller, vibratory	1	0.1	20	0	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.000	0.000	0.000	0.000	0.000	0.000	0.013
Total Annual Construction Emissions Between 2011 - 2014														0.511	1.612	0.151	0.146	1.587	0.186	160.980

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-192. Utilities Van & Truck Emissions - Potable Water Alternative 2

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	39719	25	397	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.102	0.000	0.000	0.009	0.010	5.625
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	593680	25	5937	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.720	0.329	0.085	0.078	0.956	0.076	231.845
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.720	0.431	0.085	0.078	0.965	0.086	237.470

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-193. Utilities Total Construction Emissions - Potable Water Alternative 2

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	1.2	2.0	0.2	0.2	2.6	0.3	398.4

Table I.3-194. Utilities Construction Equipment Emissions - Wastewater Alternative 1a and 1b

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Concrete pump, small	1	0.2	50	3.0	53	43	1.74	3.03	0.74	0.72	6.18	0.75	567.14	0.000	0.000	0.000	0.000	0.000	0.000	0.043
Gas engine vibrator	1	0.3	20	2.0	6	55	3.20	696.11	0.24	0.22	2.78	26.08	1093.00	0.000	0.013	0.000	0.000	0.000	0.000	0.021
Hydraulic excavator, 3.5 cy	1	0.1	40	0.8	171	59	1.66	1.64	0.38	0.37	4.25	0.32	541.49	0.000	0.000	0.000	0.000	0.000	0.000	0.048
Total Annual Construction Emissions Between 2011 – 2014														0.000	0.005	0.000	0.000	0.001	0.000	0.098

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-195. Utilities Van & Truck Emissions - Wastewater Alternative 1a and 1b

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	155	25	2	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.000	0.000	0.000	0.000	0.000	0.022
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	3150	25	32	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.004	0.002	0.000	0.000	0.005	0.000	1.230
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.004	0.002	0.000	0.000	0.005	0.000	1.252

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-196. Utilities Total Construction Emissions - Wastewater Alternative 1a and 1b

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.0	0.0	0.0	0.0	0.0	0.0	1.4

Table I.3-197. Utilities Construction Equipment Emissions –Solid Waste Alternative 1 / Apra Harbor

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Compressor, 250 cfm	1	0.4	40	6	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.000	0.001	0.000	0.000	0.001	0.000	0.144
Dozer,75 HP	1	5.5	40	87	75	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.007	0.008	0.002	0.002	0.020	0.001	2.292
Dozer, 300 HP	1	1.0	40	16	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.005	0.006	0.001	0.001	0.015	0.001	1.682
Front end loader, 1.5 cy	1	1.0	40	16	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.001	0.002	0.000	0.000	0.002	0.001	0.229
Grader, 30,000 lb	1	2.6	40	41	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.009	0.008	0.002	0.002	0.023	0.002	2.912
Roller, vibratory	1	1.0	20	8	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.001	0.001	0.000	0.000	0.002	0.000	0.268
Total Annual Construction Emissions Between 2011 - 2014														0.023	0.026	0.006	0.005	0.064	0.005	7.527

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-198. Utilities Van & Truck Emissions –Solid Waste Alternative 1 / Apra Harbor

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	3234	25	32	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.008	0.000	0.000	0.001	0.001	0.458
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	9201	25	92	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.011	0.005	0.001	0.001	0.015	0.001	3.593
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.011	0.013	0.001	0.001	0.016	0.002	4.051

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-199. Utilities Total Construction Emissions - Solid Waste Alternative 1 / Apra Harbor

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.0	0.0	0.0	0.0	0.1	0.0	11.6

Table I.3-200. Utilities Construction Equipment Emissions - Solid Waste Alternative 1 / Layon

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*							*Emission Rate (tons/year)*						
							SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction																				
Compressor, 250 cfm	1	1.2	40	18	83	43	1.76	2.40	0.57	0.56	5.42	0.54	573.27	0.001	0.002	0.000	0.000	0.004	0.000	0.415
Dozer, 75 HP	1	16.0	40	256	75	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.021	0.024	0.005	0.005	0.059	0.004	6.729
Dozer, 200 HP	1	6.9	41	112	200	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.024	0.028	0.006	0.005	0.069	0.005	7.874
Dozer, 300 HP	1	2.9	40	46	300	59	1.65	1.93	0.38	0.37	4.72	0.33	539.34	0.015	0.017	0.003	0.003	0.043	0.003	4.878
Front end loader, 1.5 cy	1	2.9	40	46	93	21	2.03	6.42	1.31	1.27	6.80	1.47	662.28	0.002	0.006	0.001	0.001	0.007	0.001	0.664
Grader, 30,000 lb	1	7.3	40	117	204	59	1.64	1.45	0.36	0.35	4.26	0.32	537.25	0.026	0.023	0.006	0.005	0.066	0.005	8.335
Hydraulic excavator, 3.5 cy	1	8.6	40	137	62	43	1.76	2.43	0.59	0.57	5.41	0.56	576.01	0.007	0.010	0.002	0.002	0.022	0.002	2.310
Roller, vibratory	1	2.9	20	23	92	59	1.71	2.49	0.53	0.51	4.77	0.42	558.97	0.002	0.003	0.001	0.001	0.007	0.001	0.777
Total Annual Construction Emissions Between 2011 - 2014														0.098	0.114	0.024	0.023	0.276	0.021	31.982

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-201. Utilities Van & Truck Emissions - Solid Waste Alternative 1 / Layon

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*							*Emission Rate (tons/year)*						
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*	*SO_2*	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Construction	10292	25	103	0.001	0.515	0.001	0.001	0.045	0.051	28..324	0.000	0.026	0.000	0.000	0.002	0.003	1.458
Trucks (HDDV)				Emission Factor[1] (lb/hr)							Emission Rate (tons/year)						
Construction	32423	25	324	0.243	0.111	0.029	0.026	0.322	0.025	78.104	0.039	0.018	0.005	0.004	0.052	0.004	12.662
Total Annual Motor Vehicle Emissions, Between 2011-2014											0.039	0.044	0.005	0.004	0.054	0.007	14.119

Source: *1*. Mobile 6.2 Emission Factors.

Table I.3-202. Utilities Total Construction Emissions - Solid Waste Alternative 1 / Layon

Construction Activity	*Pollutant*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Total Annual Emissions (TPY)	0.1	0.2	0.0	0.0	0.3	0.0	46.1

Table I.3-203. Roadway Projects Estimated Construction Emission Burden – North, Alternative 1

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	13.0	20.3	8.4	4.1	1.4	15.3	3,881
Highest Monthly Emission Burden (Tons)	4.7	7.3	1.8	1.3	0.51	5.4	1,462
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.23	0.36	0.09	0.06	0.03	0.27	73.1
	2011	2011	2011	2011	2011	2011	2011

Table I.3-204. Roadway Projects Estimated Construction Emission Burden – Central, Alternative 1

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	54.6	84.2	17.2	14.4	5.9	62.4	16,707
Highest Monthly Emission Burden (Tons)	8.5	13.1	2.2	2.2	0.9	9.7	2,590
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.42	0.65	0.11	0.11	0.05	0.48	129
Year Highest Monthly Emission Burden Predicted to Occur	2012	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013

Table I.3-205. Roadway Projects Estimated Construction Emission Burden – Apra Harbor, Alternative 1

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	13.5	20.9	5.0	3.7	1.2	15.4	4,199
Highest Monthly Emission Burden (Tons)	1.6	2.5	0.59	0.44	0.34	1.82	494
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.08	0.12	0.03	0.02	0.02	0.09	24.7
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

Table I.3-206. Roadway Projects Estimated Construction Emission Burden – South, Alternative 1

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	11.1	17.3	2.9	2.8	1.2	12.9	3310
Highest Monthly Emission Burden (Tons)	3.1	4.9	0.83	0.81	0.34	3.7	957
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.16	0.25	0.04	0.04	0.02	0.18	47.8
Year Highest Monthly Emission Burden Predicted to Occur	2012	2013	2012 & 2013	2012 & 2013	2013	2013	2013

Table I.3-207. Roadway Projects Estimated Construction Emission Burden – North, Alternative 2

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	13.0	20.3	8.4	4.1	1.4	15.3	3,881
Highest Monthly Emission Burden (Tons)	4.7	7.3	1.8	1.3	0.51	5.4	1,462
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.23	0.36	0.09	0.06	0.03	0.27	73.1
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

Table I.3-208. Roadway Projects Estimated Construction Emission Burden – Central, Alternative 2

	CO	NO_x	PM_{10}	$PM_{2.5}$	*VOC*	SO_2	CO_2
Maximum Yearly Value (Tons)	54.6	84.2	17.2	14.4	5.9	62.4	16,707
Highest Monthly Emission Burden (Tons)	8.5	13.1	2.2	2.2	0.9	9.7	2,590
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.42	0.65	0.11	0.11	0.05	0.48	129
Year Highest Monthly Emission Burden Predicted to Occur	2012	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013

Table I.3-209. Roadway Projects Estimated Construction Emission Burden – Apra Region, Alternative 2

	CO	NO_x	PM_{10}	$PM_{2.5}$	*VOC*	SO_2	CO_2
Maximum Yearly Value (Tons)	13.5	20.9	5.0	3.7	1.2	15.4	4,199
Highest Monthly Emission Burden (Tons)	1.6	2.5	0.59	0.44	0.34	1.82	494
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.08	0.12	0.03	.02	0.02	0.0.9	24.7
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

Table I.3-210. Roadway Projects Estimated Construction Emission Burden – South, Alternative 2

	CO	NO_x	PM_{10}	$PM_{2.5}$	*VOC*	SO_2	CO_2
Maximum Yearly Value (Tons)	11.1	17.3	2.9	2.8	1.2	12.9	3310
Highest Monthly Emission Burden (Tons)	3.1	4.9	0.83	0.81	0.34	3.7	957
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.16	0.25	0.04	0.04	0.02	0.18	47.8
Year Highest Monthly Emission Burden Predicted to Occur	2012	2013	2012 & 2013	2012 & 2013	2013	2013	2013

Table I.3-211. Roadway Projects Estimated Construction Emission Burden – North, Alternative 3

	CO	NO_x	PM_{10}	$PM_{2.5}$	*VOC*	SO_2	CO_2
Maximum Yearly Value (Tons)	13.0	20.3	8.4	4.1	1.4	15.3	3,881
Highest Monthly Emission Burden (Tons)	4.7	7.3	1.8	1.3	0.51	5.4	1,462
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.23	0.36	0.09	0.06	0.03	0.27	73.1
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

Table I.3-212. Roadway Projects Estimated Construction Emission Burden – Central, Alternative 3

	CO	NO_x	PM_{10}	$PM_{2.5}$	*VOC*	SO_2	CO_2
Maximum Yearly Value (Tons)	54.6	84.2	17.2	14.4	5.9	62.4	16,707
Highest Monthly Emission Burden (Tons)	8.5	13.1	2.2	2.2	0.9	9.7	2,590
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.42	0.65	0.11	0.11	0.05	0.48	129
Year Highest Monthly Emission Burden Predicted to Occur	2012	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013

Table I.3-213. Roadway Projects Estimated Construction Emission Burden – Apra Harbor, Alternative 3

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	13.5	20.9	5.0	3.7	1.2	15.4	4,199
Highest Monthly Emission Burden (Tons)	1.6	2.5	0.59	0.44	0.34	1.82	494
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.08	0.12	0.03	0.02	0.02	0.09	24.7
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

Table I.3-214. Roadway Projects Estimated Construction Emission Burden – South, Alternative 3

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	11.1	17.3	2.9	2.8	1.2	12.9	3310
Highest Monthly Emission Burden (Tons)	3.1	4.9	0.83	0.81	0.34	3.7	957
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.16	0.25	0.04	0.04	0.02	0.18	47.8
Year Highest Monthly Emission Burden Predicted to Occur	2012	2013	2012 & 2013	2012 & 2013	2013	2013	2013

Table I.3-215. Roadway Projects Estimated Construction Emission Burden – North, Alternative 8

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	13.0	20.3	8.4	4.1	1.4	15.3	3,881
Highest Monthly Emission Burden (Tons)	4.7	7.3	1.8	1.3	0.51	5.4	1,462
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.23	0.36	0.09	0.06	0.03	0.27	73.1
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

Table I.3-216. Roadway Projects Estimated Construction Emission Burden – Central, Alternative 8

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	54.6	84.2	17.2	14.4	5.9	62.4	16,707
Highest Monthly Emission Burden (Tons)	8.5	13.1	2.2	2.2	0.9	9.7	2,590
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.42	0.65	0.11	0.11	0.05	0.48	129
Year Highest Monthly Emission Burden Predicted to Occur	2012	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013	2012 & 2013

Table I.3-217. Roadway Projects Estimated Construction Emission Burden – Apra Harbor, Alternative 8

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	13.5	20.9	5.0	3.7	1.2	15.4	4,199
Highest Monthly Emission Burden (Tons)	1.6	2.5	0.59	0.44	0.34	1.82	494
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.08	0.12	0.03	0.02	0.02	0.09	24.7
Year Highest Monthly Emission Burden Predicted to Occur	2011	2011	2011	2011	2011	2011	2011

Table I.3-218. Roadway Projects Estimated Construction Emission Burden – South, Alternative 8

	CO	NO_x	PM_{10}	$PM_{2.5}$	VOC	SO_2	CO_2
Maximum Yearly Value (Tons)	11.1	17.3	2.9	2.8	1.2	12.9	3310
Highest Monthly Emission Burden (Tons)	3.1	4.9	0.83	0.81	0.34	3.7	957
Average Daily Emission Burden (Based on Highest Month) (Tons)	0.16	0.25	0.04	0.04	0.02	0.18	47.8
Year Highest Monthly Emission Burden Predicted to Occur	2012	2013	2012 & 2013	2012 & 2013	2013	2013	2013

3.5 Regional Emissions under Preferred Alternatives

The preferred alternatives (Table I.3-219) were evaluated for potential air quality impacts to Guam. Regional emissions occurring under the collective alternatives require analysis of both the location of the proposed actions and the timing of the proposed actions. The greatest collective impact to air quality resources would occur if all of the proposed actions were implemented concurrently. As construction activities would occur prior to operational activities, it was assumed that all of the proposed construction actions are occurring at the same time and that all operational activity will commence upon completion of construction. Although some components of the preferred alternative will require longer construction times than others, construction and operation in a specific area would not be occurring concurrently. Impacts on air quality are evaluated for each individual region of influence (ROI). The scenario presented is a consideration of the preferred alternative from each individual component of the proposed action.

Table I.3-219. Collective Alternatives for Preferred Alternatives

Preferred Alternatives	
Alternative	Description
Alternative 2	Marine Corps Guam Relocation
Alternative 1	Marine Corps Tinian (CNMI) Relocation
Alternative 1	Aircraft Carrier Berthing
Alternative 1	Army Air Missile Defense Task Force (AMDTF)
Alternative 1	Utilities – Interim Power
Alternative 1	Utilities – Potable Water
Alternative 1	Utilities – Interim Wastewater
Alternative 1	Utilities – Solid Waste
Alternative 2	Roadway Projects

Methods, emission factors, and input parameters for the analyses summarized in this section were obtained from the following references, with detailed of the analyses provided previously in Section 3.

- The Procedures of Emission Inventory Preparation, Volume IV: Mobile Sources (USEPA December 1992)
- Aircraft engine emission factors developed by the Navy's Aircraft Environmental Support Office (AESO) (AESO April 1999 – January 2001)
- U.S. Air Force Air Conformity Applicability Model (Version 4.3) (Air Force Center for Environmental Excellence [AFCEE] 2005)
- Aircraft Noise Study for Guam Joint Military Master Plan at Andersen AFB (Czech and Kester 2008)
- USEPA NONROAD emission factor model (USEPA December 2008)
- Federal Highway Administration's (FHWA) Roadway Construction Noise Model User's Guide (FHWA 2006)
- USEPA Mobile6 emission factor model (USEPA August 2003).

The significance criteria used to determine potential air quality impacts are summarized below. There criteria include:

- The Clean Air Act (CAA) General Conformity Rule (GCR) de minimis levels for nonattainment pollutant emissions.
- Criteria pollutants significance criteria selected based on Prevention of Significant Deterioration (PSD) major source threshold

Under the GCR, reasonably foreseeable emissions associated with all proposed operational and construction activities, both direct and indirect, must be quantified and compared to the annual *de minimis* levels for those pollutants in nonattainment areas. The areas around the Piti and Tanguisson power plants on Guam (Figure I.2-1) are SO_2 nonattainment areas. Apra Harbor is within the Piti SO_2 nonattainment area. The *de minimis* criterion for these nonattainment areas is 100 TPY for SO_2.

For the purposes of this summary impact evaluation, all construction and operational emissions are combined according to the preferred alternatives specified. Using these emission totals the CAA GCR applicability analysis was completed for those activities with potential to occur within the SO2 nonattainment areas of Tanguisson and Piti. These emissions are further discussed in Section I.7 CAA General Applicability Analysis.

Greenhouse gas emissions in the atmosphere are of concern because they contribute to global warming by trapping re-radiated energy. The total quantity of greenhouse gas emissions was expressed in terms of CO2 emissions resulting under the preferred alternaitves. CO2 is not a criteria pollutant and the 250 TPY significance threshold is not applicable to CO2. Therefore, greenhouse gases in terms of CO2 emissions are presented only for disclosure purposes. These emissions are discussed for all ROIs collectively as the entire geographic region is a more appropriate scale for evaluation of potential impacts.

The maximum annual CO2 emissions of 186,130 tons from the proposed action would result in a roughly 0.002% increase over the U.S. 2007 CO2 emissions 7,879 million tons of CO_2 emissions (USEPA 2009), resulting in an insignificant impact to global climate change. Since the proposed action would mostly involve the relocation of the military operations that are currently occurring in the West Pacific region, such as training exercises, energy consumption from activities in the region are unlikely to change significantly and the overall global greenhouse gas emissions associated with the proposed action are likely remain at the current levels on a regional scale.

The following tables present the action scenario utilizing the preferred alternative from each individual component of the proposed action.

Table I.3-220. Annual Construction Emissions by EIS/OEIS Volume and ROI – Preferred Alternatives

Table I.3-221. Guam Annual Construction Emissions – Preferred Alternatives

Table I.3-222. Annual Operational Emissions by EIS/OEIS Volume and ROI – Preferred Alternatives

Table I.3-223. Guam Annual Operational Emissions – Preferred Alternatives

Table 1.3-224. Guam Total Annual Construction and Operational Emissions Combined – Preferred Alternatives

Table I.3-225. Intersections Analyzed for CO Microscale Impact Analysis – Preferred Alternatives

Table I.3-220. Annual Construction Emissions by EIS/OEIS Volume and ROI – Preferred Alternatives

				Total Annual Pollutant Emissions (TPY)						
	ROI	Construction Activity	Year	SO_2	CO	PM_{10}	$PM_{2.5}$	NO_x	VOC	CO_2
Volume 2 Alternative 2	North	Andersen AFB Airfield	2011 – 2014	0.5	1.5	0.1	0.1	1.0	2.5	166.0
		Training Facilities	2011 – 2014	0.0	0.1	0.0	0.0	0.0	0.0	7.4
		Main Cantonment	2011	6.4	26.2	1.5	1.4	13.3	10.4	2,188.9
			2012	10.4	42.9	2.5	2.3	21.7	16.9	3,581.9
			2013	13.3	54.8	3.2	13.3	27.7	21.6	4,576.8
			2014	13.3	54.8	3.2	3.0	27.7	21.6	4,576.8
			2015	9.9	40.5	2.3	2.2	20.5	16.0	3,382.9
			2016	4.6	19.1	1.1	1.0	9.6	7.5	1,591.9
		C3 and Non-Firing Training Facilities	2011 – 2014	0.2	0.6	0.0	0.0	0.3	0.9	49.3
	Central	C3 and Non-Firing Training Facilities	2011 – 2014	0.2	0.6	0.0	0.0	0.3	0.9	49.3
		Firing Training, Option A	2011 – 2014	0.4	1.6	0.1	0.1	1.0	0.5	138.9
		Firing Training, Option B	2011 – 2014	0.8	1.7	0.2	0.2	1.5	0.3	264.3
	Apra Harbor	Waterfront Operations	2011 – 2014	1.1	0.8	0.0	0.0	0.5	0.4	80.1
	South	Training Facilities	2011 – 2014	0.0	0.1	0.0	0.0	0.0	0.0	7.4
Volume 4 Alternative 1	Apra Harbor	Aircraft Carrier Berthing	2011 – 2014	0.4	1.4	0.1	0.1	0.7	0.2	118.9
		Dredging, ODMDS option	2014 – 2015	0.7	5.2	0.8	0.4	2.6	5.3	491.5
Volume 5 Alternative 1	North	Army AMDTF	2011 – 2014	1.3	4.2	0.2	0.2	2.5	0.9	453.7
Volume 6 Alternative 1	North	Utilities Interim Wastewater	2011 – 2014	0.0	0.0	0.0	0.0	0.0	0.0	1.4
		Roadway	2011	13.5	11.7	4.5	3.3	18.3	1.3	3665.5
			2012	14.1	12.2	7.5	3.8	18.9	1.3	3699.4
			2013	15.3	13.0	8.4	4.1	20.3	1.4	3881.3
			2014	7.0	5.9	5.5	2.2	9.4	0.7	1896.0
			2015	4.1	3.5	2.9	1.2	5.5	0.4	1106.0
	Central	Utilities Interim Power	2011 – 2014	0.1	3.8	0.0	0.0	0.4	0.1	52.0
		Utilities Long – Term Programmatic Water	2011 – 2014	2.0	2.2	0.2	0.2	2.7	0.3	422.9
		Roadway	2011	17.0	14.7	5.3	4.0	23.0	1.6	4613.2
			2012	31.6	27.7	7.9	7.3	42.7	3.0	8467.8
			2013	62.4	54.6	15.8	14.4	84.2	5.9	16707.6
			2014	35.6	31.2	15.5	9.5	48.2	3.4	9680.5
			2015	5.0	4.3	17.2	4.2	6.7	0.5	1346.6
			2016	0.0	0.0	4.8	0.9	0.0	0.0	0.0
	Apra Harbor	Utilities Interim Solid Waste	2011 – 2014	0.0	0.0	0.0	0.0	0.1	0.0	11.6
		Roadway	2011	15.4	13.5	5.0	3.7	20.9	1.5	4199.8
			2012	3.2	2.6	0.6	0.6	4.1	0.3	703.4
			2013	5.1	4.1	1.0	1.0	6.6	0.5	1166.0

	South	Roadway	2012	8.2	6.9	1.8	1.7	10.8	0.8	2042.2
			2013	13.0	11.1	2.9	2.8	17.3	1.2	3309.9

Note: [1] *Air emissions from Tinian are not considered in the summary impacts of Guam air quality. Only* CO^2 *emissions are considered on a regional scale for GHG impacts.*

Table I.3-221. Guam Annual Construction Emissions by Volume and ROIs – Preferred Alternatives

Year	*Total Construction Annual Pollutant Emissions (tpy)*						
	SO_2	*CO*	PM_{10}	$PM_{2.5}$	NO_x	*VOC*	CO_2
2011	59.3	85.0	17.3	13.5	86.6	21.9	16490.5
2012	74.6	111.1	21.3	16.8	109.5	29.4	20317.8
2013	116.1	156.4	32.4	36.7	167.4	37.8	31464.8
2014	63.6	116.0	26.0	16.1	99.2	38.1	18467.9
2015	19.6	53.5	23.2	8.0	35.3	22.1	6326.9
2016	4.6	19.1	5.9	2.0	9.6	7.5	1591.9

Note: Bolded numbers indicate an exceedance of the 250 TPY significance criteria.

Table I.3-222. Annual Operational Emissions by EIS/OEIS Volume and ROI – Preferred Alternatives

Action Item	*ROI*	*Operational Activity*	*Year*	*Total Annual Pollutant Emissions (tpy)*						
				SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
Volume 2 Alternative 2	North	Airfield Training Operations	2015 and on	0.2	1.6	1.0	1.0	5.6	0.4	1399.8
		Anderson AFB Aircraft Operations	2015 and on	2.1	135.6	20.6	20.6	40.1	45.8	4477.1
		On base Vehicle Operations	2015 and on	10.1	254.2	1.9	1.2	12.2	16.1	21235.8
	Central	Airfield Training Operations	2015 and on	0.1	0.5	0.5	0.5	1.9	0.1	179.5
		Training Vehicle Operations	2015 and on	0.2	1.6	24.1	2.4	0.3	0.2	161.8
		On base Vehicle Operations	2015 and on	2.8	70.9	0.5	0.3	3.4	4.5	5926.1
	Apra Harbor	Airfield Training Operations	2015 and on	0.1	0.4	0.4	0.4	2.0	0.1	361.0
		Vessel Training Operations	2015 and on	3.8	5.3	6.5	6.5	13.7	0.7	N/A
		On base Vehicle Operations	2015 and on	0.3	8.6	0.1	0.0	0.4	0.5	716.3
	South	Airfield Training Operations	2015 and on	0.4	1.4	1.7	1.7	10.6	0.1	1883.8
		On base Vehicle Operations	2015 and on	0.1	0.8	0.0	0.0	0.0	0.1	77.6
		Training Vehicle Operations	2015 and on	0.0	0.0	0.5	0.1	0.0	0.0	2.3
Volume 4 Alternative 1	Apra Harbor	Aircraft Carrier Berthing	2015 and on	0.5	91.3	4.7	8.4	27.3	1.7	N/A
Volume 6 Alternative 1	Apra Harbor	Utilities Interim Solid Waste	2011 – 2013	N/A	N/A	N/A	N/A	N/A	2.7 – 6.2	169.6 – 398.5
			2014 and on	N/A	N/A	N/A	N/A	N/A	0.2 – 2.5	624.2 – 7827.1
	Total	Off-base Vehicle Operations[1]	2015 and on	99.4	2425.3	13.7	10.1	87.8	150.2	141886.0

Notes:

1. Based on 2030 estimates.

Table I.3-223. Guam Annual Operational Emissions – Preferred Alternatives

Year	*Total Operational Annual Pollutant Emissions (TPY)*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
2011	N/A	N/A	N/A	N/A	N/A	2.7	169.6
2012	N/A	N/A	N/A	N/A	N/A	4.3	273.2
2013	N/A	N/A	N/A	N/A	N/A	6.2	398.5
2014	N/A	N/A	N/A	N/A	N/A	0.2	624.2
2015	120.13	**2997.73**	76.20	53.21	205.24	220.8	179253.0
2016	120.13	**2997.73**	76.20	53.21	205.24	220.9	179728.8
2017 and on	120.13	**2997.73**	76.20	53.21	205.24	221.1 –223.0	180215.5 –186134.2

Note: Bolded numbers indicate an exceedance of the 250 TPY significance criteria.

Table I.3-224. Guam Total Annual Construction and Operational Emissions Combined – Preferred Alternatives

Year	*Total Combined Annual Pollutant Emissions (TPY)*						
	SO_2	*CO*	*PM_{10}*	*$PM_{2.5}$*	*NO_x*	*VOC*	*CO_2*
2011	59.3	85.0	17.3	13.5	86.6	24.6	16660.1
2012	74.6	111.1	21.3	16.8	109.5	33.7	20591.0
2013	116.1	156.4	32.4	36.7	167.4	44.0	31863.3
2014	63.6	116.0	26.0	16.1	99.2	38.3	19092.1
2015	139.7	**3051.2**	99.4	61.2	240.5	242.9	185580.0
2016	124.8	**3016.8**	82.1	55.2	214.9	228.4	181320.8
2017 and on	120.1	**2997.7**	76.2	53.2	205.2	221.1 – 223.0	180215.5 – 186134.2

Note: Bolded numbers indicate an exceedance of the 250 TPY significance criteria.

Vehicular CO emissions are of local (microscale) concern with potential impacts concentrated around heavily congested intersections. Although the collective CO emissions are predicted to exceed 250 TPY under both construction and operational conditions, the further microscale dispersion modeling performed at the worst-case intersections (Section 3.3.7) indicated that no exceedance of the CO NAAQS would occur. Therefore, potential CO impacts would not be significant under the preferred alternatives. Table I.3-225 lists the worst-case intersections on Guam that were analyzed for CO concentration levels. These intersections showed no exceedance of the CO NAAQS under the preferred alternatives.

Table I.3-225. Intersections Analyzed for CO Microscale Impact Analysis – Preferred Alternatives

ROI	*Intersections*
North	Route 1/25
	Route 9/Andersen AFB North Gate
Central	Route 1/8
	Route 4/7A
	Route 16/27
Apra Harbor	Route 1/2A
South	Route 5/2A

3.6 CAA General Conformity Applicability Analysis

The 1990 amendments to the CAA (CAAA) require federal agencies to ensure that their actions conform to the State Implementation Plan (SIP) in a nonattainment area. Conformity to a SIP, as defined in the CAAA, means reducing the severity and number of violations of the NAAQS to achieve attainment of the standards. The federal agency responsible for an action is required to determine whether its action conforms to the applicable SIP. The USEPA has developed two sets of conformity regulations—for transportation projects and non-transportation-related projects, respectively:

- Transportation projects developed or approved under the Federal Aid Highway Program or Federal Transit Act are governed by transportation conformity regulations (40 CFR Parts 51 and 93), which became effective December 27, 1993 and were revised August 15, 1997.
- Non-transportation projects are governed by general conformity regulations (40 CFR Parts 6, 51, and 93), described in the final rule for *Determining Conformity of General Federal Actions to State or Federal Implementation Plans,* published in the *Federal Register* on November 30, 1993. The general conformity rule became effective January 31, 1994 and has not been updated.

As the proposed action is a non-transportation project and would potentially involve activities in Piti and Tanguisson SO_2 nonattainment areas, the General Conformity Rule (GCR) applies to the proposed activities within the nonattainment areas. Therefore, a subsequent general conformity applicability analysis is required.

Attainment and Nonattainment Areas

The GCR applies to federal actions occurring in an area designated as nonattainment for the NAAQS or in attainment areas subject to maintenance plans (maintenance areas). Federal actions occurring in an area in attainment with the NAAQS are not subject to the conformity rule.

The proposed action would occur on Guam, and potentially in Piti and Tanguisson, areas that are currently designated as a SO_2 nonattainment area, and an attainment area for the other criteria pollutants: CO, NO_x, Pb, and PM (PM_{10} and $PM_{2.5}$).

De Minimis Emissions Levels

To focus general conformity requirements on those federal actions with the potential to have significant air quality impacts, threshold (*de minimis*) rates of emissions were established in the final rule. A formal conformity determination is required when the annual net total of direct and indirect emissions from a federal action occurring in a nonattainment or maintenance area for a criteria pollutant equals or exceeds the *de minimis* for this pollutant. Table I.3-226 lists the *de minimis* level by pollutant. Under the General Conformity Rule (GCR), the total emissions resulting from the proposed federal actions must be compared to applicable *de minimis* levels on an annual basis. As defined by the GCR, if the emissions of a criteria pollutant (or its precursors) do not exceed the *de minimis* level, the federal action has minimal air quality impact and the action is determined to be in conformity for the pollutant under study. Therefore, no further analysis is necessary. Conversely, if the total direct and indirect emissions of a pollutant are above the *de minimis* level, a formal general conformity determination is required for that pollutant.

Regional Significance

A federal action that does not exceed the *de minimis* level may still be subject to a general conformity determination if the direct and indirect emissions resulting from the action exceed 10 percent of the total emissions inventory the nonattainment or maintenance criteria pollutant. If the emissions exceed this 10 percent threshold, the federal action is considered to be a "regionally significant" activity, and the GCR applies.

3.6.1 SO_2 Emissions from both Stationary and Mobile Sources within Two Nonattainment Areas

The net increase in SO_2 emissions with potential to emit from the proposed action within the two SO_2 nonattainment areas was predicted in the same way as described in previous sections. The estimates of SO_2 emissions were performed for those operational and construction activities with potential to occur within those two nonattainment.

As shown in Table I.3-226, the *de minimis* level applicable to the two non-attainment areas on Guam, Piti and Tanguisson, is 100 TPY of SO_2. Therefore, if the total expected direct and indirect emissions of SO_2 are below 100 TPY, no formal conformity determination is required and no significant air quality impact would result from the implementation of the proposed action.

Table I.3-226. *De Minimis* Emission Levels for Criteria Air Pollutants

Pollutant	*Nonattainment Designation*	*Tons/Year*
Ozone*	Serious	50
	Severe	25
	Extreme	10
	Other nonattainment or maintenance areas outside ozone transport region	100
	Marginal and moderate nonattainment areas inside ozone transport region	50/100**
Carbon Monoxide	All	100
Sulfur Dioxide	All	100
Lead	All	25
Nitrogen Dioxide	All	100
Particulate Matter ≤ 10 microns	Moderate	100
	Serious	70
Particulate Matter ≤ 2.5 microns***	All	100

Notes: *Applies to ozone precursors – volatile organic compounds (VOCs) and nitrogen oxides (NO_X).
** VOCs/NO_X
*** Applies to $PM_{2.5}$ and its precursors.

SO_2 emissions resulting from construction activities occurring within the two nonattainment areas are presented in Tables I.3-227 through I.3-255. The applicable operational emissions within these two nonattainment areas include aircraft emissions from training and aircraft carrier berthing and on-base vehicle emissions from Naval main base. Detailed emissions estimates are described in Section 3.3, Mobile Sources.

Marine Corps Relocation - Guam

Table I.3-227. Marine Corps Construction Equipment Emissions - Main Cantonment / Tanguisson

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*	*Emission Rate (tons/year)*
							SO_2	*SO_2*
Construction								
Asphalt paver, 130 HP	1	138	50	2755	130	59	1.68	0.392
Backhoe loader, 48hp	1	927	40	14831	48	21	2.03	0.334
Compressor, 250 cfm	1	11,026	40	176410	83	43	1.76	12.147
Centrif. water pump, 6"	1	4	50	80	53	43	1.74	0.003
Chain saws, 36"	1	766	20	6129	48	59	2.00	0.378
Chipping machine	1	383	50	7661	144	43	1.69	0.880
Concrete pump, small	1	577	50	11537	53	43	1.74	0.500
Crane, 90-ton	1	408	16	2613	231	43	1.63	0.466
Crane, SP, 12 ton	1	2,789	16	17848	231	43	1.63	3.183
Drill rig & augers	1	4	20	32	176	43	1.65	0.004
Dozer, 300 HP	1	203	40	3246	300	59	1.65	0.000
Front end loader, 1.5 cy	1	586	40	9374	93	21	1.65	1.045
Gas engine vibrator	1	1,343	20	10744	6	55	2.03	0.411
Gas welding machine	1	600	40	9596	17	68	0.22	0.008
Gradall, 3 ton, 1/2 cy	1	344	40	5510	171	59	0.21	0.026
Grader, 30,000 lb	1	942	40	15070	204	59	1.66	1.016
Pneumatic wheel roller	1	138	50	2755	92	59	1.64	3.292
Roller, vibratory	1	203	20	1623	92	59	1.76	0.000
Rollers, steel wheel	1	275	20	2201	92	59	1.76	0.000
Tandem roller, 10 ton	1	0.2	20	1.7	92	59	1.71	0.283
Total Annual Construction Emissions Between 2011 – 2016, Alternative 1								24.761
Total Annual Construction Emissions Between 2011 – 2016, Alternative 2 (1.9% increase)								25.232
Total Annual Construction Emissions Between 2011 – 2016, Alternative 3 (4.8% increase)								25.940
Total Annual Construction Emissions Between 2011 – 2016, Alternative 8 (2.9% increase)								25.468

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-228. Marine Corps Van & Truck Emissions - Main Cantonment / Tanguisson

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*	*Emission Rate (tons/year)*
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*SO_2*
Alternative 1	1,703,686	25	68,147	0.001	0.018
Alternative 2 (no increase)					0.018
Alternative 3 (1.0% increase)					0.018
Alternative 8 (no increase)					0.018
Trucks (HDDV)				Emission Factor[1] (lb/hr)	Emission Rate (tons/year)
Alternative 1	6,676,676	25	267,067	0.243	32.395
Alternative 2 (1.0% increase)					32.706
Alternative 3 (2.9% increase)					33.329
Alternative 8 (1.0% increase)					32.706
Total Annual Motor Vehicle Emissions, Between 2011-2016, Alternative 1					32.416
Total Annual Motor Vehicle Emissions, Between 2011-2016, Alternative 2 (1.0% increase)					32.724
Total Annual Motor Vehicle Emissions, Between 2011-2016, Alternative 3 (2.9% increase)					33.347
Total Annual Motor Vehicle Emissions, Between 2011-2016, Alternative 8 (1.0% increase)					32.724

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-229. Marine Corps Total Construction Emissions - Main Cantonment / Tanguisson

	Construction Activity	*Pollutant*
	Total Annual Emissions (TPY)	*SO_2*
Alternative 1, North	2011 (11%)	6.3
	2012 (18%)	10.3
	2013 (23%)	13.1
	2014 (23%)	13.1
	2015 (17%)	9.7
	2016 (8%)	4.6
Alternative 2, North	2011 (11%)	6.4
	2012 (18%)	10.4
	2013 (23%)	13.3
	2014 (23%)	13.3
	2015 (17%)	9.9
	2016 (8%)	4.6
Alternative 3, North	2011 (11%)	4.3
	2012 (18%)	7.0
	2013 (23%)	8.9
	2014 (23%)	8.9
	2015 (17%)	6.6
	2016 (8%)	3.1
Alternative 3, Central	2011 (11%)	2.3
	2012 (18%)	3.7
	2013 (23%)	4.7
	2014 (23%)	4.7
	2015 (17%)	3.5
	2016 (8%)	1.6

Alternative 8, North	2011 (11%)	5.2
	2012 (18%)	8.4
	2013 (23%)	10.8
	2014 (23%)	10.8
	2015 (17%)	8.0
	2016 (8%)	3.7
Alternative 8, Central	2011 (11%)	1.2
	2012 (18%)	2.0
	2013 (23%)	2.6
	2014 (23%)	2.6
	2015 (17%)	1.9
	2016 (8%)	0.9

Table I.3-230. Marine Corps Construction Equipment Emissions – Waterfront / Piti

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*	*Emission Rate (tons/year)*
							SO_2	SO_2
Construction								
Asphalt paver, 130 HP	1	0.6	50	11.0	130	59	1.68	0.002
Compressor, 250 cfm	1	1.7	40	27.2	83	43	1.76	0.002
Concrete pump, small	1	0.6	50	11.0	53	43	1.74	0.000
Crane, 90-ton	1	0.7	16	4.5	231	43	1.63	0.001
Crane, SP, 12 ton	1	0.7	16	4.2	231	43	1.63	0.001
Dozer, 300 HP	1	0.6	40	8.8	300	59	1.65	0.003
Front end loader, 1.5 cy, crl	1	1.1	40	17.6	93	21	2.03	0.001
Gas engine vibrator	1	1.1	20	8.8	6	55	0.22	0.000
Gas welding machine	1	0.5	40	8.0	17	68	0.21	0.000
Grader, 30,000 lb	1	1.3	40	20.8	204	59	1.64	0.005
Pneumatic wheel roller	1	0.6	50	11.0	92	59	1.71	0.001
Roller, vibratory	1	0.6	20	4.4	92	59	1.71	0.000
Rollers, steel wheel	1	1.1	20	8.8	92	59	1.71	0.001
Total Annual Construction Emissions Between 2011 – 2014								0.016

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-231. Marine Corps Van & Truck Emissions - Waterfront / Piti

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*	*Emission Rate (tons/year)*
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*SO_2*
Construction	1889	25	19	0.001	0.000
Trucks (HDDV)				Emission Factor[1] (lb/hr)	Emission Rate (tons/year)
Construction	10832	25	108	0.243	0.013
Total Annual Motor Vehicle Emissions, Between 2011-2016					0.013

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-232. Marine Corps Total Construction Emissions - Waterfront / Piti

Construction Activity	*Pollutant*
	SO_2
Total Annual Emissions (TPY)	0.03

Marine Corps Relocation – Aircraft Carrier Berthing

Table I.3-233. Construction Equipment Emissions – Aircraft Carrier Berthing/ Alternative 1 & 2 / Apra Harbor

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*	*Emission Rate (tons/year)*
							SO_2	*SO_2*
Construction								
Asphalt paver, 130 HP	1	0.4	50	8	130	59	1.68	0.001
Backhoe loader, 48hp	1	29.7	40	475	48	21	2.03	0.011
Chain saws, 36"	1	0.7	20	6	48	59	1.99	0.000
Chipping machine	1	0.4	50	7	144	43	1.69	0.001
Compressor, 250 cfm	1	0.4	40	6	83	43	1.76	0.000
Concrete pump, small	1	2.3	50	46	53	43	1.74	0.002
Crane, 90-ton	1	17.1	16	109	231	43	1.63	0.020
Crane, SP, 12 ton	1	39.3	16	252	231	43	1.63	0.045
Diesel hammer, 41k ft-lb	1	14.1	20	113	329	59	1.64	0.040
Dozer, 200 HP	1	0.1	40	1	300	59	1.65	0.000
Dozer, 300 HP	1	0.3	40	5	300	59	1.65	0.002
Front end loader, 1.5 cy	1	0.3	40	5	93	21	2.03	0.000
Gas engine vibrator	1	8.2	20	66	6	55	0.22	0.000
Gas welding machine	1	6.7	40	106	17	68	0.21	0.000
Gradall, 3 ton, 1/2 cy	1	0.7	40	10	171	59	1.66	0.002
Grader, 30,000 lb	1	1.0	40	15	204	59	1.64	0.003
Hydraulic excavator, 3.5 cy	1	5.9	40	94	171	59	1.66	0.017
Pneumatic wheel roller	1	0.4	50	8	92	59	1.71	0.001
Roller, vibratory	1	0.3	20	2	92	59	1.71	0.000
Rollers, steel wheel	1	0.8	20	6	92	59	1.71	0.001
Total Annual Construction Emissions Between 2011 - 2014								0.146

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-234. Aircraft Carrier Berthing (Dredging) Construction Equipment Emissions – Alternative 1 & 2 - Apra Harbor

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*	*Emission Rate (tons/year)*
							SO$_2$	*SO$_2$*
Construction								
Crane, 90-ton	1	19.0	16	122	231	43	1.63	0.022
2 Diesel generator	2	5.3	50	212	2822	59	1.71	0.665
Tug boat	1	19.0	51	388	2000	30	0.10	0.024
Total Annual Construction Emissions Between 2014 – 2015								0.711

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-235. Aircraft Carrier Berthing Van &Truck Emissions – Alternative 1 & 2 / Apra Harbor

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*	*Emission Rate (tons/year)*
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO$_2$*	*SO$_2$*
Construction	19743	25	197	0.001	0.000
Trucks (HDDV)					
Construction	171304	25	1713	0.243	0.208
Total Annual Motor Vehicle Emissions, Between 2011-2014					0.208

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-236. Aircraft Carrier Berthing (Dredging) Van &Truck Emissions - Alternative 1 & 2 – Apra Harbor

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*	*Emission Rate (tons/year)*
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO$_2$*	*SO$_2$*
Construction	972	25	19	0.001	0.000
Trucks (HDDV)					
Construction	37900	25	758	0.243	0.092
Total Annual Motor Vehicle Emissions, Between 2014-2015					0.092

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-237. Marine Corps Total Construction Emissions – Aircraft Carrier Berthing/ Alternative 1 & 2 / Apra Harbor

Construction Activity	*Pollutant*
	SO_2
Total Annual Emissions (TPY)	0.4
Total Annual Emissions for Dredging (TPY)	0.8

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Table I.3-238. Utility Construction Equipment Emissions – Interim Power Alternative 1 / Tanguisson

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*	*Emission Rate (tons/year)*
							SO_2	*SO_2*
Construction								
Chain saws, 36"	1	0.2	20	1.6	6.8	70	2.00	0.000
Chipping machine	1	0.1	50	2.0	144	43	1.69	0.000
Compressor, 250 cfm	1	0.1	40	1.6	83	43	1.76	0.000
Crane, 90-ton	1	37.5	16	240.0	231	43	1.63	0.043
Crane, 33 ton	1	5.6	17	37.7	231	43	1.63	0.006
Dozer, 200 HP	1	0.1	40	0.8	200	59	1.65	0.001
Dozer, 300 HP	1	0.2	40	2.4	300	59	2.03	0.026
Front end loader, 1.5 cy	1	37.7	40	602.4	93	21	0.22	0.000
Gas engine vibrator	1	18.8	20	150.0	6	55	0.21	0.001
Gas welding machine	1	24.3	40	388.0	17	68	1.74	0.020
Generator	1	24.3	50	485.0	50	43	1.64	0.001
Grader, 30,000 lb	1	0.4	40	6.4	204	59	1.71	0.000
Roller, vibratory	1	0.2	20	1.2	92	59	2.00	0.000
Total Annual Construction Emissions Between 2011 - 2014								0.099

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-239. Utility Van & Truck Emissions - Interim Power Alternative 1 / Tanguisson

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*	*Emission Rate (tons/year)*
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*SO_2*
Construction	11482	25	115	0.001	0.000
Trucks (HDDV)					
Construction	32825	25	328	0.243	0.040
Total Annual Motor Vehicle Emissions, Between 2011-2014					0.040

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-240. Utility Total Construction Emissions - Interim Power Alternative 1 / Tanguisson

Construction Activity	*Pollutant*
	SO_2
Total Annual Emissions (TPY)	0.14

Table I.3-241. Utility Construction Equipment Emissions – Interim Power Alternative 2 / Tanguisson

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*	*Emission Rate (tons/year)*
							SO_2	*SO_2*
Construction								
Crane, 33 ton	1	15.0	16	96	231	43	1.63	0.017
Gas welding machine	1	15.0	40	240	17	68	2.92	0.009
Generator	1	15.0	50	300	50	43	1.74	0.012
Total Annual Construction Emissions Between 2011 - 2014								0.038

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-242. Utility Van & Truck Emissions - Interim Power Alternative 2 / Tanguisson

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*	*Emission Rate (tons/year)*
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*SO_2*
Construction	8100	25	81	0.001	0.000
Trucks (HDDV)					
Construction	6000	25	60	0.243	0.007
Total Annual Motor Vehicle Emissions, Between 2011-2014					0.007

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-243. Utility Total Construction Emissions - Interim Power Alternative 2 / Tanguisson

Construction Activity	*Pollutant*
	SO_2
Total Annual Emissions (TPY)	0.05

Table I.3-244. Utility Construction Equipment Emissions – Interim Power Alternative 3 / Tanguisson

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*	*Emission Rate (tons/year)*
							SO_2	*SO_2*
Construction								
Crane, 33 ton	1	21.6	16	138	231	43	1.63	0.025
Gas welding machine	1	21.6	40	346	17	68	2.92	0.013
Generator	1	21.6	50	432	50	43	1.74	0.018
Total Annual Construction Emissions Between 2011 - 2014								0.055

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-245. Utility Van & Truck Emissions - Interim Power Alternative 3 / Tanguisson

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*	*Emission Rate (tons/year)*
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*SO_2*
Construction	11664	25	117	0.001	0.000
Trucks (HDDV)					
Construction	8640	25	86	0.243	0.011
Total Annual Motor Vehicle Emissions, Between 2011-2014					0.011

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-246. Utility Total Construction Emissions - Interim Power Alternative 3 / Tanguisson

Construction Activity	*Pollutant*
	SO_2
Total Annual Emissions (TPY)	0.07

Table I.3-247. Utility Construction Equipment Emissions –Potable Water Alternative 1 / Piti &Tanguisson

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*	*Emission Rate (tons/year)*
							SO_2	*SO_2*
Construction								
Backhoe loader, 48hp	1	290.7	40	4650	48	21	1.99	0.103
Chain saws, 36"	1	1.0	20	8	6.8	70	2.00	0.000
Chipping machine	1	0.5	50	10	144	43	1.69	0.001
Compressor, 250 cfm	1	3.0	40	47	83	43	1.76	0.003
Concrete pump, small	1	5.2	50	104	53	43	1.74	0.005
Crane, 90-ton	1	6.7	16	43	231	43	1.63	0.008
Crane, SP, 12 ton	1	294.6	16	1885	231	43	1.63	0.336
Vibratory hammer and generator	1	3.6	50	72	50	43	1.74	0.003
Drill rig & augers	1	34.2	20	274	176	43	1.65	0.038
Dozer, 300 HP	1	0.1	40	2	300	59	1.65	0.001
Front end loader, TM, 2.5 cy	1	0.6	40	10	93	21	2.03	0.000
Gas engine vibrator	1	13.6	20	108	6	55	0.22	0.000
Gas welding machine	1	6.0	40	96	17	68	0.21	0.000
Grader, 30,000 lb	1	1.1	40	18	204	59	1.64	0.004
Hydraulic excavator, 3.5 cy	1	9.4	40	150	62	43	7.96	0.035
Roller, vibratory	1	0.1	20	1	92	59	1.71	0.000
Tug, 500 HP	1	0.6	50	12	500	80	140.66	0.744
Total Annual Construction Emissions Between 2011 - 2014								1.280

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-248. Utility Van & Truck Emissions – Potable Water Alternative 1 / Piti &Tanguisson

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*	*Emission Rate (tons/year)*
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*SO_2*
Construction	42740	25	427	0.001	0.000
Trucks (HDDV)					
Construction	629007	25	6290	0.243	0.763
Total Annual Motor Vehicle Emissions, Between 2011-2014					0.763

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-249. Utility Total Construction Emissions – Potable Water Alternative 1 / Piti &Tanguisson

Construction Activity	*Pollutant*
	SO_2
Total Annual Emissions (TPY)	2.0

Table I.3-250. Utility Construction Equipment Emissions – Potable Water Alternative 2 / Piti &Tanguisson

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*	*Emission Rate (tons/year)*
							SO_2	*SO_2*
Construction								
Backhoe loader, 48hp	1	284.2	40	4546	48	21	1.99	0.101
Chain saws, 36"	1	0.7	20	6	6.8	70	2.00	0.000
Chipping machine	1	0.4	50	7	144	43	1.69	0.001
Compressor, 250 cfm	1	2.0	40	31	83	43	1.76	0.002
Concrete pump, small	1	4.6	50	91	53	43	1.74	0.004
Crane, 90-ton	1	2.8	16	18	231	43	1.63	0.003
Crane, SP, 12 ton	1	287.7	16	1841	231	43	1.63	0.328
Drill rig & augers	1	34.2	20	274	176	43	1.65	0.038
Dozer, 300 HP	1	0.1	40	1	300	59	1.65	0.000
Front end loader, TM, 2.5 cy	1	0.4	40	6	93	21	2.03	0.000
Gas engine vibrator	1	11.9	20	95	6	55	0.22	0.000
Gas welding machine	1	5.4	40	86	17	68	0.21	0.000
Grader, 30,000 lb	1	0.7	40	11	204	59	1.64	0.002
Hydraulic excavator, 3.5 cy	1	8.4	40	134	62	43	7.96	0.031
Roller, vibratory	1	0.1	20	0	92	59	1.71	0.000
Total Annual Construction Emissions Between 2011 - 2014								**0.511**

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-251. Utility Truck Emissions – Potable Water Alternative 2 / Piti &Tanguisson

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*	*Emission Rate (tons/year)*
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*SO_2*
Construction	39719	25	397	0.001	0.000
Trucks (HDDV)					
Construction	593680	25	5937	0.243	0.720
Total Annual Motor Vehicle Emissions, Between 2011-2014					0.720

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-252. Utility Total Construction Emissions – Potable Water Alternative 2 / Piti &Tanguisson

Construction Activity	Pollutant
	SO_2
Total Annual Emissions (TPY)	1.2

Table I.3-253. Utility Construction Equipment Emissions –Wastewater Alternative 1a and 1b / Tanguisson

Equipment Type/Activity	*Number of Units*	*Weeks*	*Usage Factor[1] %*	*Hours*	*Horse power[2] (hp)*	*Load Factor[2] (%)*	*Emission Factor[2] (grams/hp-hour)*	*Emission Rate (tons/year)*
							SO_2	*SO_2*
Construction								
Concrete pump, small	1	0.2	50	3.0	53	43	1.74	0.000
Gas engine vibrator	1	0.3	20	2.0	6	55	3.20	0.000
Hydraulic excavator, 3.5 cy	1	0.1	40	0.8	62	43	1.66	0.000
Total Annual Construction Emissions Between 2011 – 2014								**0.000**

Source: 1. Federal Highway Administration Roadway Construction Noise Model User's Guide, Jan. 2006.
2. Nonroad model worksheet, USEPA, Dec. 31, 2008.

Table I.3-254. Utility Van & Truck Emissions –Wastewater Alternative 1a and 1b / Tanguisson

Commuter Van (LDGT)				*Emission Factor[1] (lb/hr)*	*Emission Rate (tons/year)*
Stage	*Total VMT*	*Speed in miles/hour*	*Hours*	*SO_2*	*SO_2*
Construction	155	25	2	0.001	0.000
Trucks (HDDV)					
Construction	3150	25	32	0.243	0.004
Total Annual Motor Vehicle Emissions, Between 2011-2014					0.004

Source: 1. Mobile 6.2 Emission Factors.

Table I.3-255. Utility Total Construction Emissions - Wastewater Alternative 1a and 1b / Tanguisson

Construction Activity	*Pollutant*
	SO_2
Total Annual Emissions (TPY)	0.00

Summary Impacts – Preferred Alternatives

The general conformity rule analysis was conducted in the same way as previously described. As shown in Table I.3-256 through Table I.3-259, annual SO_2 emissions from the Guam Military Relocation would not exceed the *de minimis* criterion of 100 TPY of SO_2 in both the Tanguisson and the Piti nonattainment areas and a formal conformity determination is not required.

Table I.3-256. Preferred Alternatives SO_2 Emissions – Tanguisson (TPY)

Construction Activities	*Year*	*SO_2*
Main Cantonment, Alternative 2	2011	6.38
	2012	10.43
	2013	13.33
	2014	13.33
	2015	9.85
	2016	4.64
Interim Power Alternative 1	2011-2014	0.14
Wastewater Alternative 1a and 1b	2011-2014	0.00
Potable Water Alternative 1	2011-2014	2.04
Operational Activities		
Aircraft Training	2015 and on	0.1
On-base Vehicles	2015 and on	8.2
de minimis level		**100**

Table I.3-257. Preferred Alternatives Total Annual SO_2 Emissions – Tanguisson (TPY)

Year	*SO_2*
2011	8.56
2012	12.61
2013	15.51
2014	15.51
2015	18.15
2016	12.94
2017 and on	8.3
de minimis level	**100**

Table I.3-258. Preferred Alternatives SO_2 Emissions – Piti (TPY)

Construction Activities	*Years*	*SO_2*
Waterfront Training	2011-2014	0.03
Aircraft Carrier Berthing Alternative 2	2011-2014	0.35
Aircraft Carrier Berthing Alternative 2 (Dredging)	2015 -2016	0.73
Potable Water Alternative 1	2011-2014	2.04
Operational Activities		
Aircraft Carrier Berthing	2015 and on	0.50
Aircraft Training at Orote	2015 and on	0.1
On-base Vehicles	2015 and on	0.3
de minimis level		**100**

Table I.3-259. Preferred Alternatives Total Annual SO2 Emissions – Piti (TPY)

Year	*SO_2*
2011	2.42
2012	2.42
2013	2.42
2014	2.42
2015	1.63
2016	1.63
2017 and on	0.9
de minimis level	**100**

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Attachment A Off Base Roadway Project Impact Analysis Support Data

Guam Haul Road
Construction Emission Analysis
North- Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP $^{(2)}$ hp/hr	Average Equipment Usage of HP $^{(2)}$ hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors $^{(3)}$			
								Months	(4) hrs/month	CO g/hp-hr	NOx g/hp-hr	PM10 g/hp-hr	PM$_{2.5}$ g/hp-hr
PTG8 - FDR													
WL	1	Diesel	197	116	116	11/3/2012	8/2/2013	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	11/3/2012	8/2/2013	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	11/3/2012	8/2/2013	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	11/3/2012	8/2/2013	10	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	11/3/2012	8/2/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	11/3/2012	8/2/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	11/3/2012	8/2/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/3/2012	8/2/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/3/2012	8/2/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/3/2012	8/2/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PTG9 - FDR & Widening													
Wheel Loader	2	Diesel	197	116	232	10/1/2011	4/2/2012	7	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	10/1/2011	4/2/2012	7	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	10/1/2011	4/2/2012	7	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	10/1/2011	4/2/2012	7	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	10/1/2011	4/2/2012	7	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/1/2011	4/2/2012	7	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PTG 10 - FDR & Widening													
Wheel Loader	2	Diesel	197	116	232	10/1/2011	4/2/2012	7	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	10/1/2011	4/2/2012	7	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	10/1/2011	4/2/2012	7	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	10/1/2011	4/2/2012	7	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	10/1/2011	4/2/2012	7	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/1/2011	4/2/2012	7	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PTG 22 - FDR & Widening													
Wheel Loader	2	Diesel	197	116	232	10/1/2011	4/2/2012	7	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	10/1/2011	4/2/2012	7	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	10/1/2011	4/2/2012	7	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	10/1/2011	4/2/2012	7	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	10/1/2011	4/2/2012	7	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/1/2011	4/2/2012	7	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PTG 22A - FDR & Widening													
Wheel Loader	2	Diesel	197	116	232	10/4/2012	9/3/2013	12	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	10/4/2012	9/3/2013	12	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	10/4/2012	9/3/2013	12	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	10/4/2012	9/3/2013	12	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	10/4/2012	9/3/2013	12	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	10/4/2012	9/3/2013	12	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/4/2012	9/3/2013	12	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/4/2012	9/3/2013	12	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/4/2012	9/3/2013	12	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/4/2012	9/3/2013	12	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PTG 23 - Overlay													
Cold Planer	1	Diesel	545	322	322	9/2/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Roller	2	Gasoline	147	87	173	9/2/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	1	Electric	97	57	57	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Electric	130	77	77	9/2/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Construction Equipment Total	**5**												
PTG 38 - FDR & Widening													
Wheel Loader	2	Diesel	197	116	232	10/2/2011	12/6/2011	3	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	10/2/2011	12/6/2011	3	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	10/2/2011	12/6/2011	3	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	10/2/2011	12/6/2011	3	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	10/2/2011	12/6/2011	3	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	10/2/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/2/2011	12/6/2011	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/2/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/2/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/2/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PTG 39 - Widening													
Wheel Loader	1	Diesel	197	116	116	10/5/2011	12/7/2011	3	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	10/5/2011	12/7/2011	3	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	10/5/2011	12/7/2011	3	172	1.48	2.62	0.40	0.39
Reclaimer	2	Diesel	540	319	637	10/5/2011	12/7/2011	3	172	1.48	2.62	0.40	0.39
Back hoe	2	Diesel	97	57	114	10/5/2011	12/7/2011	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/5/2011	12/7/2011	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/7/2011	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/7/2011	3	172	4.17	3.14	0.73	0.71

Guam Haul Road
Construction Emission Analysis
North- Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP [2]	Average Equipment Usage of HP [2]	Total Utilized Equipment HP (all units)	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors [3]			
			hp/hr	hrs	hp/hr			Months	(4) hrs/month	CO g/hp-hr	NOx g/hp-hr	PM10 g/hp-hr	$PM_{2.5}$ g/hp-hr
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/7/2011	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/7/2011	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**8**												
PTG 41 - FDR & Widening													
Wheel Loader	1	Diesel	197	116	116	10/5/2011	12/6/2011	3	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	10/5/2011	12/6/2011	3	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	10/5/2011	12/6/2011	3	172	1.48	2.62	0.40	0.39
Reclaimer	2	Diesel	540	319	637	10/5/2011	12/6/2011	3	172	1.48	2.62	0.40	0.39
Back hoe	2	Diesel	97	57	114	10/5/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/5/2011	12/6/2011	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**8**												
PTG 42 - Widening													
Wheel Loader	1	Diesel	197	116	116	10/5/2011	12/6/2011	3	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	10/5/2011	12/6/2011	3	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	10/5/2011	12/6/2011	3	172	1.48	2.62	0.40	0.39
Reclaimer	2	Diesel	540	319	637	10/5/2011	12/6/2011	3	172	1.48	2.62	0.40	0.39
Back hoe	2	Diesel	97	57	114	10/5/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/5/2011	12/6/2011	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**8**												
PTG 117 - FDR & Widening													
Wheel Loader	1	Diesel	197	116	116	10/28/2015	12/30/2015	3	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	10/28/2015	12/30/2015	3	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	10/28/2015	12/30/2015	3	172	1.48	2.62	0.40	0.39
Reclaimer	2	Diesel	540	319	637	10/28/2015	12/30/2015	3	172	1.48	2.62	0.40	0.39
Back hoe	2	Diesel	97	57	114	10/28/2015	12/30/2015	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/28/2015	12/30/2015	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/28/2015	12/30/2015	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/28/2015	12/30/2015	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/28/2015	12/30/2015	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/28/2015	12/30/2015	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**8**												
PTG 57 - FDR & Widening													
Wheel Loader	1	Diesel	197	116	116	10/4/2013	5/6/2015	20	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	10/4/2013	5/6/2015	20	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	10/4/2013	5/6/2015	20	172	1.48	2.62	0.40	0.39
Reclaimer	2	Diesel	540	319	637	10/4/2013	5/6/2015	20	172	1.48	2.62	0.40	0.39
Back hoe	2	Diesel	97	57	114	10/4/2013	5/6/2015	20	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/4/2013	5/6/2015	20	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/4/2013	5/6/2015	20	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/4/2013	5/6/2015	20	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/4/2013	5/6/2015	20	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/4/2013	5/6/2015	20	172	4.17	3.14	0.73	0.71

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Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP (2)	Average Equipment Usage of HP (2)	Total Utilized Equipment HP (all units)	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors (3)			
			hp/hr	hrs	hp/hr			Months	(4) hrs/month	CO g/hp-hr	NOx g/hp-hr	PM10 g/hp-hr	$PM_{2.5}$ g/hp-hr
PB1 - Pavement Strengthening													
WL	1	Diesel	197	116	116	11/8/2010	6/2/2011	8	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	11/8/2010	6/2/2011	8	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	11/8/2010	6/2/2011	8	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	11/8/2010	6/2/2011	8	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	11/8/2010	6/2/2011	8	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	11/8/2010	6/2/2011	8	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	11/8/2010	6/2/2011	8	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PTG2 - FDR & Widening													
Wheel Loader	2	Diesel	197	116	232	11/8/2010	6/2/2011	8	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	11/8/2010	6/2/2011	8	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	11/8/2010	6/2/2011	8	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	11/8/2010	6/2/2011	8	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	11/8/2010	6/2/2011	8	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	11/8/2010	6/2/2011	8	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	11/8/2010	6/2/2011	8	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PTG 3 - FDR & Widening													
Wheel Loader	0	Diesel	197	116	0	12/1/2010	10/31/2011	11	172	1.32	2.62	0.40	0.39
Scraper	0	Diesel	500	295	0	12/1/2010	10/31/2011	11	172	1.48	2.62	0.40	0.39
Reclaimer	0	Diesel	540	319	0	12/1/2010	10/31/2011	11	172	1.48	2.62	0.40	0.39
Grader	0	Diesel	540	319	0	12/1/2010	10/31/2011	11	172	1.48	2.62	0.40	0.39
Roller	0	Diesel	147	87	0	12/1/2010	10/31/2011	11	172	1.53	2.62	0.56	0.54
Back hoe	0	Diesel	97	57	0	12/1/2010	10/31/2011	11	172	4.17	3.14	0.73	0.71
Paving Machine	0	Diesel	130	77	0	12/1/2010	10/31/2011	11	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	12/1/2010	10/31/2011	11	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	12/1/2010	10/31/2011	11	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	12/1/2010	10/31/2011	11	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**0**												
PTG 6 - FDR & Widening													
Wheel Loader	2	Diesel	197	116	232	8/5/2012	5/1/2013	10	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	8/5/2012	5/1/2013	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	8/5/2012	5/1/2013	10	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	8/5/2012	5/1/2013	10	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	8/5/2012	5/1/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	8/5/2012	5/1/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	8/5/2012	5/1/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	8/5/2012	5/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	8/5/2012	5/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	8/5/2012	5/1/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PTG 7 - FDR & Widening													
Wheel Loader	2	Diesel	197	116	232	9/2/2012	6/3/2013	10	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	9/2/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	9/2/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	9/2/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	9/2/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	9/2/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PB17 - Overlay													
Cold Planer	1	Diesel	545	322	322	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Roller	2	Gasoline	147	87	173	9/2/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	1	Electric	97	57	57	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Electric	130	77	77	9/2/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Construction Equipment Total	**5**												
PTG 11 - FDR													
Wheel Loader	1	Diesel	197	116	116	10/2/2010	7/4/2011	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	10/2/2010	7/4/2011	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	10/2/2010	7/4/2011	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	10/2/2010	7/4/2011	10	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	10/2/2010	7/4/2011	10	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	10/2/2010	7/4/2011	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/2/2010	7/4/2011	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PTG 12 - FDR													
Wheel Loader	1	Diesel	197	116	116	10/2/2010	7/4/2011	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	10/2/2010	7/4/2011	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	10/2/2010	7/4/2011	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	10/2/2010	7/4/2011	10	172	1.48	2.62	0.40	0.39
Back hoe	2	Diesel	97	57	114	10/2/2010	7/4/2011	10	172	4.17	3.14	0.73	0.71
Paving Machine	2	Diesel	130	77	153	10/2/2010	7/4/2011	10	172	1.53	2.62	0.56	0.54
Wheel Loader	1	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	4.17	3.14	0.73	0.71

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Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP [2] hp/hr	Average Equipment Usage of HP [2] hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors [3]			
								Months	(4) hrs/month	CO g/hp-hr	NOx g/hp-hr	PM10 g/hp-hr	$PM_{2.5}$ g/hp-hr
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PTG 13 - FDR													
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/1/2013	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Back hoe	2	Diesel	97	57	114	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	2	Diesel	130	77	153	9/1/2012	6/1/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	1	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PTG 14 - FDR													
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/1/2013	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Back hoe	2	Diesel	97	57	114	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	2	Diesel	130	77	153	9/1/2012	6/1/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	1	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PTG 15 - FDR													
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/1/2013	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Back hoe	2	Diesel	97	57	114	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	2	Diesel	130	77	153	9/1/2012	6/1/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	1	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PTG 16 - Widening & Overlay													
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/1/2013	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Cold Planer	1	Diesel	545	322	322	9/1/2012	6/1/2013	10	172	1.48	2.62	0.40	0.39
Back hoe	2	Diesel	97	57	114	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Roller	4	Diesel	147	87	347	9/1/2012	6/1/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	3	Diesel	97	57	172	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	2	Diesel	130	77	153	9/1/2012	6/1/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**15**												
PB18 - FDR													
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/3/2013	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	9/1/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	9/1/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PB19 - FDR													
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/3/2013	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	9/1/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	9/1/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PB20 - FDR													
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/3/2013	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	9/1/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	9/1/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												

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Construction Emission Analysis
Central 1- Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP [2] hp/hr	Average Equipment Usage of HP [2] hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors [3]			
								Months	(4) hrs/month	CO g/hp-hr	NOx g/hp-hr	PM10 g/hp-hr	$PM_{2.5}$ g/hp-hr
PB21 - Overlay													
Cold Planer	1	Diesel	197	116	116	9/1/2012	6/1/2013	10	172	1.32	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	9/1/2012	6/1/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	1	Diesel	97	57	57	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	9/1/2012	6/1/2013	10	172	1.53	2.62	0.56	0.54
Roller	0	Diesel	147	87	0	9/1/2012	6/1/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	0	Diesel	97	57	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	0	Diesel	130	77	0	9/1/2012	6/1/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**5**												
PB 28 - Widening & FDR													
Wheel Loader	2	Diesel	197	116	232	10/1/2013	12/3/2014	15	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	10/1/2013	12/3/2014	15	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	10/1/2013	12/3/2014	15	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	10/1/2013	12/3/2014	15	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	10/1/2013	12/3/2014	15	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	10/1/2013	12/3/2014	15	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/1/2013	12/3/2014	15	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/1/2013	12/3/2014	15	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/1/2013	12/3/2014	15	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/1/2013	12/3/2014	15	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PB 29 - Widening & FDR													
Wheel Loader	2	Diesel	197	116	232	8/7/2014	5/6/2015	10	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	8/7/2014	5/6/2015	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	8/7/2014	5/6/2015	10	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	8/7/2014	5/6/2015	10	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	8/7/2014	5/6/2015	10	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	8/7/2014	5/6/2015	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	8/7/2014	5/6/2015	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	8/7/2014	5/6/2015	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	8/7/2014	5/6/2015	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	8/7/2014	5/6/2015	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PB30 -Overlay													
Cold Planer	1	Diesel	545	322	322	8/2/2013	5/1/2014	10	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	8/2/2013	5/1/2014	10	172	1.53	2.62	0.56	0.54
Back hoe	1	Diesel	97	57	57	8/2/2013	5/1/2014	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	8/2/2013	5/1/2014	10	172	1.53	2.62	0.56	0.54
Roller	0	Diesel	147	87	0	8/2/2013	5/1/2014	10	172	1.53	2.62	0.56	0.54
Back hoe	0	Diesel	97	57	0	8/2/2013	5/1/2014	10	172	4.17	3.14	0.73	0.71
Paving Machine	0	Diesel	130	77	0	8/2/2013	5/1/2014	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	8/2/2013	5/1/2014	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	8/2/2013	5/1/2014	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	8/2/2013	5/1/2014	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**5**												
PB31 - FDR													
Wheel Loader	1	Diesel	197	116	116	11/1/2012	5/2/2014	19	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	11/1/2012	5/2/2014	19	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	11/1/2012	5/2/2014	19	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	11/1/2012	5/2/2014	19	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	11/1/2012	5/2/2014	19	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	11/1/2012	5/2/2014	19	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	11/1/2012	5/2/2014	19	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/1/2012	5/2/2014	19	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/1/2012	5/2/2014	19	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/1/2012	5/2/2014	19	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PB 33 - Widening & FDR													
Wheel Loader	2	Diesel	197	116	232	8/1/2013	8/2/2014	13	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	8/1/2013	8/2/2014	13	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	8/1/2013	8/2/2014	13	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	8/1/2013	8/2/2014	13	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	8/1/2013	8/2/2014	13	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	8/1/2013	8/2/2014	13	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	8/1/2013	8/2/2014	13	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	8/1/2013	8/2/2014	13	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	8/1/2013	8/2/2014	13	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	8/1/2013	8/2/2014	13	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												

Guam Haul Road
Construction Emission Analysis
Central2 - Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP (2) hp/hr	Average Equipment Usage of HP (2) hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors (3)			
								Months	(4) hrs/month	CO g/hp-hr	NOx g/hp-hr	PM10 g/hp-hr	$PM_{2.5}$ g/hp-hr
PTG36 - Widening													
WL	1	Diesel	197	116	116	10/1/2011	9/10/2013	24	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	10/1/2011	9/10/2013	24	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	10/1/2011	9/10/2013	24	172	1.48	2.62	0.40	0.39
Roller	1	Diesel	147	87	87	10/1/2011	9/10/2013	24	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	10/1/2011	9/10/2013	24	172	4.17	3.14	0.73	0.71
Paving Machine	2	Diesel	130	77	153	10/1/2011	9/10/2013	24	172	1.53	2.62	0.56	0.54
Paving Machine	0	Diesel	130	77	0	10/1/2011	9/10/2013	24	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/1/2011	9/10/2013	24	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/1/2011	9/10/2013	24	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/1/2011	9/10/2013	24	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**8**												
PTG44 - FDR & Widening													
Wheel Loader	2	Diesel	197	116	232	11/28/2012	1/30/2013	3	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	11/28/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	11/28/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	11/28/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	11/28/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	11/28/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PTG46 - FDR & Widening													
Wheel Loader	2	Diesel	197	116	232	11/29/2012	1/30/2013	3	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	11/29/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	11/29/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	11/29/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	11/29/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	11/29/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PTG 47 - Widening													
WL	1	Diesel	197	116	116	11/28/2012	1/30/2013	3	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	11/28/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	11/28/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Roller	1	Diesel	147	87	87	11/28/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Paving Machine	2	Diesel	130	77	153	11/28/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Paving Machine	0	Diesel	130	77	0	11/28/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**8**												
PB48 - Widening & FDR													
Wheel Loader	2	Diesel	197	116	232	11/28/2013	1/29/2014	3	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	11/28/2013	1/29/2014	3	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	11/28/2013	1/29/2014	3	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	11/28/2013	1/29/2014	3	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	11/28/2013	1/29/2014	3	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	11/28/2013	1/29/2014	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	11/28/2013	1/29/2014	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
Cold Planer	0	Diesel	545	322	0	9/1/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Roller	0	Gasoline	147	87	0	9/2/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	0	Electric	97	57	0	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	0	Electric	130	77	0	9/2/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Construction Equipment Total	**0**												
PB49 - Widening & FDR													
Wheel Loader	2	Diesel	197	116	232	10/29/2014	12/31/2014	3	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	10/29/2014	12/31/2014	3	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	10/29/2014	12/31/2014	3	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	10/29/2014	12/31/2014	3	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	10/29/2014	12/31/2014	3	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	10/29/2014	12/31/2014	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/29/2014	12/31/2014	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PB49A - Widening & FDR													
Wheel Loader	2	Diesel	197	116	232	10/29/2014	12/31/2014	3	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	10/29/2014	12/31/2014	3	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	10/29/2014	12/31/2014	3	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	10/29/2014	12/31/2014	3	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	10/29/2014	12/31/2014	3	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	10/29/2014	12/31/2014	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	10/29/2014	12/31/2014	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	4.17	3.14	0.73	0.71

Guam Haul Road
Construction Emission Analysis
Central2 - Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP (2) hp/hr	Average Equipment Usage of HP (2) hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors (3)			
								Months	(4) hrs/month	CO g/hp-hr	NOx g/hp-hr	PM10 g/hp-hr	$PM_{2.5}$ g/hp-hr
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PB63 - FDR													
Wheel Loader	1	Diesel	197	116	116	11/28/2012	1/30/2013	3	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	11/28/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	11/28/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	11/28/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	11/28/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	11/28/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PB74 - FDR													
Wheel Loader	1	Diesel	197	116	116	11/28/2013	1/29/2014	3	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	11/28/2013	1/29/2014	3	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	11/28/2013	1/29/2014	3	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	11/28/2013	1/29/2014	3	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	11/28/2013	1/29/2014	3	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	11/28/2013	1/29/2014	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	11/28/2013	1/29/2014	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PB113 - Widening													
Wheel Loader	1	Diesel	197	116	116	9/28/2013	11/29/2013	3	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	9/28/2013	11/29/2013	3	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	9/28/2013	11/29/2013	3	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	9/28/2013	11/29/2013	3	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	9/28/2013	11/29/2013	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	9/28/2013	11/29/2013	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	9/28/2013	11/29/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/28/2013	11/29/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/28/2013	11/29/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/28/2013	11/29/2013	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**8**												
PB124 - Widening													
Wheel Loader	1	Diesel	197	116	116	2/28/2013	1/30/2015	24	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	2/28/2013	1/30/2015	24	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	2/28/2013	1/30/2015	24	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	2/28/2013	1/30/2015	24	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	2/28/2013	1/30/2015	24	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	2/28/2013	1/30/2015	24	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	2/28/2013	1/30/2015	24	172	4.17	3.14	0.73	0.71
Paving Machine	0	Diesel	130	77	0	2/28/2013	1/30/2015	24	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	2/28/2013	1/30/2015	24	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	2/28/2013	1/30/2015	24	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**8**												

Guam Haul Road
Construction Emission Analysis
Apra Harbor- Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP $^{(2)}$ hp/hr	Average Equipment Usage of HP $^{(2)}$ hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors $^{(3)}$			
								Months	(4) hrs/month	CO g/hp-hr	NOx g/hp-hr	PM10 g/hp-hr	$PM_{2.5}$ g/hp-hr
PTG4 - Widening & FDR													
Wheel Loader	2	Diesel	197	116	232	1/3/2011	9/28/2011	9	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	1/3/2011	9/28/2011	9	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	1/3/2011	9/28/2011	9	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	1/3/2011	9/28/2011	9	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	1/3/2011	9/28/2011	9	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	1/3/2011	9/28/2011	9	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	1/3/2011	9/28/2011	9	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	1/3/2011	9/28/2011	9	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	1/3/2011	9/28/2011	9	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	1/3/2011	9/28/2011	9	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PTG5 - Widening & FDR													
Wheel Loader	2	Diesel	197	116	232	1/8/2011	10/3/2011	10	172	1.32	2.62	0.40	0.39
Scraper	2	Diesel	500	295	590	1/8/2011	10/3/2011	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	1/8/2011	10/3/2011	10	172	1.48	2.62	0.40	0.39
Grader	2	Diesel	540	319	637	1/8/2011	10/3/2011	10	172	1.48	2.62	0.40	0.39
Roller	4	Diesel	147	87	347	1/8/2011	10/3/2011	10	172	1.53	2.62	0.56	0.54
Back hoe	4	Diesel	97	57	229	1/8/2011	10/3/2011	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	1/8/2011	10/3/2011	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	1/8/2011	10/3/2011	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	1/8/2011	10/3/2011	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	1/8/2011	10/3/2011	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**16**												
PB 24 - FDR													
Wheel Loader	1	Diesel	197	116	116	9/2/2012	6/3/2013	10	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	9/2/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	9/2/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	9/2/2012	6/3/2013	10	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	9/2/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	9/2/2012	6/3/2013	10	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												
PB50 - FDR													
Wheel Loader	1	Diesel	197	116	116	11/29/2012	1/30/2013	3	172	1.32	2.62	0.40	0.39
Scraper	1	Diesel	500	295	295	11/29/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Reclaimer	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Grader	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	1.48	2.62	0.40	0.39
Roller	2	Diesel	147	87	173	11/29/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Back hoe	2	Diesel	97	57	114	11/29/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Paving Machine	1	Diesel	130	77	77	11/29/2012	1/30/2013	3	172	1.53	2.62	0.56	0.54
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	4.17	3.14	0.73	0.71
Construction Equipment Total	**9**												

GUAM
AIR QUALITY CONSTRUCTION ANALYSIS
PM 2.5 Schedule

PM 2.5 Summary Table

Year	North	Central	Central 2	Apra	South	Central Total	All Locations
2009	0.000	0.032	0.000	0.000	0.000	0.032	0.032
2010	0.000	0.941	0.000	0.000	0.000	0.941	1.725
2011	3.259	3.752	0.284	3.731	0.000	4.036	14.873
2012	3.803	5.487	1.764	0.617	1.741	7.251	20.585
2013	4.138	11.399	2.955	1.010	2.812	14.354	36.466
2014	2.163	7.181	2.304	0.000	0.000	9.484	19.810
2015	1.212	4.108	0.096	0.000	0.000	4.203	6.548
2016	0.000	0.932	0.000	0.000	0.000	0.932	0.932
2017	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2019	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2022	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maximum Yearly Value	**4.138**	**11.3989**	**2.955**	**3.731**	**2.8124**	**14.354**	**36.466**
Year	**2013**	**2013**	**2013**	**2011**	**2013**	**2013**	**2013**
Highest month from highest year - 2009-2015	**0.448**	**1.489**	**0.723**	**0.439**	**0.808**	**2.190**	**5.931**
Highest Monthly Value - from all years	**1.295**	**1.489**	**0.723**	**0.439**	**0.808**	**2.190**	**5.931**
Daily	0.06	0.07	0.04	0.02	0.04	0.11	0.30

GUAM
AIR QUALITY CONSTRUCTION ANALYSIS
CO Schedule

CO Summary Table

Year	North	Central	Central 2	Apra	South	Central Total	All Locations
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	3.01	0.00	0.00	0.00	3.01	6.02
2011	11.72	13.66	1.08	13.54	0.00	14.75	54.75
2012	12.18	20.95	6.75	2.59	6.92	27.70	77.09
2013	12.95	43.27	11.28	4.15	11.09	54.56	137.31
2014	5.92	22.42	8.81	0.00	0.00	31.23	68.38
2015	3.45	3.98	0.36	0.00	0.00	4.35	12.15
2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2018	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Yearly Value	**12.95**	**43.27**	**11.28**	**13.54**	**11.09**	**54.56**	**137.31**
Year	**2013.00**	**2013.00**	**2013.00**	**2011.00**	**2013.00**	**2013.00**	**2013.00**
Highest month from highest year - 2009-2015	**1.445**	**5.690**	**2.770**	**1.592**	**3.149**	**8.460**	**22.616**
Highest Monthly Value - from all years	**4.665**	**5.690**	**2.770**	**1.592**	**3.149**	**8.460**	**22.616**
Year highest monthly value occurs	**0.00**	0.28	0.14	0.08	0.16	0.42	1.13

GUAM
AIR QUALITY CONSTRUCTION ANALYSIS
NOx Schedule

NOx Summary Table

Year	North	Central	Central 2	Apra	South	Central Total	All Locations
2009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2010	0.000	4.702	0.000	0.000	0.000	4.702	9.404
2011	18.250	21.317	1.651	20.920	0.000	22.968	85.107
2012	18.914	32.351	10.328	4.150	10.820	42.679	119.241
2013	20.298	66.928	17.283	6.614	17.297	84.211	212.632
2014	9.428	34.693	13.529	0.000	0.000	48.222	105.872
2015	5.499	6.153	0.555	0.000	0.000	6.708	18.916
2016	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2017	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2019	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2022	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maximum Yearly Value	**20.298**	**66.9280**	**17.283**	**20.920**	**17.2966**	**84.211**	**212.632**
Year	**2013**	**2013**	**2013**	**2011**	**2013**	**2013**	**2013**
Highest month from highest year - 2009-2015	**2.268**	**8.793**	**4.275**	**2.461**	**4.926**	**13.068**	**35.082**
Highest Monthly Value - from all years	**7.279**	**8.793**	**4.275**	**2.461**	**4.926**	**13.068**	**35.082**
Daily	0.36	0.44	0.21	0.12	0.25	0.65	1.75

GUAM
AIR QUALITY CONSTRUCTION ANALYSIS
PM10 Schedule

PM10 Summary Table

Year	North	Central	Central 2	Apra	South	Central Total	All Locations
2009	0.000	0.217	0.000	0.000	0.000	0.217	0.217
2010	0.000	1.875	0.000	0.000	0.000	1.875	2.680
2011	4.516	4.964	0.291	4.984	0.000	5.255	18.700
2012	7.494	6.074	1.809	0.632	1.784	7.883	25.149
2013	8.445	12.749	3.030	1.035	2.883	15.780	42.652
2014	5.545	13.093	2.363	0.000	0.000	15.456	29.372
2015	2.908	17.107	0.098	0.000	0.000	17.206	21.274
2016	0.000	4.775	0.000	0.000	0.000	4.775	4.775
2017	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2019	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2022	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maximum Yearly Value	**8.445**	**17.1074**	**3.030**	**4.984**	**2.8825**	**17.206**	**42.652**
Year	**2013**	**2015**	**2013**	**2011**	**2013**	**2015**	**2013**
Highest month from highest year - 2009-2015	**0.881**	**1.655**	**0.742**	**0.588**	**0.828**	**0.311**	**6.632**
Highest Monthly Value - from all years	**1.800**	**2.082**	**0.742**	**0.588**	**0.828**	**2.245**	**6.632**
Daily	0.09	0.10	0.04	0.03	0.04	0.11	0.33

GUAM
AIR QUALITY CONSTRUCTION ANALYSIS
PM 2.5 Schedule

PM25 Summary Table

Year	North	Central	Central 2	Apra	South	Central Total	All Locations
2009	0.000	0.032	0.000	0.000	0.000	0.032	0.032
2010	0.000	0.941	0.000	0.000	0.000	0.941	1.725
2011	3.259	3.752	0.284	3.731	0.000	4.036	14.873
2012	3.803	5.487	1.764	0.617	1.741	7.251	20.585
2013	4.138	11.399	2.955	1.010	2.812	14.354	36.466
2014	2.163	7.181	2.304	0.000	0.000	9.484	19.810
2015	1.212	4.108	0.096	0.000	0.000	4.203	6.548
2016	0.000	0.932	0.000	0.000	0.000	0.932	0.932
2017	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2019	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2022	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maximum Yearly Value	**4.138**	**11.3989**	**2.955**	**3.731**	**2.8124**	**14.354**	**36.466**
Year	**2013**	**2013**	**2013**	**2011**	**2013**	**2013**	**2013**
Highest month from highest year - 2009-2015	**0.448**	**1.489**	**0.723**	**0.439**	**0.808**	**2.190**	**5.931**
Highest Monthly Value - from all years	**1.295**	**1.489**	**0.723**	**0.439**	**0.808**	**2.190**	**5.931**
Daily	0.06	0.07	0.04	0.02	0.04	0.11	0.30

Guam Haul Road
Equipment Size and Load Factors

Construction Equipment	Equipment Rated HP (2) hp/hr	Average Equipment HP Avg. load factor applied to rated HP hp/hr	Average Daily Load Factor
Back hoe	97	57	0.59
Cold Planer	545	322	0.59
Grader	540	319	0.59
Paving Machine	130	77	0.59
Reclaimer	540	319	0.59
Roller	147	87	0.59
Scraper	500	295	0.59
Wheel Loader	197	116	0.59

Guam Haul Road
Construction Emission Analysis
North - Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP $^{(2)}$ hp/hr	Average Equipment Usage of HP $^{(2)}$ hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors $^{(3)}$	
								Months	(4) hrs/month	CO2 g/hp-hr	SO2 g/hp-hr
PTG8 - FDR											
WL	1	Diesel	197	116	116	11/3/2012	8/2/2013	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	11/3/2012	8/2/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/3/2012	8/2/2013	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	11/3/2012	8/2/2013	10	172	530.47	1.95
Roller	2	Diesel	147	87	173	11/3/2012	8/2/2013	10	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	11/3/2012	8/2/2013	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/3/2012	8/2/2013	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/3/2012	8/2/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/3/2012	8/2/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/3/2012	8/2/2013	10	172	589.74	2.17
Construction Equipment Total	**9**										
PTG9 - FDR & Widening											
Wheel Loader	2	Diesel	197	116	232	10/1/2011	4/2/2012	7	172	530.41	1.95
Scraper	2	Diesel	500	295	590	10/1/2011	4/2/2012	7	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	10/1/2011	4/2/2012	7	172	530.47	1.95
Grader	2	Diesel	540	319	637	10/1/2011	4/2/2012	7	172	530.47	1.95
Roller	4	Diesel	147	87	347	10/1/2011	4/2/2012	7	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	10/1/2011	4/2/2012	7	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/1/2011	4/2/2012	7	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	589.74	2.17
Construction Equipment Total	**16**										
PTG 10 - FDR & Widening											
Wheel Loader	2	Diesel	197	116	232	10/1/2011	4/2/2012	7	172	530.41	1.95
Scraper	2	Diesel	500	295	590	10/1/2011	4/2/2012	7	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	10/1/2011	4/2/2012	7	172	530.47	1.95
Grader	2	Diesel	540	319	637	10/1/2011	4/2/2012	7	172	530.47	1.95
Roller	4	Diesel	147	87	347	10/1/2011	4/2/2012	7	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	10/1/2011	4/2/2012	7	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/1/2011	4/2/2012	7	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	589.74	2.17
Construction Equipment Total	**16**										
PTG 22 - FDR & Widening											
Wheel Loader	2	Diesel	197	116	232	10/1/2011	4/2/2012	7	172	530.41	1.95
Scraper	2	Diesel	500	295	590	10/1/2011	4/2/2012	7	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	10/1/2011	4/2/2012	7	172	530.47	1.95
Grader	2	Diesel	540	319	637	10/1/2011	4/2/2012	7	172	530.47	1.95
Roller	4	Diesel	147	87	347	10/1/2011	4/2/2012	7	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	10/1/2011	4/2/2012	7	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/1/2011	4/2/2012	7	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/1/2011	4/2/2012	7	172	589.74	2.17
Construction Equipment Total	**16**										
PTG 22A - FDR & Widening											
Wheel Loader	2	Diesel	197	116	232	10/4/2012	9/3/2013	12	172	530.41	1.95
Scraper	2	Diesel	500	295	590	10/4/2012	9/3/2013	12	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	10/4/2012	9/3/2013	12	172	530.47	1.95
Grader	2	Diesel	540	319	637	10/4/2012	9/3/2013	12	172	530.47	1.95
Roller	4	Diesel	147	87	347	10/4/2012	9/3/2013	12	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	10/4/2012	9/3/2013	12	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/4/2012	9/3/2013	12	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/4/2012	9/3/2013	12	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/4/2012	9/3/2013	12	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/4/2012	9/3/2013	12	172	589.74	2.17
Construction Equipment Total	**16**										
PTG 23 - Overlay											
Cold Planer	1	Diesel	545	322	322	9/2/2012	6/3/2013	10	172	530.47	1.95
Roller	2	Gasoline	147	87	173	9/2/2012	6/3/2013	10	172	530.41	1.95
Back hoe	1	Electric	97	57	57	9/2/2012	6/3/2013	10	172	589.74	2.17
Paving Machine	1	Electric	130	77	77	9/2/2012	6/3/2013	10	172	530.41	1.95
Construction Equipment Total	**5**										
PTG 38 - FDR & Widening											
Wheel Loader	2	Diesel	197	116	232	10/2/2011	12/6/2011	3	172	530.41	1.95
Scraper	2	Diesel	500	295	590	10/2/2011	12/6/2011	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	10/2/2011	12/6/2011	3	172	530.47	1.95
Grader	2	Diesel	540	319	637	10/2/2011	12/6/2011	3	172	530.47	1.95
Roller	4	Diesel	147	87	347	10/2/2011	12/6/2011	3	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	10/2/2011	12/6/2011	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/2/2011	12/6/2011	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/2/2011	12/6/2011	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/2/2011	12/6/2011	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/2/2011	12/6/2011	3	172	589.74	2.17
Construction Equipment Total	**16**										
PTG 39 - Widening											
Wheel Loader	1	Diesel	197	116	116	10/5/2011	12/7/2011	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	10/5/2011	12/7/2011	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	10/5/2011	12/7/2011	3	172	530.47	1.95
Reclaimer	2	Diesel	540	319	637	10/5/2011	12/7/2011	3	172	530.47	1.95
Back hoe	2	Diesel	97	57	114	10/5/2011	12/7/2011	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/5/2011	12/7/2011	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/7/2011	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/7/2011	3	172	589.74	2.17

Guam Haul Road
Construction Emission Analysis
North - Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP (2) hp/hr	Average Equipment Usage of HP (2) hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors (3)	
								Months	(4) hrs/month	CO2 g/hp-hr	SO2 g/hp-hr
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/7/2011	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/7/2011	3	172	589.74	2.17
Construction Equipment Total	**8**										
PTG 41 - FDR & Widening											
Wheel Loader	1	Diesel	197	116	116	10/5/2011	12/6/2011	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	10/5/2011	12/6/2011	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	10/5/2011	12/6/2011	3	172	530.47	1.95
Reclaimer	2	Diesel	540	319	637	10/5/2011	12/6/2011	3	172	530.47	1.95
Back hoe	2	Diesel	97	57	114	10/5/2011	12/6/2011	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/5/2011	12/6/2011	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	589.74	2.17
Construction Equipment Total	**8**										
PTG 42 - Widening											
Wheel Loader	1	Diesel	197	116	116	10/5/2011	12/6/2011	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	10/5/2011	12/6/2011	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	10/5/2011	12/6/2011	3	172	530.47	1.95
Reclaimer	2	Diesel	540	319	637	10/5/2011	12/6/2011	3	172	530.47	1.95
Back hoe	2	Diesel	97	57	114	10/5/2011	12/6/2011	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/5/2011	12/6/2011	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/5/2011	12/6/2011	3	172	589.74	2.17
Construction Equipment Total	**8**										
PTG 117 - FDR & Widening											
Wheel Loader	1	Diesel	197	116	116	10/28/2015	12/30/2015	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	10/28/2015	12/30/2015	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	10/28/2015	12/30/2015	3	172	530.47	1.95
Reclaimer	2	Diesel	540	319	637	10/28/2015	12/30/2015	3	172	530.47	1.95
Back hoe	2	Diesel	97	57	114	10/28/2015	12/30/2015	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/28/2015	12/30/2015	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/28/2015	12/30/2015	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/28/2015	12/30/2015	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/28/2015	12/30/2015	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/28/2015	12/30/2015	3	172	589.74	2.17
Construction Equipment Total	**8**										
PTG 57 - FDR & Widening											
Wheel Loader	1	Diesel	197	116	116	10/4/2013	5/6/2015	20	172	530.41	1.95
Scraper	1	Diesel	500	295	295	10/4/2013	5/6/2015	20	172	530.47	1.95
Grader	1	Diesel	540	319	319	10/4/2013	5/6/2015	20	172	530.47	1.95
Reclaimer	2	Diesel	540	319	637	10/4/2013	5/6/2015	20	172	530.47	1.95
Back hoe	2	Diesel	97	57	114	10/4/2013	5/6/2015	20	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/4/2013	5/6/2015	20	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/4/2013	5/6/2015	20	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/4/2013	5/6/2015	20	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/4/2013	5/6/2015	20	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/4/2013	5/6/2015	20	172	589.74	2.17

Guam Haul Road
Construction Emission Analysis
Central1 - Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP [2]	Average Equipment Usage of HP [2]	Total Utilized Equipment HP (all units)	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors [3]	
			hp/hr	hrs	hp/hr			Months	(4) hrs/month	CO2 g/hp-hr	SO2 g/hp-hr
PB1 - Pavement Strengthening											
WL	1	Diesel	197	116	116	11/8/2010	6/2/2011	8	172	530.41	1.95
Scraper	1	Diesel	500	295	295	11/8/2010	6/2/2011	8	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/8/2010	6/2/2011	8	172	530.47	1.95
Grader	1	Diesel	540	319	319	11/8/2010	6/2/2011	8	172	530.47	1.95
Roller	2	Diesel	147	87	173	11/8/2010	6/2/2011	8	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	11/8/2010	6/2/2011	8	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/8/2010	6/2/2011	8	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	589.74	2.17
Construction Equipment Total	**9**										
PTG2 - FDR & Widening											
Wheel Loader	2	Diesel	197	116	232	11/8/2010	6/2/2011	8	172	530.41	1.95
Scraper	2	Diesel	500	295	590	11/8/2010	6/2/2011	8	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/8/2010	6/2/2011	8	172	530.47	1.95
Grader	2	Diesel	540	319	637	11/8/2010	6/2/2011	8	172	530.47	1.95
Roller	4	Diesel	147	87	347	11/8/2010	6/2/2011	8	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	11/8/2010	6/2/2011	8	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/8/2010	6/2/2011	8	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/8/2010	6/2/2011	8	172	589.74	2.17
Construction Equipment Total	**16**										
PTG 3 - FDR & Widening											
Wheel Loader	0	Diesel	197	116	0	12/1/2010	10/31/2011	11	172	530.41	1.95
Scraper	0	Diesel	500	295	0	12/1/2010	10/31/2011	11	172	530.47	1.95
Reclaimer	0	Diesel	540	319	0	12/1/2010	10/31/2011	11	172	530.47	1.95
Grader	0	Diesel	540	319	0	12/1/2010	10/31/2011	11	172	530.47	1.95
Roller	0	Diesel	147	87	0	12/1/2010	10/31/2011	11	172	530.41	1.95
Back hoe	0	Diesel	97	57	0	12/1/2010	10/31/2011	11	172	589.74	2.17
Paving Machine	0	Diesel	130	77	0	12/1/2010	10/31/2011	11	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	12/1/2010	10/31/2011	11	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	12/1/2010	10/31/2011	11	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	12/1/2010	10/31/2011	11	172	589.74	2.17
Construction Equipment Total	**0**										
PTG 6 - FDR & Widening											
Wheel Loader	2	Diesel	197	116	232	8/5/2012	5/1/2013	10	172	530.41	1.95
Scraper	2	Diesel	500	295	590	8/5/2012	5/1/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	8/5/2012	5/1/2013	10	172	530.47	1.95
Grader	2	Diesel	540	319	637	8/5/2012	5/1/2013	10	172	530.47	1.95
Roller	4	Diesel	147	87	347	8/5/2012	5/1/2013	10	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	8/5/2012	5/1/2013	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	8/5/2012	5/1/2013	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	8/5/2012	5/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	8/5/2012	5/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	8/5/2012	5/1/2013	10	172	589.74	2.17
Construction Equipment Total	**16**										
PTG 7 - FDR & Widening											
Wheel Loader	2	Diesel	197	116	232	9/2/2012	6/3/2013	10	172	530.41	1.95
Scraper	2	Diesel	500	295	590	9/2/2012	6/3/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	9/2/2012	6/3/2013	10	172	530.47	1.95
Grader	2	Diesel	540	319	637	9/2/2012	6/3/2013	10	172	530.47	1.95
Roller	4	Diesel	147	87	347	9/2/2012	6/3/2013	10	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	9/2/2012	6/3/2013	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	9/2/2012	6/3/2013	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	589.74	2.17
Construction Equipment Total	**16**										
PB17 - Overlay											
Cold Planer	1	Diesel	545	322	322	9/1/2012	6/3/2013	10	172	530.47	1.95
Roller	2	Gasoline	147	87	173	9/2/2012	6/3/2013	10	172	530.41	1.95
Back hoe	1	Electric	97	57	57	9/2/2012	6/3/2013	10	172	589.74	2.17
Paving Machine	1	Electric	130	77	77	9/2/2012	6/3/2013	10	172	530.41	1.95
Construction Equipment Total	**5**										
PTG 11 - FDR											
Wheel Loader	1	Diesel	197	116	116	10/2/2010	7/4/2011	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	10/2/2010	7/4/2011	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	10/2/2010	7/4/2011	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	10/2/2010	7/4/2011	10	172	530.47	1.95
Roller	2	Diesel	147	87	173	10/2/2010	7/4/2011	10	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	10/2/2010	7/4/2011	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/2/2010	7/4/2011	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	589.74	2.17
Construction Equipment Total	**9**										
PTG 12 - FDR											
Wheel Loader	1	Diesel	197	116	116	10/2/2010	7/4/2011	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	10/2/2010	7/4/2011	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	10/2/2010	7/4/2011	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	10/2/2010	7/4/2011	10	172	530.47	1.95
Back hoe	2	Diesel	97	57	114	10/2/2010	7/4/2011	10	172	589.74	2.17
Paving Machine	2	Diesel	130	77	153	10/2/2010	7/4/2011	10	172	530.41	1.95
Wheel Loader	1	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	589.74	2.17

Guam Haul Road
Construction Emission Analysis
Central1 - Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP [2] hp/hr	Average Equipment Usage of HP [2] hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors [3]	
								Months	(4) hrs/month	CO2 g/hp-hr	SO2 g/hp-hr
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/2/2010	7/4/2011	10	172	589.74	2.17
Construction Equipment Total	**9**										
PTG 13 - FDR											
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/1/2013	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	9/1/2012	6/1/2013	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	530.47	1.95
Back hoe	2	Diesel	97	57	114	9/1/2012	6/1/2013	10	172	589.74	2.17
Paving Machine	2	Diesel	130	77	153	9/1/2012	6/1/2013	10	172	530.41	1.95
Wheel Loader	1	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Construction Equipment Total	**9**										
PTG 14 - FDR											
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/1/2013	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	9/1/2012	6/1/2013	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	530.47	1.95
Back hoe	2	Diesel	97	57	114	9/1/2012	6/1/2013	10	172	589.74	2.17
Paving Machine	2	Diesel	130	77	153	9/1/2012	6/1/2013	10	172	530.41	1.95
Wheel Loader	1	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Construction Equipment Total	**9**										
PTG 15 - FDR											
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/1/2013	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	9/1/2012	6/1/2013	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	530.47	1.95
Back hoe	2	Diesel	97	57	114	9/1/2012	6/1/2013	10	172	589.74	2.17
Paving Machine	2	Diesel	130	77	153	9/1/2012	6/1/2013	10	172	530.41	1.95
Wheel Loader	1	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Construction Equipment Total	**9**										
PTG 16 - Widening & Overlay											
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/1/2013	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	9/1/2012	6/1/2013	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	9/1/2012	6/1/2013	10	172	530.47	1.95
Cold Planer	1	Diesel	545	322	322	9/1/2012	6/1/2013	10	172	530.47	1.95
Back hoe	2	Diesel	97	57	114	9/1/2012	6/1/2013	10	172	589.74	2.17
Roller	4	Diesel	147	87	347	9/1/2012	6/1/2013	10	172	530.41	1.95
Back hoe	3	Diesel	97	57	172	9/1/2012	6/1/2013	10	172	589.74	2.17
Paving Machine	2	Diesel	130	77	153	9/1/2012	6/1/2013	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Construction Equipment Total	**15**										
PB18 - FDR											
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/3/2013	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	9/1/2012	6/3/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	530.47	1.95
Roller	2	Diesel	147	87	173	9/1/2012	6/3/2013	10	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	9/1/2012	6/3/2013	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	9/1/2012	6/3/2013	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	589.74	2.17
Construction Equipment Total	**9**										
PB19 - FDR											
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/3/2013	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	9/1/2012	6/3/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	530.47	1.95
Roller	2	Diesel	147	87	173	9/1/2012	6/3/2013	10	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	9/1/2012	6/3/2013	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	9/1/2012	6/3/2013	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	589.74	2.17
Construction Equipment Total	**9**										
PB20 - FDR											
Wheel Loader	1	Diesel	197	116	116	9/1/2012	6/3/2013	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	9/1/2012	6/3/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	9/1/2012	6/3/2013	10	172	530.47	1.95
Roller	2	Diesel	147	87	173	9/1/2012	6/3/2013	10	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	9/1/2012	6/3/2013	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	9/1/2012	6/3/2013	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/3/2013	10	172	589.74	2.17
Construction Equipment Total	**9**										

Guam Haul Road
Construction Emission Analysis
Central1 - Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP [2] hp/hr	Average Equipment Usage of HP [2] hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration Months	Construction Activity Duration (4) hrs/month	Diesel Pollutant Emission Factors [3] CO2 g/hp-hr	Diesel Pollutant Emission Factors [3] SO2 g/hp-hr
PB21 - Overlay											
Cold Planer	1	Diesel	197	116	116	9/1/2012	6/1/2013	10	172	530.41	1.95
Roller	2	Diesel	147	87	173	9/1/2012	6/1/2013	10	172	530.41	1.95
Back hoe	1	Diesel	97	57	57	9/1/2012	6/1/2013	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	9/1/2012	6/1/2013	10	172	530.41	1.95
Roller	0	Diesel	147	87	0	9/1/2012	6/1/2013	10	172	530.41	1.95
Back hoe	0	Diesel	97	57	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Paving Machine	0	Diesel	130	77	0	9/1/2012	6/1/2013	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/1/2012	6/1/2013	10	172	589.74	2.17
Construction Equipment Total	**5**										
PB 28 - Widening & FDR											
Wheel Loader	2	Diesel	197	116	232	10/1/2013	12/3/2014	15	172	530.41	1.95
Scraper	2	Diesel	500	295	590	10/1/2013	12/3/2014	15	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	10/1/2013	12/3/2014	15	172	530.47	1.95
Grader	2	Diesel	540	319	637	10/1/2013	12/3/2014	15	172	530.47	1.95
Roller	4	Diesel	147	87	347	10/1/2013	12/3/2014	15	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	10/1/2013	12/3/2014	15	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/1/2013	12/3/2014	15	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/1/2013	12/3/2014	15	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/1/2013	12/3/2014	15	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/1/2013	12/3/2014	15	172	589.74	2.17
Construction Equipment Total	**16**										
PB 29 - Widening & FDR											
Wheel Loader	2	Diesel	197	116	232	8/7/2014	5/6/2015	10	172	530.41	1.95
Scraper	2	Diesel	500	295	590	8/7/2014	5/6/2015	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	8/7/2014	5/6/2015	10	172	530.47	1.95
Grader	2	Diesel	540	319	637	8/7/2014	5/6/2015	10	172	530.47	1.95
Roller	4	Diesel	147	87	347	8/7/2014	5/6/2015	10	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	8/7/2014	5/6/2015	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	8/7/2014	5/6/2015	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	8/7/2014	5/6/2015	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	8/7/2014	5/6/2015	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	8/7/2014	5/6/2015	10	172	589.74	2.17
Construction Equipment Total	**16**										
PB30 -Overlay											
Cold Planer	1	Diesel	545	322	322	8/2/2013	5/1/2014	10	172	530.47	1.95
Roller	2	Diesel	147	87	173	8/2/2013	5/1/2014	10	172	530.41	1.95
Back hoe	1	Diesel	97	57	57	8/2/2013	5/1/2014	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	8/2/2013	5/1/2014	10	172	530.41	1.95
Roller	0	Diesel	147	87	0	8/2/2013	5/1/2014	10	172	530.41	1.95
Back hoe	0	Diesel	97	57	0	8/2/2013	5/1/2014	10	172	589.74	2.17
Paving Machine	0	Diesel	130	77	0	8/2/2013	5/1/2014	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	8/2/2013	5/1/2014	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	8/2/2013	5/1/2014	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	8/2/2013	5/1/2014	10	172	589.74	2.17
Construction Equipment Total	**5**										
PB31 - FDR											
Wheel Loader	1	Diesel	197	116	116	11/1/2012	5/2/2014	19	172	530.41	1.95
Scraper	1	Diesel	500	295	295	11/1/2012	5/2/2014	19	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/1/2012	5/2/2014	19	172	530.47	1.95
Grader	1	Diesel	540	319	319	11/1/2012	5/2/2014	19	172	530.47	1.95
Roller	2	Diesel	147	87	173	11/1/2012	5/2/2014	19	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	11/1/2012	5/2/2014	19	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/1/2012	5/2/2014	19	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/1/2012	5/2/2014	19	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/1/2012	5/2/2014	19	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/1/2012	5/2/2014	19	172	589.74	2.17
Construction Equipment Total	**9**										
PB 33 - Widening & FDR											
Wheel Loader	2	Diesel	197	116	232	8/1/2013	8/2/2014	13	172	530.41	1.95
Scraper	2	Diesel	500	295	590	8/1/2013	8/2/2014	13	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	8/1/2013	8/2/2014	13	172	530.47	1.95
Grader	2	Diesel	540	319	637	8/1/2013	8/2/2014	13	172	530.47	1.95
Roller	4	Diesel	147	87	347	8/1/2013	8/2/2014	13	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	8/1/2013	8/2/2014	13	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	8/1/2013	8/2/2014	13	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	8/1/2013	8/2/2014	13	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	8/1/2013	8/2/2014	13	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	8/1/2013	8/2/2014	13	172	589.74	2.17
Construction Equipment Total	**16**										

Guam Haul Road
Construction Emission Analysis
Central 2- Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP $^{(2)}$ hp/hr	Average Equipment Usage of HP $^{(2)}$ hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors $^{(3)}$	
								Months	(4) hrs/month	CO2 g/hp-hr	SO2 g/hp-hr
PTG36 - Widening											
WL	1	Diesel	197	116	116	10/1/2011	9/10/2013	24	172	530.41	1.95
Scraper	1	Diesel	500	295	295	10/1/2011	9/10/2013	24	172	530.47	1.95
Grader	1	Diesel	540	319	319	10/1/2011	9/10/2013	24	172	530.47	1.95
Roller	1	Diesel	147	87	87	10/1/2011	9/10/2013	24	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	10/1/2011	9/10/2013	24	172	589.74	2.17
Paving Machine	2	Diesel	130	77	153	10/1/2011	9/10/2013	24	172	530.41	1.95
Paving Machine	0	Diesel	130	77	0	10/1/2011	9/10/2013	24	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/1/2011	9/10/2013	24	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/1/2011	9/10/2013	24	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/1/2011	9/10/2013	24	172	589.74	2.17
Construction Equipment Total	**8**										
PTG44 - FDR & Widening											
Wheel Loader	2	Diesel	197	116	232	11/28/2012	1/30/2013	3	172	530.41	1.95
Scraper	2	Diesel	500	295	590	11/28/2012	1/30/2013	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/28/2012	1/30/2013	3	172	530.47	1.95
Grader	2	Diesel	540	319	637	11/28/2012	1/30/2013	3	172	530.47	1.95
Roller	4	Diesel	147	87	347	11/28/2012	1/30/2013	3	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	11/28/2012	1/30/2013	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/28/2012	1/30/2013	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	589.74	2.17
Construction Equipment Total	**16**										
PTG46 - FDR & Widening											
Wheel Loader	2	Diesel	197	116	232	11/29/2012	1/30/2013	3	172	530.41	1.95
Scraper	2	Diesel	500	295	590	11/29/2012	1/30/2013	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	530.47	1.95
Grader	2	Diesel	540	319	637	11/29/2012	1/30/2013	3	172	530.47	1.95
Roller	4	Diesel	147	87	347	11/29/2012	1/30/2013	3	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	11/29/2012	1/30/2013	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/29/2012	1/30/2013	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Construction Equipment Total	**16**										
PTG 47 - Widening											
WL	1	Diesel	197	116	116	11/28/2012	1/30/2013	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	11/28/2012	1/30/2013	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	11/28/2012	1/30/2013	3	172	530.47	1.95
Roller	1	Diesel	147	87	87	11/28/2012	1/30/2013	3	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	11/28/2012	1/30/2013	3	172	589.74	2.17
Paving Machine	2	Diesel	130	77	153	11/28/2012	1/30/2013	3	172	530.41	1.95
Paving Machine	0	Diesel	130	77	0	11/28/2012	1/30/2013	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	589.74	2.17
Construction Equipment Total	**8**										
PB48 - Widening & FDR											
Wheel Loader	2	Diesel	197	116	232	11/28/2013	1/29/2014	3	172	530.41	1.95
Scraper	2	Diesel	500	295	590	11/28/2013	1/29/2014	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/28/2013	1/29/2014	3	172	530.47	1.95
Grader	2	Diesel	540	319	637	11/28/2013	1/29/2014	3	172	530.47	1.95
Roller	4	Diesel	147	87	347	11/28/2013	1/29/2014	3	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	11/28/2013	1/29/2014	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/28/2013	1/29/2014	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	589.74	2.17
Construction Equipment Total	**16**										
Cold Planer	0	Diesel	545	322	0	9/1/2012	6/3/2013	10	172	530.47	1.95
Roller	0	Gasoline	147	87	0	9/2/2012	6/3/2013	10	172	530.41	1.95
Back hoe	0	Electric	97	57	0	9/2/2012	6/3/2013	10	172	589.74	2.17
Paving Machine	0	Electric	130	77	0	9/2/2012	6/3/2013	10	172	530.41	1.95
Construction Equipment Total	**0**										
PB49 - Widening & FDR											
Wheel Loader	2	Diesel	197	116	232	10/29/2014	12/31/2014	3	172	530.41	1.95
Scraper	2	Diesel	500	295	590	10/29/2014	12/31/2014	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	10/29/2014	12/31/2014	3	172	530.47	1.95
Grader	2	Diesel	540	319	637	10/29/2014	12/31/2014	3	172	530.47	1.95
Roller	4	Diesel	147	87	347	10/29/2014	12/31/2014	3	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	10/29/2014	12/31/2014	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/29/2014	12/31/2014	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	589.74	2.17
Construction Equipment Total	**16**										
PB49A - Widening & FDR											
Wheel Loader	2	Diesel	197	116	232	10/29/2014	12/31/2014	3	172	530.41	1.95
Scraper	2	Diesel	500	295	590	10/29/2014	12/31/2014	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	10/29/2014	12/31/2014	3	172	530.47	1.95
Grader	2	Diesel	540	319	637	10/29/2014	12/31/2014	3	172	530.47	1.95
Roller	4	Diesel	147	87	347	10/29/2014	12/31/2014	3	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	10/29/2014	12/31/2014	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	10/29/2014	12/31/2014	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	589.74	2.17

Guam Haul Road
Construction Emission Analysis
Central 2- Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP $^{(2)}$ hp/hr	Average Equipment Usage of HP $^{(2)}$ hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration		Diesel Pollutant Emission Factors $^{(3)}$	
								Months	(4) hrs/month	CO2 g/hp-hr	SO2 g/hp-hr
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	10/29/2014	12/31/2014	3	172	589.74	2.17
Construction Equipment Total	**16**										
PB63 - FDR											
Wheel Loader	1	Diesel	197	116	116	11/28/2012	1/30/2013	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	11/28/2012	1/30/2013	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/28/2012	1/30/2013	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	11/28/2012	1/30/2013	3	172	530.47	1.95
Roller	2	Diesel	147	87	173	11/28/2012	1/30/2013	3	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	11/28/2012	1/30/2013	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/28/2012	1/30/2013	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/28/2012	1/30/2013	3	172	589.74	2.17
Construction Equipment Total	**9**										
PB74 - FDR											
Wheel Loader	1	Diesel	197	116	116	11/28/2013	1/29/2014	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	11/28/2013	1/29/2014	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/28/2013	1/29/2014	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	11/28/2013	1/29/2014	3	172	530.47	1.95
Roller	2	Diesel	147	87	173	11/28/2013	1/29/2014	3	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	11/28/2013	1/29/2014	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/28/2013	1/29/2014	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/28/2013	1/29/2014	3	172	589.74	2.17
Construction Equipment Total	**9**										
PB113 - Widening											
Wheel Loader	1	Diesel	197	116	116	9/28/2013	11/29/2013	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	9/28/2013	11/29/2013	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	9/28/2013	11/29/2013	3	172	530.47	1.95
Roller	2	Diesel	147	87	173	9/28/2013	11/29/2013	3	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	9/28/2013	11/29/2013	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	9/28/2013	11/29/2013	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	9/28/2013	11/29/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/28/2013	11/29/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/28/2013	11/29/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/28/2013	11/29/2013	3	172	589.74	2.17
Construction Equipment Total	**8**										
PB124 - Widening											
Wheel Loader	1	Diesel	197	116	116	2/28/2013	1/30/2015	24	172	530.41	1.95
Scraper	1	Diesel	500	295	295	2/28/2013	1/30/2015	24	172	530.47	1.95
Grader	1	Diesel	540	319	319	2/28/2013	1/30/2015	24	172	530.47	1.95
Roller	2	Diesel	147	87	173	2/28/2013	1/30/2015	24	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	2/28/2013	1/30/2015	24	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	2/28/2013	1/30/2015	24	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	2/28/2013	1/30/2015	24	172	589.74	2.17
Paving Machine	0	Diesel	130	77	0	2/28/2013	1/30/2015	24	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	2/28/2013	1/30/2015	24	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	2/28/2013	1/30/2015	24	172	589.74	2.17
Construction Equipment Total	**8**										

Guam Haul Road
Construction Emission Analysis
Apra Harbor-Equipment

Construction Equipment	**Number of Units**	**Type of Fuel**	**Equipment Rated HP (2)**	**Average Equipment Usage of HP (2)**	**Total Utilized Equipment HP (all units)**	**Start Date**	**End Date**	**Construction Activity Duration**		**Diesel Pollutant Emission Factors (3)**	
			hp/hr	**hrs**	**hp/hr**			**Months**	**(4) hrs/month**	**CO2 g/hp-hr**	**SO2 g/hp-hr**
PTG4 - Widening & FDR											
Wheel Loader	2	Diesel	197	116	232	1/3/2011	9/28/2011	9	172	530.41	1.95
Scraper	2	Diesel	500	295	590	1/3/2011	9/28/2011	9	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	1/3/2011	9/28/2011	9	172	530.47	1.95
Grader	2	Diesel	540	319	637	1/3/2011	9/28/2011	9	172	530.47	1.95
Roller	4	Diesel	147	87	347	1/3/2011	9/28/2011	9	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	1/3/2011	9/28/2011	9	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	1/3/2011	9/28/2011	9	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	1/3/2011	9/28/2011	9	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	1/3/2011	9/28/2011	9	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	1/3/2011	9/28/2011	9	172	589.74	2.17
Construction Equipment Total	**16**										
PTG5 - Widening & FDR											
Wheel Loader	2	Diesel	197	116	232	1/8/2011	10/3/2011	10	172	530.41	1.95
Scraper	2	Diesel	500	295	590	1/8/2011	10/3/2011	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	1/8/2011	10/3/2011	10	172	530.47	1.95
Grader	2	Diesel	540	319	637	1/8/2011	10/3/2011	10	172	530.47	1.95
Roller	4	Diesel	147	87	347	1/8/2011	10/3/2011	10	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	1/8/2011	10/3/2011	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	1/8/2011	10/3/2011	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	1/8/2011	10/3/2011	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	1/8/2011	10/3/2011	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	1/8/2011	10/3/2011	10	172	589.74	2.17
Construction Equipment Total	**16**										
PB 24 - FDR											
Wheel Loader	1	Diesel	197	116	116	9/2/2012	6/3/2013	10	172	530.41	1.95
Scraper	1	Diesel	500	295	295	9/2/2012	6/3/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	9/2/2012	6/3/2013	10	172	530.47	1.95
Grader	1	Diesel	540	319	319	9/2/2012	6/3/2013	10	172	530.47	1.95
Roller	2	Diesel	147	87	173	9/2/2012	6/3/2013	10	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	9/2/2012	6/3/2013	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	9/2/2012	6/3/2013	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	589.74	2.17
Construction Equipment Total	**9**										
PB50 - FDR											
Wheel Loader	1	Diesel	197	116	116	11/29/2012	1/30/2013	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	11/29/2012	1/30/2013	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	530.47	1.95
Roller	2	Diesel	147	87	173	11/29/2012	1/30/2013	3	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	11/29/2012	1/30/2013	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/29/2012	1/30/2013	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Construction Equipment Total	**9**										

Guam Haul Road
Construction Emission Analysis
South- Equipment

Construction Equipment	Number of Units	Type of Fuel	Equipment Rated HP (2) hp/hr	Average Equipment Usage of HP (2) hrs	Total Utilized Equipment HP (all units) hp/hr	Start Date	End Date	Construction Activity Duration Months	(4) hrs/month	Diesel Pollutant Emission Factors (3) CO2 g/hp-hr	SO2 g/hp-hr
PB25 - Widening & FDR											
Wheel Loader	2	Diesel	197	116	232	9/2/2012	6/3/2013	10	172	530.41	1.95
Scraper	2	Diesel	500	295	590	9/2/2012	6/3/2013	10	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	9/2/2012	6/3/2013	10	172	530.47	1.95
Grader	2	Diesel	540	319	637	9/2/2012	6/3/2013	10	172	530.47	1.95
Roller	4	Diesel	147	87	347	9/2/2012	6/3/2013	10	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	9/2/2012	6/3/2013	10	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	9/2/2012	6/3/2013	10	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/2/2012	6/3/2013	10	172	589.74	2.17
Construction Equipment Total	**16**										
PB27 - Widening & FDR											
Wheel Loader	2	Diesel	197	116	232	9/2/2012	5/1/2013	9	172	530.41	1.95
Scraper	2	Diesel	500	295	590	9/2/2012	5/1/2013	9	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	9/2/2012	5/1/2013	9	172	530.47	1.95
Grader	2	Diesel	540	319	637	9/2/2012	5/1/2013	9	172	530.47	1.95
Roller	4	Diesel	147	87	347	9/2/2012	5/1/2013	9	172	530.41	1.95
Back hoe	4	Diesel	97	57	229	9/2/2012	5/1/2013	9	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	9/2/2012	5/1/2013	9	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	9/2/2012	5/1/2013	9	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/2/2012	5/1/2013	9	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	9/2/2012	5/1/2013	9	172	589.74	2.17
Construction Equipment Total	**16**										
PB52 - FDR											
Wheel Loader	1	Diesel	197	116	116	11/29/2012	1/30/2013	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	11/29/2012	1/30/2013	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	530.47	1.95
Roller	2	Diesel	147	87	173	11/29/2012	1/30/2013	3	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	11/29/2012	1/30/2013	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/29/2012	1/30/2013	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Construction Equipment Total	**9**										
PB50 - FDR											
Wheel Loader	1	Diesel	197	116	116	11/29/2012	1/30/2013	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	11/29/2012	1/30/2013	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	530.47	1.95
Roller	2	Diesel	147	87	173	11/29/2012	1/30/2013	3	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	11/29/2012	1/30/2013	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/29/2012	1/30/2013	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Construction Equipment Total	**9**										
PB52 - FDR											
Wheel Loader	1	Diesel	197	116	116	11/29/2012	1/30/2013	3	172	530.41	1.95
Scraper	1	Diesel	500	295	295	11/29/2012	1/30/2013	3	172	530.47	1.95
Reclaimer	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	530.47	1.95
Grader	1	Diesel	540	319	319	11/29/2012	1/30/2013	3	172	530.47	1.95
Roller	2	Diesel	147	87	173	11/29/2012	1/30/2013	3	172	530.41	1.95
Back hoe	2	Diesel	97	57	114	11/29/2012	1/30/2013	3	172	589.74	2.17
Paving Machine	1	Diesel	130	77	77	11/29/2012	1/30/2013	3	172	530.41	1.95
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Wheel Loader	0	Diesel	0	0	0	11/29/2012	1/30/2013	3	172	589.74	2.17
Construction Equipment Total	**9**										
PTG 26 - Overlay											
Cold Planer	1	Diesel	545	322	322	8/3/2012	5/2/2013	10	172	530.47	1.95
Roller	2	Gasoline	147	87	173	8/3/2012	5/2/2013	10	172	530.41	1.95
Back hoe	1	Electric	97	57	57	8/3/2012	5/2/2013	10	172	589.74	2.17
Paving Machine	1	Electric	130	77	77	8/3/2012	5/2/2013	10	172	530.41	1.95
Construction Equipment Total	**5**										

GUAM
AIR QUALITY CONSTRUCTION ANALYSIS
CO2 Schedule

CO_2 Summary Table

Year	North	Central	Central 2	Apra	South	Central Total	All Locations
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	944.59	0.00	0.00	0.00	944.59	1889.17
2011	3665.49	4282.16	331.05	4199.75	0.00	4613.20	17091.65
2012	3699.35	6395.81	2072.02	703.38	2042.24	8467.83	23380.63
2013	3881.26	13239.94	3467.70	1166.02	3309.91	16707.64	41772.47
2014	1896.00	6965.54	2714.91	0.00	0.00	9680.45	21256.90
2015	1106.00	1235.22	111.36	0.00	0.00	1346.58	3799.16
2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2018	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum Yearly Value	**3881.26**	**13239.94**	**3467.70**	**4199.75**	**3309.91**	**16707.64**	**41772.47**
Year	**2013.00**	**2013.00**	**2013.00**	**2011.00**	**2013.00**	**2013.00**	**2013.00**
Highest month from highest year - 2009-2015	**422.889**	**1732.440**	**858.186**	**494.088**	**956.734**	**2590.626**	**6880.118**
Highest Monthly Value - from all years	**1462.176**	**1732.440**	**858.186**	**494.088**	**956.734**	**2590.626**	**6880.118**
Year highest monthly value occurs	**0.00**	86.62	42.91	24.70	47.84	129.53	344.01

GUAM
AIR QUALITY CONSTRUCTION ANALYSIS
SO2 Schedule

SO_2 Summary Table

Year	North	Central	Central 2	Apra	South	Central Total	All Locations
2009	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2010	0.000	3.473	0.000	0.000	0.000	3.473	6.947
2011	13.478	15.746	1.217	15.443	0.000	16.963	62.848
2012	14.094	24.009	7.619	3.241	8.165	31.629	88.757
2013	15.254	49.667	12.751	5.106	12.990	62.419	158.187
2014	6.972	25.613	9.983	0.000	0.000	35.596	78.164
2015	4.067	4.542	0.409	0.000	0.000	4.952	13.970
2016	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2017	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2018	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2019	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2020	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2021	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2022	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Maximum Yearly Value	**15.254**	**49.6674**	**12.751**	**15.443**	**12.9896**	**62.419**	**158.187**
Year	**2013**	**2013**	**2013**	**2011**	**2013**	**2013**	**2013**
Highest month from highest year - 2009-2015	**1.719**	**6.534**	**3.156**	**1.817**	**3.682**	**9.690**	**26.118**
Highest Monthly Value - from all years	**5.377**	**6.534**	**3.156**	**1.817**	**3.682**	**9.690**	**26.118**
Daily	0.27	0.33	0.16	0.09	0.18	0.48	1.31

Guam Haul Road
Equipment Size and Load Factors

Construction Equipment	Equipment Rated HP (2) hp/hr	Average Equipment HP Avg. load factor applied to rated HP hp/hr	Average Daily Load Factor
Back hoe	97	57	0.59
Cold Planer	545	322	0.59
Grader	540	319	0.59
Paving Machine	130	77	0.59
Reclaimer	540	319	0.59
Roller	147	87	0.59
Scraper	500	295	0.59
Wheel Loader	197	116	0.59

Parsons Transportation Group/Parsons Brinckerhoff Team

Air Quality Impact Analysis Data

CAL3QHC Input and Output Files

Site 1

```
Site 1 Existing AM - 1EXAM.DAT          60.0321.0.0000.000240.30480000    1
1
SE MID S                  650.     1369.       5.0
SE 164 S                  792.     1375.       5.0
SE 82 S                   874.     1379.       5.0
SE CNR                    960.     1383.       5.0
SE 82 E                   947.     1304.       5.0
NE 82 E                  1016.     1306.       5.0
NE CNR                   1022.     1387.       5.0
NE 82 N                  1094.     1391.       5.0
NE 164 N                 1175.     1396.       5.0
NE MID N                 1298.     1405.       5.0
NW MID N                 1318.     1496.       5.0
NW 164 N                 1218.     1493.       5.0
NW 82 N                  1136.     1488.       5.0
NW CNR                   1054.     1503.       5.0
NW 82 W                  1043.     1586.       5.0
NW 164 W                 1057.     1667.       5.0
NW MID W                 1083.     1784.       5.0
SW MID W                 1024.     1777.       5.0
SW 164 W                  994.     1650.       5.0
SW 82 W                   975.     1570.       5.0
SW CNR                    935.     1495.       5.0
SW 82 S                   853.     1474.       5.0
SW 164 S                  771.     1470.       5.0
SW MID S                  631.     1463.       5.0
Site 1 Existing AM                       24  1   0
  1
NB        Rt1 aprch AG     3.  1362.   559.  1390.     72515.5  0.  56   30.
  1
NB        Rt1 th+rt AG   559.  1390.  1016.  1410.     58515.5  0.  56   30.
  2
NB        Rt1 th+rt AG   936.  1407.   568.  1390.      0.  36   3
       167        57       2.0  585  141.4 1679 1 3
  1
NB        Rt1 left  AG   552.  1408.  1013.  1432.     14015.5  0.  32   30.
  2
NB        Rt1 left  AG   934.  1428.   569.  1409.      0.  12   1
       167       145       2.0  140  141.4 1752 1 3
  1
NB        Rt1 departAG  1017.  1410.  1345.  1432.     69015.5  0.  56   30.
  1
NB        Rt1 departAG  1345.  1432.  1632.  1463.     69015.5  0.  44   30.
  1
NB        Rt1 departAG  1632.  1463.  1999.  1510.     69015.5  0.  44   30.
  1
SB        Rt1 aprch AG  1995.  1546.  1680.  1502.    152015.5  0.  44   30.
  1
SB        Rt1 aprch AG  1680.  1502.  1429.  1473.    152015.5  0.  44   30.
  1
SB        Rt1 aprch AG  1429.  1473.  1228.  1465.    152015.5  0.  44   30.
  1
SB        Rt1 th+rt AG  1228.  1465.  1017.  1455.    150015.5  0.  56   30.
  2
SB        Rt1 th+rt AG  1066.  1457.  1221.  1465.      0.  36   3
       167        72       2.0 1500  141.4 1668 1 3
```

```
  1
SB        Rt1 left  AG  1165.  1444.  1020.  1436.      2015.5  0.  32   30.
  2
SB        Rt1 left  AG  1068.  1439.  1161.  1444.      0.  12   1
       167       160       2.0   20  141.4 1752 1 3
  1
SB        Rt1 departAG  1017.  1455.     2.  1403.    176015.5  0.  56   30.
  1
EB        Rt28 aprchAG  1191.  2428.  1007.  1603.     39515.5  0.  32   30.
  1
EB        Rt28 aprchAG  1007.  1603.   961.  1435.     39515.5  0.  44   30.
  2
EB        Rt28 aprchAG   979.  1500.  1000.  1578.      0.  24   2
       167       147       2.0  395  141.4 1688 1 3
  1
EB        Rt28 deparAG   987.  1425.   978.  1298.      4515.5  0.  32   30.
  1
WB        Rt28 aprchAG   986.  1300.   997.  1445.      8515.5  0.  44   30.
  2
WB        Rt28 aprchAG   993.  1391.   986.  1306.      0.  24   2
       167       152       2.0   85  141.4 1694 1 3
  1
WB        Rt28 deparAG   999.  1445.  1024.  1615.     23015.5  0.  32   30.
  1
WB        Rt28 deparAG  1024.  1615.  1201.  2425.     23015.5  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 1 Existing AM - 1EXAM.DAT                      RUN: Site 1 Existing AM
      DATE: 05/08/2009   TIME: 17:42:17.24


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =    .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt1 aprch *      3.0    1362.0     559.0    1390.0 *     557.     87. AG    725.  15.5    .0 56.0
       2. NB        Rt1 th+rt *    559.0    1390.0    1016.0    1410.0 *     457.     87. AG    585.  15.5    .0 56.0
       3. NB        Rt1 th+rt *    936.0    1407.0     875.3    1404.2 *      61.    267. AG    388. 100.0    .0 36.0  .18    3.1
       4. NB        Rt1 left  *    552.0    1408.0    1013.0    1432.0 *     462.     87. AG    140.  15.5    .0 32.0
       5. NB        Rt1 left  *    934.0    1428.0     816.0    1421.9 *     118.    267. AG    329. 100.0    .0 12.0  .74    6.0
       6. NB        Rt1 depart*   1017.0    1410.0    1345.0    1432.0 *     329.     86. AG    690.  15.5    .0 56.0
       7. NB        Rt1 depart*   1345.0    1432.0    1632.0    1463.0 *     289.     84. AG    690.  15.5    .0 44.0
       8. NB        Rt1 depart*   1632.0    1463.0    1999.0    1510.0 *     370.     83. AG    690.  15.5    .0 44.0
       9. SB        Rt1 aprch *   1995.0    1546.0    1680.0    1502.0 *     318.    262. AG   1520.  15.5    .0 44.0
      10. SB        Rt1 aprch *   1680.0    1502.0    1429.0    1473.0 *     253.    263. AG   1520.  15.5    .0 44.0
      11. SB        Rt1 aprch *   1429.0    1473.0    1228.0    1465.0 *     201.    268. AG   1520.  15.5    .0 44.0
      12. SB        Rt1 th+rt *   1228.0    1465.0    1017.0    1455.0 *     211.    267. AG   1500.  15.5    .0 56.0
      13. SB        Rt1 th+rt *   1066.0    1457.0    1262.6    1467.1 *     197.     87. AG    491. 100.0    .0 36.0  .55   10.0
      14. SB        Rt1 left  *   1165.0    1444.0    1020.0    1436.0 *     145.    267. AG     20.  15.5    .0 32.0
      15. SB        Rt1 left  *   1068.0    1439.0    1088.5    1440.1 *      21.     87. AG    363. 100.0    .0 12.0  .65    1.0
      16. SB        Rt1 depart*   1017.0    1455.0       2.0    1403.0 *    1016.    267. AG   1760.  15.5    .0 56.0
      17. EB        Rt28 aprch*   1191.0    2428.0    1007.0    1603.0 *     845.    193. AG    395.  15.5    .0 32.0
      18. EB        Rt28 aprch*   1007.0    1603.0     961.0    1435.0 *     174.    195. AG    395.  15.5    .0 44.0
      19. EB        Rt28 aprch*    979.0    1500.0    1131.9    2067.9 *     588.     15. AG    668. 100.0    .0 24.0 1.22   29.9
      20. EB        Rt28 depar*    987.0    1425.0     978.0    1298.0 *     127.    184. AG     45.  15.5    .0 32.0
      21. WB        Rt28 aprch*    986.0    1300.0     997.0    1445.0 *     145.      4. AG     85.  15.5    .0 44.0
      22. WB        Rt28 aprch*    993.0    1391.0     990.1    1356.2 *      35.    185. AG    690. 100.0    .0 24.0  .38    1.8
      23. WB        Rt28 depar*    999.0    1445.0    1024.0    1615.0 *     172.      8. AG    230.  15.5    .0 32.0
      24. WB        Rt28 depar*   1024.0    1615.0    1201.0    2425.0 *     829.     12. AG    230.  15.5    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 1 Existing AM - 1EXAM.DAT                      RUN: Site 1 Existing AM
      DATE: 05/08/2009   TIME: 17:42:17.24

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 th+rt *     167       57       2.0       585       1679     141.40      1        3
       5. NB        Rt1 left  *     167      145       2.0       140       1752     141.40      1        3
      13. SB        Rt1 th+rt *     167       72       2.0      1500       1668     141.40      1        3
      15. SB        Rt1 left  *     167      160       2.0        20       1752     141.40      1        3
      19. EB        Rt28 aprch*     167      147       2.0       395       1688     141.40      1        3
      22. WB        Rt28 aprch*     167      152       2.0        85       1694     141.40      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*-------------------------------------*
      1. SE MID S             *       650.0     1369.0       5.0   *
      2. SE 164 S             *       792.0     1375.0       5.0   *
      3. SE 82 S              *       874.0     1379.0       5.0   *
      4. SE CNR               *       960.0     1383.0       5.0   *
      5. SE 82 E              *       947.0     1304.0       5.0   *
      6. NE 82 E              *      1016.0     1306.0       5.0   *
      7. NE CNR               *      1022.0     1387.0       5.0   *
      8. NE 82 N              *      1094.0     1391.0       5.0   *
      9. NE 164 N             *      1175.0     1396.0       5.0   *
     10. NE MID N             *      1298.0     1405.0       5.0   *
     11. NW MID N             *      1318.0     1496.0       5.0   *
     12. NW 164 N             *      1218.0     1493.0       5.0   *
     13. NW 82 N              *      1136.0     1488.0       5.0   *
     14. NW CNR               *      1054.0     1503.0       5.0   *
     15. NW 82 W              *      1043.0     1586.0       5.0   *
     16. NW 164 W             *      1057.0     1667.0       5.0   *
     17. NW MID W             *      1083.0     1784.0       5.0   *
     18. SW MID W             *      1024.0     1777.0       5.0   *
     19. SW 164 W             *       994.0     1650.0       5.0   *
     20. SW 82 W              *       975.0     1570.0       5.0   *
     21. SW CNR               *       935.0     1495.0       5.0   *
     22. SW 82 S              *       853.0     1474.0       5.0   *
     23. SW 164 S             *       771.0     1470.0       5.0   *
     24. SW MID S             *       631.0     1463.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 1 Existing AM - 1EXAM.DAT                      RUN: Site 1 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .8    .8   1.9   1.7   1.4   1.8   2.2   2.5   1.9   1.0    .0    .1    .5   1.2   2.0   2.3   2.5    .4    .6    .7
```

```
   5.  *    .8    .9   2.1   2.0   1.5   1.6   2.0   2.3   1.8    .8    .0    .1    .3   1.1   1.8   2.2   2.3    .8   1.0   1.2
  10.  *    .8   1.0   2.4   2.1   1.6   1.4   1.8   2.0   1.6    .8    .0    .0    .2    .9   1.5   1.9   1.9   1.2   1.5   1.9
  15.  *    .8   1.1   2.8   2.2   1.6   1.1   1.6   1.9   1.5    .8    .0    .0    .1    .6   1.2   1.4   1.5   1.6   1.9   2.3
  20.  *    .9   1.3   3.0   2.2   1.6    .9   1.3   1.7   1.6    .8    .0    .0    .0    .3    .9   1.1   1.2   1.9   2.4   2.7
  25.  *   1.0   1.4   3.3   1.8   1.4    .9   1.3   1.7   1.7    .8    .0    .0    .1    .2    .5    .8    .7   2.2   2.7   3.0
  30.  *   1.1   1.7   3.3   1.6   1.4   1.0   1.4   1.7   1.6    .8    .0    .0    .1    .1    .2    .3    .4   2.4   2.9   3.2
  35.  *   1.2   1.7   3.2   1.3   1.4    .9   1.5   1.8   1.6    .7    .0    .0    .1    .0    .1    .2    .2   2.5   2.9   3.2
  40.  *   1.3   2.0   3.0   1.3   1.3    .8   1.6   1.8   1.6    .9    .0    .0    .1    .0    .0    .1    .1   2.5   2.9   3.1
  45.  *   1.5   2.1   3.1   1.3   1.0    .9   1.7   1.8   1.5    .9    .0    .0    .1    .0    .0    .0    .0   2.5   2.8   3.0
  50.  *   1.5   2.2   3.0   1.4   1.1    .9   1.7   1.8   1.4    .9    .0    .0    .1    .0    .0    .0    .0   2.4   2.6   2.9
  55.  *   1.6   2.4   2.7   1.7   1.0    .7   2.0   1.8   1.4   1.1    .0    .0    .1    .0    .0    .0    .0   2.3   2.5   2.8
  60.  *   1.5   2.1   2.8   2.1   1.0    .7   1.9   1.7   1.4   1.0    .1    .0    .2    .0    .0    .0    .0   2.2   2.4   2.6
  65.  *   1.7   2.1   2.7   2.2    .8    .6   1.8   1.7   1.4   1.3    .2    .1    .3    .0    .0    .0    .0   2.2   2.3   2.5
  70.  *   1.7   2.1   2.4   2.3    .7    .6   1.9   1.6   1.2   1.2    .3    .2    .5    .0    .0    .0    .0   2.1   2.2   2.4
  75.  *   1.5   2.1   2.4   2.4    .5    .6   1.8   1.4   1.2   1.2    .5    .4    .8    .3    .0    .0    .0   2.0   2.2   2.3
  80.  *   1.5   1.8   2.0   2.3    .4    .4   1.5   1.3    .9   1.0    .6    .6   1.2    .5    .0    .0    .0   2.0   2.2   2.3
  85.  *   1.3   1.5   1.9   2.3    .0    .0   1.2   1.1    .8    .9   1.0   1.0   1.7    .8    .0    .0    .0   2.0   2.2   2.3
  90.  *   1.2   1.2   1.4   2.1    .0    .0    .9    .8    .7    .7   1.1   1.5   2.2   1.3    .2    .0    .0   2.0   2.2   2.7
  95.  *    .8    .9   1.0   1.8    .0    .0    .5    .4    .5    .4   1.3   1.6   2.7   1.7    .3    .1    .0   2.0   2.4   2.7
 100.  *    .2    .4    .8   1.6    .0    .0    .3    .2    .2    .2   1.4   1.9   2.8   1.8    .4    .2    .0   2.0   2.3   2.8
 105.  *    .2    .3    .4   1.6    .0    .0    .2    .2    .2    .2   1.3   2.0   3.0   2.0    .4    .2    .1   2.1   2.3   3.0
 110.  *    .1    .2    .3   1.5    .0    .0    .1    .1    .1    .1   1.2   2.0   3.1   2.0    .7    .2    .2   2.2   2.4   3.1
 115.  *    .1    .1    .2   1.4    .0    .0    .1    .1    .1    .1   1.1   2.2   2.9   2.0    .8    .2    .2   2.1   2.5   3.0
 120.  *    .1    .1    .2   1.3    .0    .0    .1    .1    .1    .1   1.1   2.3   3.0   2.2    .7    .3    .1   2.1   2.6   3.2
 125.  *    .1    .1    .1   1.1    .0    .0    .1    .1    .1    .1   1.1   2.3   2.9   2.0    .8    .2    .1   2.2   2.7   3.2
 130.  *    .0    .0    .0   1.0    .0    .0    .1    .1    .1    .1   1.0   2.3   2.8   1.9    .9    .4    .2   2.2   2.8   3.1
 135.  *    .0    .0    .0    .8    .0    .0    .1    .0    .0    .0   1.0   2.3   2.6   2.0   1.0    .5    .1   2.2   2.9   3.1
 140.  *    .0    .0    .0    .7    .0    .0    .0    .0    .0    .0   1.0   2.3   2.6   1.9    .9    .6    .2   2.4   2.7   3.0
 145.  *    .0    .0    .0    .5    .0    .0    .0    .0    .0    .0   1.0   2.3   2.4   1.8    .9    .6    .2   2.5   2.9   3.0
 150.  *    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0    .9   2.4   2.4   1.7    .9    .6    .3   2.7   3.1   3.0
 155.  *    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0    .9   2.3   2.3   1.8    .8    .6    .5   2.7   3.1   3.0
 160.  *    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0    .9   2.4   2.3   1.7    .8    .6    .5   2.8   3.1   3.1
 165.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0    .9   2.3   2.3   1.5    .7    .6    .4   2.9   3.0   2.9
 170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .9   2.3   2.4   1.3    .7    .6    .5   2.9   3.0   2.8
 175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   1.0   2.4   2.5   1.2    .6    .6    .6   2.8   2.8   2.5
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   1.0   2.3   2.5   1.2    .6    .8    .7   2.6   2.7   2.3
 185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .9   2.4   2.3   1.0    .8    .8   1.0   2.4   2.5   2.1
 190.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .9   2.3   2.3    .9    .7   1.1   1.5   1.8   2.1   1.8
 195.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .9   2.3   2.3    .9    .9   1.4   1.8   1.7   1.6   1.6
 200.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0    .9   2.3   2.3   1.0   1.1   1.9   2.0   1.4   1.4   1.4
 205.  *    .0    .0    .0    .0    .0    .0    .4    .0    .0    .0    .9   2.4   2.5   1.1   1.5   2.2   2.4   1.1   1.2   1.2
1
                                                                                                                 PAGE  4
      JOB: Site 1 Existing AM - 1EXAM.DAT                       RUN: Site 1 Existing AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .5    .0    .0    .0   1.1   2.4   2.7   1.1   1.6   2.4   2.9    .7    .9   1.1
 215.  *    .0    .0    .0    .0    .0    .0    .7    .0    .0    .0   1.1   2.5   2.7   1.1   1.8   2.6   3.1    .5    .7   1.0
 220.  *    .0    .0    .0    .0    .0    .0    .9    .1    .1    .1   1.2   2.6   2.8   1.1   2.1   2.7   2.8    .3    .6    .8
 225.  *    .0    .0    .0    .0    .0    .0   1.0    .1    .1    .1   1.4   2.8   2.9   1.2   2.2   2.6   2.7    .2    .5    .7
 230.  *    .0    .1    .1    .1    .0    .0   1.2    .2    .1    .1   1.5   2.9   3.0   1.5   2.3   2.6   2.7    .2    .4    .6
 235.  *    .1    .1    .1    .1    .0    .0   1.4    .2    .1    .1   1.8   3.1   3.0   1.5   2.4   2.4   2.6    .2    .4    .6
 240.  *    .1    .1    .1    .1    .0    .0   1.5    .3    .1    .1   2.0   3.2   3.1   1.7   2.3   2.4   2.5    .2    .3    .6
 245.  *    .1    .1    .1    .1    .0    .0   1.6    .3    .2    .2   2.4   3.4   3.1   1.8   2.3   2.3   2.4    .2    .4    .6
 250.  *    .2    .1    .2    .4    .0    .0   1.9    .6    .4    .3   2.7   3.5   3.0   1.7   2.3   2.1   2.2    .1    .3    .6
 255.  *    .3    .4    .3    .5    .0    .0   1.9    .8    .5    .5   2.6   3.4   2.7   1.9   2.1   2.1   2.2    .1    .2    .5
 260.  *    .6    .6    .6    .9    .0    .1   2.1   1.1    .9   1.0   2.7   3.0   2.5   1.7   2.0   2.0   2.2    .0    .1    .4
 265.  *    .7    .7    .8   1.3    .1    .1   2.3   1.5   1.1   1.2   2.5   2.5   2.4   1.6   1.8   2.0   2.1    .0    .1    .2
 270.  *   1.0    .9    .9   1.6    .3    .3   2.6   1.7   1.3   1.7   1.9   2.2   1.9   1.2   1.7   1.9   2.1    .0    .0    .1
 275.  *   1.1   1.0   1.1   2.0    .4    .4   2.7   1.6   1.5   1.9   1.3   1.5   1.4   1.2   1.7   1.9   2.1    .0    .0    .1
 280.  *   1.1   1.1   1.2   2.2    .5    .5   2.6   1.7   1.8   1.9   1.2   1.2   1.2   1.1   1.6   1.9   2.1    .0    .0    .0
 285.  *   1.1   1.2   1.5   2.4    .5    .6   2.4   1.6   1.9   2.0    .8   1.0   1.0   1.1   1.6   1.9   2.1    .0    .0    .0
 290.  *   1.2   1.1   1.3   2.4    .5    .7   2.4   1.5   1.8   2.1    .6    .8    .9   1.2   1.7   1.9   2.1    .0    .0    .0
 295.  *   1.1   1.2   1.3   2.4    .5    .7   2.0   1.4   1.8   2.3    .4    .5    .7   1.1   1.7   1.9   2.1    .0    .0    .0
 300.  *   1.1   1.1   1.3   2.4    .6    .9   1.7   1.4   2.0   2.2    .3    .5    .7   1.1   1.7   1.9   2.1    .0    .0    .0
 305.  *   1.0   1.1   1.4   2.3    .7   1.0   1.4   1.4   2.0   2.1    .3    .5    .7   1.1   1.7   1.9   2.1    .0    .0    .0
 310.  *    .9   1.1   1.4   2.2    .6   1.0   1.5   1.6   2.2   2.0    .3    .5    .7   1.2   1.6   1.9   2.1    .0    .0    .0
 315.  *    .9   1.0   1.4   1.9    .7   1.1   1.3   1.5   2.1   1.9    .4    .5    .7   1.2   1.6   1.9   2.1    .0    .0    .0
 320.  *    .9    .9   1.4   1.7    .8   1.2   1.1   1.8   2.1   1.9    .4    .5    .7   1.2   1.6   1.9   2.1    .0    .0    .0
 325.  *    .9    .8   1.3   1.5    .9   1.3   1.1   1.8   2.2   1.8    .3    .6    .8   1.2   1.8   2.0   2.2    .0    .0    .0
 330.  *    .9    .8   1.4   1.3    .9   1.2   1.2   2.0   2.1   1.5    .3    .5    .8   1.3   2.0   2.1   2.3    .0    .0    .0
 335.  *    .8    .8   1.4   1.2    .9   1.4   1.4   1.9   2.1   1.3    .3    .5    .7   1.4   2.0   2.1   2.4    .0    .0    .0
 340.  *    .8    .8   1.4   1.2    .9   1.5   1.6   2.1   2.1   1.2    .2    .4    .7   1.3   2.1   2.3   2.5    .0    .0    .0
 345.  *    .8    .8   1.5   1.3   1.0   1.5   1.8   2.3   2.2   1.1    .2    .4    .7   1.3   2.0   2.4   2.6    .0    .1    .1
 350.  *    .8    .8   1.6   1.4   1.1   1.5   1.9   2.5   2.2   1.1    .1    .3    .7   1.3   2.0   2.4   2.6    .1    .1    .2
 355.  *    .8    .8   1.7   1.4   1.0   1.6   2.1   2.5   2.0   1.0    .1    .2    .6   1.3   2.0   2.4   2.6    .3    .4    .4
 360.  *    .8    .8   1.9   1.7   1.4   1.8   2.2   2.5   1.9   1.0    .0    .1    .5   1.2   2.0   2.3   2.5    .4    .6    .7
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.7   2.4   3.3   2.4   1.6   1.8   2.7   2.5   2.2   2.3   2.7   3.5   3.1   2.2   2.4   2.7   3.1   2.9   3.1   3.2
 DEGR. *   65    55    30    75    10     0   275     0   310   295   250   250   110   120   235   220   215   165   150    30

1
                                                                                                                 PAGE  5
      JOB: Site 1 Existing AM - 1EXAM.DAT                       RUN: Site 1 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
   0.  *    .3    .0    .0    .0
   5.  *    .6    .1    .0    .0
  10.  *    .8    .1    .0    .0
  15.  *   1.2    .3    .1    .0
```

```
  20.  *   1.6    .5    .1    .0
  25.  *   1.9    .7    .3    .1
  30.  *   2.0    .9    .4    .2
  35.  *   2.0   1.0    .6    .3
  40.  *   1.9   1.0    .7    .3
  45.  *   1.8   1.0    .6    .4
  50.  *   1.8    .9    .6    .4
  55.  *   1.7    .9    .6    .5
  60.  *   1.6   1.0    .7    .6
  65.  *   1.5    .9    .8    .6
  70.  *   1.5   1.1    .9    .7
  75.  *   1.4   1.3   1.0   1.0
  80.  *   1.6   1.5   1.3   1.3
  85.  *   1.7   1.9   1.7   1.6
  90.  *   1.9   2.0   2.0   1.9
  95.  *   2.1   2.0   2.2   2.0
 100.  *   2.1   2.2   2.2   2.0
 105.  *   2.1   2.0   2.3   1.9
 110.  *   1.9   2.0   2.4   1.8
 115.  *   1.5   2.0   2.1   1.7
 120.  *   1.4   2.2   2.0   1.5
 125.  *   1.1   2.1   2.0   1.3
 130.  *   1.3   2.2   1.8   1.2
 135.  *   1.2   2.1   1.6   1.2
 140.  *   1.3   2.0   1.4   1.1
 145.  *   1.2   2.0   1.3   1.1
 150.  *   1.1   2.0   1.2   1.1
 155.  *   1.1   1.8   1.1   1.0
 160.  *   1.2   1.7   1.0   1.0
 165.  *   1.3   1.7   1.0   1.0
 170.  *   1.4   1.7   1.1   1.1
 175.  *   1.2   1.6   1.1   1.1
 180.  *   1.4   1.6   1.1   1.1
 185.  *   1.4   1.6   1.1   1.1
 190.  *   1.6   1.4   1.0   1.0
 195.  *   1.6   1.4   1.0   1.0
 200.  *   1.5   1.4   1.0   1.0
 205.  *   1.7   1.4   1.1   1.1
1
                                                                                                                 PAGE  6
      JOB: Site 1 Existing AM - 1EXAM.DAT                        RUN: Site 1 Existing AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   1.6   1.4   1.1   1.1
 215.  *   1.7   1.3   1.1   1.1
 220.  *   1.6   1.4   1.2   1.2
 225.  *   1.4   1.4   1.2   1.2
 230.  *   1.5   1.4   1.3   1.3
 235.  *   1.5   1.5   1.4   1.5
 240.  *   1.3   1.5   1.6   1.4
 245.  *   1.3   1.6   1.5   1.5
 250.  *   1.3   1.7   1.6   1.6
 255.  *   1.3   1.7   1.7   1.6
 260.  *   1.1   1.6   1.6   1.6
 265.  *    .9   1.5   1.4   1.4
 270.  *    .7   1.2   1.2   1.2
 275.  *    .4    .9   1.0    .9
 280.  *    .2    .6    .6    .6
 285.  *    .1    .4    .4    .4
 290.  *    .1    .3    .3    .3
 295.  *    .0    .2    .2    .2
 300.  *    .0    .2    .1    .1
 305.  *    .0    .1    .1    .1
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .0    .0    .0
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .0    .0    .0    .0
 355.  *    .1    .0    .0    .0
 360.  *    .3    .0    .0    .0
 ------*------------------------
 MAX   *   2.1   2.2   2.4   2.0
 DEGR. *   95   120   110    95

 THE HIGHEST CONCENTRATION IS    3.50 PPM AT  250 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS    3.30 PPM AT   30 DEGREES FROM REC3 .
 THE 3RD HIGHEST CONCENTRATION IS    3.20 PPM AT   30 DEGREES FROM REC20.
```

```
Site 1 Existing PM - 1EXPM.DAT          60.0321.0.0000.000240.30480000    1
1
SE MID S                  650.     1369.       5.0
SE 164 S                  792.     1375.       5.0
SE 82 S                   874.     1379.       5.0
SE CNR                    960.     1383.       5.0
SE 82 E                   947.     1304.       5.0
NE 82 E                  1016.     1306.       5.0
NE CNR                   1022.     1387.       5.0
NE 82 N                  1094.     1391.       5.0
NE 164 N                 1175.     1396.       5.0
NE MID N                 1298.     1405.       5.0
NW MID N                 1318.     1496.       5.0
NW 164 N                 1218.     1493.       5.0
NW 82 N                  1136.     1488.       5.0
NW CNR                   1054.     1503.       5.0
NW 82 W                  1043.     1586.       5.0
NW 164 W                 1057.     1667.       5.0
NW MID W                 1083.     1784.       5.0
SW MID W                 1024.     1777.       5.0
SW 164 W                  994.     1650.       5.0
SW 82 W                   975.     1570.       5.0
SW CNR                    935.     1495.       5.0
SW 82 S                   853.     1474.       5.0
SW 164 S                  771.     1470.       5.0
SW MID S                  631.     1463.       5.0
Site 1 Existing PM                       24  1   0
  1
NB        Rt1 aprch AG     3.  1362.   559.  1390.    173015.5  0.  56   30.
  1
NB        Rt1 th+rt AG   559.  1390.  1016.  1410.    136015.5  0.  56   30.
  2
NB        Rt1 th+rt AG   936.  1407.   568.  1390.      0.  36   3
       206        65       2.0 1360  141.4 1678 1 3
  1
NB        Rt1 left  AG   552.  1408.  1013.  1432.     37015.5  0.  32   30.
  2
NB        Rt1 left  AG   934.  1428.   569.  1409.      0.  12   1
       206       157       2.0  370  141.4 1752 1 3
  1
NB        Rt1 departAG  1017.  1410.  1345.  1432.    153015.5  0.  56   30.
  1
NB        Rt1 departAG  1345.  1432.  1632.  1463.    153015.5  0.  44   30.
  1
NB        Rt1 departAG  1632.  1463.  1999.  1510.    153015.5  0.  44   30.
  1
SB        Rt1 aprch AG  1995.  1546.  1680.  1502.    114515.5  0.  44   30.
  1
SB        Rt1 aprch AG  1680.  1502.  1429.  1473.    114515.5  0.  44   30.
  1
SB        Rt1 aprch AG  1429.  1473.  1228.  1465.    114515.5  0.  44   30.
  1
SB        Rt1 th+rt AG  1228.  1465.  1017.  1455.    114015.5  0.  56   30.
  2
SB        Rt1 th+rt AG  1066.  1457.  1221.  1465.      0.  36   3
       206       111       2.0 1140  141.4 1653 1 3
```

```
  1
SB        Rt1 left  AG  1165.  1444.  1020.  1436.       515.5  0.  32   30.
  2
SB        Rt1 left  AG  1068.  1439.  1161.  1444.      0.  12   1
       206       203       2.0    5  141.4 1752 1 3
  1
SB        Rt1 departAG  1017.  1455.     2.  1403.    130015.5  0.  56   30.
  1
EB        Rt28 aprchAG  1191.  2428.  1007.  1603.     39015.5  0.  32   30.
  1
EB        Rt28 aprchAG  1007.  1603.   961.  1435.     39015.5  0.  44   30.
  2
EB        Rt28 aprchAG   979.  1500.  1000.  1578.      0.  24   2
       206       180       2.0  390  141.4 1684 1 3
  1
EB        Rt28 deparAG   987.  1425.   978.  1298.      3015.5  0.  32   30.
  1
WB        Rt28 aprchAG   986.  1300.   997.  1445.     16015.5  0.  44   30.
  2
WB        Rt28 aprchAG   993.  1391.   986.  1306.      0.  24   2
       206       186       2.0  160  141.4 1706 1 3
  1
WB        Rt28 deparAG   999.  1445.  1024.  1615.     56515.5  0.  32   30.
  1
WB        Rt28 deparAG  1024.  1615.  1201.  2425.     56515.5  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 1 Existing PM - 1EXPM.DAT                      RUN: Site 1 Existing PM
      DATE: 05/08/2009   TIME: 22:45:46.85


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)        (VEH)
      ------------------------*----------------------------------------*------------------------------------------------------------
       1. NB        Rt1 aprch *      3.0    1362.0     559.0    1390.0 *     557.    87. AG  1730.  15.5    .0 56.0
       2. NB        Rt1 th+rt *    559.0    1390.0    1016.0    1410.0 *     457.    87. AG  1360.  15.5    .0 56.0
       3. NB        Rt1 th+rt *    936.0    1407.0     775.2    1399.6 *     161.   267. AG   359. 100.0    .0 36.0  .41   8.2
       4. NB        Rt1 left  *    552.0    1408.0    1013.0    1432.0 *     462.    87. AG   370.  15.5    .0 32.0
       5. NB        Rt1 left  *    934.0    1428.0     546.7    1407.8 *     388.   267. AG   289. 100.0    .0 12.0  .97  19.7
       6. NB        Rt1 depart*   1017.0    1410.0    1345.0    1432.0 *     329.    86. AG  1530.  15.5    .0 56.0
       7. NB        Rt1 depart*   1345.0    1432.0    1632.0    1463.0 *     289.    84. AG  1530.  15.5    .0 44.0
       8. NB        Rt1 depart*   1632.0    1463.0    1999.0    1510.0 *     370.    83. AG  1530.  15.5    .0 44.0
       9. SB        Rt1 aprch *   1995.0    1546.0    1680.0    1502.0 *     318.   262. AG  1145.  15.5    .0 44.0
      10. SB        Rt1 aprch *   1680.0    1502.0    1429.0    1473.0 *     253.   263. AG  1145.  15.5    .0 44.0
      11. SB        Rt1 aprch *   1429.0    1473.0    1228.0    1465.0 *     201.   268. AG  1145.  15.5    .0 44.0
      12. SB        Rt1 th+rt *   1228.0    1465.0    1017.0    1455.0 *     211.   267. AG  1140.  15.5    .0 56.0
      13. SB        Rt1 th+rt *   1066.0    1457.0    1296.3    1468.9 *     231.    87. AG   613. 100.0    .0 36.0  .52  11.7
      14. SB        Rt1 left  *   1165.0    1444.0    1020.0    1436.0 *     145.   267. AG     5.  15.5    .0 32.0
      15. SB        Rt1 left  *   1068.0    1439.0    1074.3    1439.3 *       6.    87. AG   374. 100.0    .0 12.0 -.63    .3
      16. SB        Rt1 depart*   1017.0    1455.0       2.0    1403.0 *    1016.   267. AG  1300.  15.5    .0 56.0
      17. EB        Rt28 aprch*   1191.0    2428.0    1007.0    1603.0 *     845.   193. AG   390.  15.5    .0 32.0
      18. EB        Rt28 aprch*   1007.0    1603.0     961.0    1435.0 *     174.   195. AG   390.  15.5    .0 44.0
      19. EB        Rt28 aprch*    979.0    1500.0    1088.2    1905.5 *     420.    15. AG   663. 100.0    .0 24.0 1.09  21.3
      20. EB        Rt28 depar*    987.0    1425.0     978.0    1298.0 *     127.   184. AG    30.  15.5    .0 32.0
      21. WB        Rt28 aprch*    986.0    1300.0     997.0    1445.0 *     145.     4. AG   160.  15.5    .0 44.0
      22. WB        Rt28 aprch*    993.0    1391.0     986.2    1309.0 *      82.   185. AG   685. 100.0    .0 24.0  .61   4.2
      23. WB        Rt28 depar*    999.0    1445.0    1024.0    1615.0 *     172.     8. AG   565.  15.5    .0 32.0
      24. WB        Rt28 depar*   1024.0    1615.0    1201.0    2425.0 *     829.    12. AG   565.  15.5    .0 32.0
1
                                                                                                                PAGE  2
      JOB: Site 1 Existing PM - 1EXPM.DAT                      RUN: Site 1 Existing PM
      DATE: 05/08/2009   TIME: 22:45:46.85

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE    SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC    TYPE     RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)       (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 th+rt *     206       65       2.0      1360       1678     141.40      1        3
       5. NB        Rt1 left  *     206      157       2.0       370       1752     141.40      1        3
      13. SB        Rt1 th+rt *     206      111       2.0      1140       1653     141.40      1        3
      15. SB        Rt1 left  *     206      203       2.0         5       1752     141.40      1        3
      19. EB        Rt28 aprch*     206      180       2.0       390       1684     141.40      1        3
      22. WB        Rt28 aprch*     206      186       2.0       160       1706     141.40      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z      *
     -------------------------*------------------------------------*
      1. SE MID S             *       650.0     1369.0       5.0   *
      2. SE 164 S             *       792.0     1375.0       5.0   *
      3. SE 82 S              *       874.0     1379.0       5.0   *
      4. SE CNR               *       960.0     1383.0       5.0   *
      5. SE 82 E              *       947.0     1304.0       5.0   *
      6. NE 82 E              *      1016.0     1306.0       5.0   *
      7. NE CNR               *      1022.0     1387.0       5.0   *
      8. NE 82 N              *      1094.0     1391.0       5.0   *
      9. NE 164 N             *      1175.0     1396.0       5.0   *
     10. NE MID N             *      1298.0     1405.0       5.0   *
     11. NW MID N             *      1318.0     1496.0       5.0   *
     12. NW 164 N             *      1218.0     1493.0       5.0   *
     13. NW 82 N              *      1136.0     1488.0       5.0   *
     14. NW CNR               *      1054.0     1503.0       5.0   *
     15. NW 82 W              *      1043.0     1586.0       5.0   *
     16. NW 164 W             *      1057.0     1667.0       5.0   *
     17. NW MID W             *      1083.0     1784.0       5.0   *
     18. SW MID W             *      1024.0     1777.0       5.0   *
     19. SW 164 W             *       994.0     1650.0       5.0   *
     20. SW 82 W              *       975.0     1570.0       5.0   *
     21. SW CNR               *       935.0     1495.0       5.0   *
     22. SW 82 S              *       853.0     1474.0       5.0   *
     23. SW 164 S             *       771.0     1470.0       5.0   *
     24. SW MID S             *       631.0     1463.0       5.0   *
1
                                                                                                                PAGE  3
      JOB: Site 1 Existing PM - 1EXPM.DAT                      RUN: Site 1 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
   0.  *   1.6   2.7   2.8   2.2   1.6   2.2   2.6   2.7   2.4   1.6    .0    .0    .4   1.3   2.1   2.4   2.1    .4    .6    .8
```

```
   5.  *   1.6   2.7   2.9   2.5   1.9   1.9   2.2   2.6   2.3   1.5    .0    .0    .3   1.0   1.8   2.1   1.9    .6    .9   1.2
  10.  *   1.6   2.8   3.1   2.6   2.0   1.8   2.3   2.4   2.2   1.4    .0    .0    .1    .7   1.5   1.8   1.5    .9   1.4   1.8
  15.  *   1.6   2.8   3.4   2.6   2.1   1.4   2.2   2.2   2.1   1.3    .0    .0    .0    .6   1.1   1.3   1.1   1.2   1.8   2.2
  20.  *   1.6   3.0   3.5   2.5   2.3   1.1   1.8   2.2   2.3   1.2    .0    .0    .0    .3    .9    .9    .8   1.6   2.3   2.6
  25.  *   1.7   3.1   3.7   2.2   2.2   1.0   1.7   2.3   2.2   1.2    .0    .0    .0    .1    .4    .7    .5   1.9   2.6   2.9
  30.  *   1.7   3.4   3.8   2.1   2.3   1.1   1.8   2.3   2.2   1.2    .0    .0    .1    .0    .3    .3    .3   2.1   2.9   3.1
  35.  *   1.9   3.4   3.8   2.0   2.4   1.1   1.9   2.4   2.2   1.1    .0    .0    .1    .0    .1    .2    .2   2.3   3.0   3.3
  40.  *   2.1   3.6   3.6   2.0   2.4   1.2   2.0   2.3   2.3   1.3    .0    .0    .1    .0    .0    .0    .0   2.4   3.0   3.2
  45.  *   2.1   3.6   3.6   2.1   2.5   1.3   2.3   2.5   2.3   1.4    .0    .0    .1    .0    .0    .0    .0   2.5   2.8   3.0
  50.  *   2.4   3.5   3.6   2.1   2.6   1.1   2.5   2.5   2.3   1.4    .0    .0    .1    .0    .0    .0    .0   2.4   2.8   2.9
  55.  *   2.4   3.7   3.4   2.4   2.5   1.1   2.5   2.6   2.3   1.5    .0    .0    .1    .0    .0    .0    .0   2.4   2.6   2.8
  60.  *   2.7   3.9   3.3   2.6   2.2   1.0   2.5   2.4   2.4   1.6    .0    .0    .2    .0    .0    .0    .0   2.3   2.5   2.7
  65.  *   2.5   3.8   3.3   2.8   2.3   1.0   2.7   2.6   2.2   1.8    .1    .2    .2    .0    .0    .0    .0   2.2   2.4   2.6
  70.  *   3.0   3.7   3.3   3.1   2.2    .8   2.6   2.5   2.2   1.8    .2    .2    .5    .1    .0    .0    .0   2.1   2.3   2.5
  75.  *   2.8   3.6   3.2   3.3   1.8    .7   2.5   2.3   1.9   1.8    .5    .7    .9    .1    .0    .0    .0   2.1   2.3   2.4
  80.  *   2.8   3.4   3.0   3.2   1.3    .4   2.2   2.2   1.9   1.6    .7   1.0   1.5    .6    .0    .0    .0   2.1   2.3   2.4
  85.  *   2.4   2.9   2.6   3.2   1.1    .3   2.0   1.7   1.6   1.3    .9   1.4   2.1   1.1    .0    .0    .0   2.1   2.2   2.3
  90.  *   1.9   2.4   2.1   2.9    .6    .1   1.6   1.4   1.3   1.2   1.2   1.7   2.7   1.4    .1    .0    .0   2.1   2.3   2.7
  95.  *   1.4   1.6   1.6   2.3    .4    .0   1.0    .9    .9    .9   1.4   2.3   3.1   1.8    .5    .1    .0   2.1   2.3   3.0
 100.  *   1.1   1.3   1.3   2.2    .3    .0    .7    .6    .6    .5   1.3   2.5   3.4   2.1    .5    .1    .0   2.1   2.5   3.2
 105.  *    .6    .9   1.0   2.0    .2    .0    .4    .4    .4    .3   1.3   2.9   3.6   2.2    .7    .3    .1   2.2   2.7   3.2
 110.  *    .5    .5    .9   2.0    .1    .0    .3    .3    .3    .3   1.4   2.9   3.5   2.4    .8    .4    .1   2.2   2.7   3.3
 115.  *    .2    .5    .7   1.9    .1    .0    .2    .2    .2    .2   1.2   2.9   3.5   2.6    .8    .4    .2   2.4   2.7   3.5
 120.  *    .1    .2    .5   1.8    .0    .0    .2    .2    .2    .1   1.2   3.0   3.6   2.5   1.0    .4    .3   2.3   3.0   3.4
 125.  *    .1    .2    .4   1.8    .0    .0    .1    .1    .1    .1   1.1   3.1   3.5   2.4   1.1    .5    .2   2.4   3.2   3.4
 130.  *    .1    .1    .3   1.8    .0    .0    .1    .1    .1    .1   1.0   3.0   3.2   2.3   1.1    .6    .3   2.4   3.2   3.5
 135.  *    .1    .1    .3   1.8    .0    .0    .1    .1    .1    .1   1.1   3.1   3.1   2.2   1.1    .7    .3   2.6   3.0   3.4
 140.  *    .1    .1    .2   1.8    .0    .0    .1    .1    .1    .1   1.1   3.0   3.0   2.1   1.1    .8    .4   2.6   3.0   3.2
 145.  *    .1    .1    .2   1.7    .0    .0    .1    .1    .1    .1   1.0   3.0   3.0   2.0   1.0    .8    .5   2.8   3.2   3.2
 150.  *    .1    .1    .1   1.6    .0    .0    .1    .1    .1    .1   1.0   2.9   2.8   1.9   1.0    .7    .4   2.8   3.5   3.3
 155.  *    .1    .0    .1   1.5    .0    .0    .1    .1    .1    .1    .9   2.8   2.8   1.7   1.0    .7    .6   3.0   3.3   3.2
 160.  *    .0    .0    .0   1.2    .0    .0    .0    .0    .0    .0   1.0   2.8   2.8   1.7    .9    .7    .5   3.0   3.3   3.3
 165.  *    .0    .0    .0   1.0    .0    .0    .0    .0    .0    .0    .9   2.8   2.8   1.6    .8    .7    .5   3.0   3.2   3.1
 170.  *    .0    .0    .0    .7    .0    .0    .1    .0    .0    .0   1.1   2.9   2.9   1.4    .8    .6    .6   3.2   3.2   3.0
 175.  *    .0    .0    .0    .5    .0    .0    .1    .0    .0    .0   1.1   2.9   2.9   1.3    .9    .9    .8   3.2   3.2   2.8
 180.  *    .0    .0    .0    .3    .0    .0    .2    .0    .0    .0   1.0   2.9   2.9   1.1   1.1    .8   1.0   3.1   3.0   2.6
 185.  *    .0    .0    .0    .2    .0    .0    .4    .0    .0    .0   1.2   2.9   2.9   1.2   1.0   1.1   1.3   2.7   2.4   2.4
 190.  *    .0    .0    .0    .1    .0    .0    .6    .0    .0    .0   1.2   2.8   2.8   1.2   1.0   1.5   2.0   2.3   2.2   2.0
 195.  *    .0    .0    .0    .1    .0    .0    .9    .1    .0    .1   1.3   2.8   2.8   1.4   1.2   1.9   2.4   1.9   1.9   1.8
 200.  *    .1    .0    .1    .1    .0    .0   1.1    .1    .1    .1   1.4   2.8   2.9   1.2   1.6   1.9   2.6   1.4   1.6   1.6
 205.  *    .1    .1    .1    .1    .0    .0   1.4    .1    .1    .1   1.6   2.8   3.0   1.2   1.7   2.5   3.0   1.0   1.3   1.4
1
                                                                                                                  PAGE  4
      JOB: Site 1 Existing PM - 1EXPM.DAT                    RUN: Site 1 Existing PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .1    .0    .0   1.7    .2    .1    .1   1.8   3.0   3.2   1.3   1.9   2.8   3.1    .7   1.0   1.3
 215.  *    .1    .1    .1    .1    .0    .0   1.8    .2    .1    .1   2.0   3.1   3.2   1.5   2.3   3.0   3.3    .6    .9   1.3
 220.  *    .1    .1    .1    .1    .0    .0   1.9    .3    .1    .1   2.2   3.2   3.4   1.4   2.5   3.0   3.2    .5    .8   1.1
 225.  *    .1    .1    .1    .1    .0    .0   2.0    .4    .1    .1   2.4   3.4   3.5   1.5   2.7   3.0   3.2    .4    .7   1.0
 230.  *    .1    .1    .1    .1    .0    .0   2.0    .5    .2    .2   2.7   3.6   3.6   1.7   2.8   3.0   3.0    .4    .7   1.0
 235.  *    .1    .1    .2    .2    .0    .0   1.9    .7    .3    .2   2.9   3.7   3.6   2.0   2.9   2.8   3.0    .4    .5   1.0
 240.  *    .3    .2    .3    .3    .0    .0   2.0    .8    .4    .4   3.3   3.8   3.5   1.9   2.9   2.8   2.8    .2    .5   1.0
 245.  *    .3    .2    .4    .4    .0    .1   2.2    .9    .6    .4   3.6   4.0   3.6   2.3   2.8   2.7   2.6    .2    .5    .9
 250.  *    .5    .4    .6    .7    .0    .2   2.2   1.2    .9    .7   3.7   3.9   3.5   2.2   2.6   2.5   2.5    .2    .4    .7
 255.  *    .7    .8   1.0   1.1    .0    .3   2.7   1.7   1.4   1.1   4.0   3.8   3.5   2.1   2.5   2.3   2.5    .2    .2    .7
 260.  *    .9   1.0   1.5   1.6    .1    .5   3.1   2.0   1.7   1.7   3.7   3.6   3.1   2.0   2.4   2.3   2.3    .0    .2    .4
 265.  *   1.2   1.4   2.0   2.2    .2    .8   3.4   2.6   2.1   2.1   3.1   2.8   2.5   1.9   2.0   2.2   2.3    .0    .2    .3
 270.  *   1.6   1.8   2.6   2.7    .4   1.2   3.6   2.7   2.4   2.3   2.6   2.4   2.2   1.6   2.0   2.0   2.3    .0    .0    .2
 275.  *   1.8   2.1   3.0   3.2    .6   1.7   3.7   2.7   2.6   2.8   2.1   2.0   1.8   1.5   1.8   2.0   2.3    .0    .0    .1
 280.  *   1.9   2.3   3.3   3.4    .8   1.8   3.7   2.7   2.6   3.0   1.2   1.1   1.4   1.2   1.8   2.1   2.3    .0    .0    .0
 285.  *   2.0   2.4   3.4   3.4    .9   2.3   3.4   2.4   2.5   3.1    .9   1.0   1.0   1.2   1.8   2.1   2.2    .0    .0    .0
 290.  *   2.1   2.4   3.4   3.1   1.2   2.7   2.9   2.2   2.2   2.9    .6    .7   1.0   1.2   1.9   2.1   2.3    .0    .0    .0
 295.  *   2.0   2.4   3.3   3.1   1.2   2.7   2.6   2.1   2.5   2.9    .4    .6    .8   1.2   1.9   2.1   2.3    .0    .0    .0
 300.  *   2.0   2.3   3.3   2.9   1.2   2.9   2.3   2.1   2.6   2.9    .3    .5    .7   1.2   1.8   2.1   2.3    .0    .0    .0
 305.  *   1.9   2.3   3.3   2.8   1.3   3.0   1.9   1.9   2.6   2.9    .3    .5    .8   1.2   1.8   2.1   2.3    .0    .0    .0
 310.  *   1.8   2.2   3.1   2.4   1.4   2.9   1.9   1.9   2.7   2.8    .3    .5    .8   1.3   1.8   2.1   2.3    .0    .0    .0
 315.  *   1.6   2.3   3.0   2.3   1.2   2.9   1.7   1.9   2.8   2.7    .4    .6    .8   1.3   1.8   2.1   2.3    .0    .0    .0
 320.  *   1.6   2.1   2.8   2.1   1.2   2.9   1.6   2.1   2.7   2.6    .4    .6    .7   1.3   1.8   2.1   2.3    .0    .0    .0
 325.  *   1.6   2.2   2.8   1.9   1.2   2.8   1.7   2.3   2.7   2.7    .4    .5    .8   1.3   1.9   2.2   2.3    .0    .0    .0
 330.  *   1.6   2.3   2.7   1.7   1.2   2.7   1.8   2.4   2.7   2.5    .3    .5    .8   1.3   2.1   2.3   2.5    .0    .0    .0
 335.  *   1.6   2.4   2.7   1.6   1.2   2.7   1.8   2.3   2.7   2.4    .2    .5    .8   1.6   2.1   2.4   2.6    .0    .0    .0
 340.  *   1.6   2.5   2.7   1.6   1.2   2.6   2.1   2.5   2.7   2.3    .2    .4    .8   1.4   2.1   2.5   2.6    .0    .0    .0
 345.  *   1.6   2.5   2.7   1.7   1.2   2.5   2.4   2.8   2.9   2.1    .1    .3    .7   1.4   2.3   2.5   2.5    .0    .0    .1
 350.  *   1.6   2.6   2.7   1.7   1.2   2.3   2.3   2.8   2.7   1.9    .0    .3    .6   1.4   2.3   2.5   2.5    .0    .1    .2
 355.  *   1.6   2.7   2.7   1.8   1.2   2.2   2.5   2.7   2.6   1.7    .0    .2    .5   1.4   2.2   2.5   2.3    .2    .3    .3
 360.  *   1.6   2.7   2.8   2.2   1.6   2.2   2.6   2.7   2.4   1.6    .0    .0    .4   1.3   2.1   2.4   2.1    .4    .6    .8
 ------*-----------------------------------------------------------------------------------------------------------------------
 MAX   *   3.0   3.9   3.8   3.4   2.6   3.0   3.7   2.8   2.9   3.1   4.0   4.0   3.6   2.6   2.9   3.0   3.3   3.2   3.5   3.5
 DEGR. *   70    60    35   280    50   305   275   345   345   285   255   245   120   115   235   215   215   170   150   115

1
                                                                                                                  PAGE  5
      JOB: Site 1 Existing PM - 1EXPM.DAT                    RUN: Site 1 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*-----------------------
   0.  *    .2    .0    .0    .0
   5.  *    .6    .0    .0    .0
  10.  *    .8    .1    .0    .0
  15.  *   1.1    .3    .0    .0
```

```
  20.  *   1.5    .5    .1    .0
  25.  *   1.7    .6    .2    .0
  30.  *   2.0    .8    .4    .1
  35.  *   2.1   1.0    .6    .2
  40.  *   2.1   1.0    .7    .2
  45.  *   2.0   1.0    .7    .3
  50.  *   1.8   1.0    .7    .4
  55.  *   1.7   1.0    .6    .4
  60.  *   1.6   1.0    .6    .4
  65.  *   1.5   1.1    .7    .5
  70.  *   1.4   1.1    .8    .7
  75.  *   1.5   1.3   1.1    .8
  80.  *   1.7   1.4   1.3   1.3
  85.  *   2.1   2.0   1.7   1.7
  90.  *   2.2   2.3   2.1   2.2
  95.  *   2.5   2.3   2.4   2.4
 100.  *   2.3   2.4   2.5   2.5
 105.  *   2.3   2.1   2.5   2.5
 110.  *   2.0   2.0   2.5   2.5
 115.  *   1.6   2.2   2.7   2.3
 120.  *   1.5   2.2   2.5   2.3
 125.  *   1.6   2.3   2.5   2.1
 130.  *   1.5   2.4   2.5   1.9
 135.  *   1.6   2.3   2.3   1.7
 140.  *   1.3   2.4   2.3   1.6
 145.  *   1.4   2.3   2.2   1.6
 150.  *   1.5   2.3   2.1   1.5
 155.  *   1.4   2.2   2.0   1.5
 160.  *   1.5   2.2   2.0   1.5
 165.  *   1.6   2.1   1.9   1.5
 170.  *   1.6   2.1   1.9   1.5
 175.  *   1.5   2.2   1.9   1.6
 180.  *   1.6   2.2   1.9   1.6
 185.  *   1.5   2.1   1.7   1.5
 190.  *   1.7   2.1   1.6   1.5
 195.  *   1.6   2.1   1.6   1.5
 200.  *   1.7   2.1   1.6   1.5
 205.  *   1.7   2.1   1.5   1.6
1
                                                                                                                          PAGE  6
      JOB: Site 1 Existing PM - 1EXPM.DAT                          RUN: Site 1 Existing PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   1.8   2.1   1.6   1.7
 215.  *   1.9   2.1   1.6   1.7
 220.  *   2.0   2.0   1.6   1.7
 225.  *   2.0   2.2   1.7   1.7
 230.  *   1.9   2.1   1.9   1.8
 235.  *   2.0   2.1   1.9   1.9
 240.  *   2.0   2.2   2.0   1.8
 245.  *   1.8   2.2   2.0   1.8
 250.  *   1.9   2.2   2.2   1.6
 255.  *   1.6   2.1   2.0   1.6
 260.  *   1.5   1.9   1.8   1.4
 265.  *   1.0   1.7   1.6   1.2
 270.  *    .7   1.2   1.2   1.0
 275.  *    .5   1.0    .8    .7
 280.  *    .2    .6    .6    .5
 285.  *    .1    .3    .3    .3
 290.  *    .0    .2    .2    .2
 295.  *    .0    .2    .1    .1
 300.  *    .0    .1    .1    .1
 305.  *    .0    .1    .1    .1
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .0    .0    .0
 335.  *    .0    .0    .0    .0
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .0    .0    .0    .0
 355.  *    .1    .0    .0    .0
 360.  *    .2    .0    .0    .0
 ------*------------------------
 MAX   *   2.5   2.4   2.7   2.5
 DEGR. *   95   130   115   100

 THE HIGHEST CONCENTRATION IS    4.00 PPM AT  255 DEGREES FROM REC11.
 THE 2ND HIGHEST CONCENTRATION IS    4.00 PPM AT  245 DEGREES FROM REC12.
 THE 3RD HIGHEST CONCENTRATION IS    3.90 PPM AT   60 DEGREES FROM REC2 .
```

```
Site 1 No Build 2014 AM - 1NBAM14.DAT   60.0321.0.0000.000240.30480000    1
1
SE MID S                  650.     1369.       5.0
SE 164 S                  792.     1375.       5.0
SE 82 S                   874.     1379.       5.0
SE CNR                    960.     1383.       5.0
SE 82 E                   947.     1304.       5.0
NE 82 E                  1016.     1306.       5.0
NE CNR                   1022.     1387.       5.0
NE 82 N                  1094.     1391.       5.0
NE 164 N                 1175.     1396.       5.0
NE MID N                 1298.     1405.       5.0
NW MID N                 1318.     1496.       5.0
NW 164 N                 1218.     1493.       5.0
NW 82 N                  1136.     1488.       5.0
NW CNR                   1054.     1503.       5.0
NW 82 W                  1043.     1586.       5.0
NW 164 W                 1057.     1667.       5.0
NW MID W                 1083.     1784.       5.0
SW MID W                 1024.     1777.       5.0
SW 164 W                  994.     1650.       5.0
SW 82 W                   975.     1570.       5.0
SW CNR                    935.     1495.       5.0
SW 82 S                   853.     1474.       5.0
SW 164 S                  771.     1470.       5.0
SW MID S                  631.     1463.       5.0
Site 1 No Build 2014 AM                  24  1   0
  1
NB        Rt1 aprch AG     3.  1362.   559.  1390.    140411.4  0.  56   30.
  1
NB        Rt1 th+rt AG   559.  1390.  1016.  1410.     96611.4  0.  56   30.
  2
NB        Rt1 th+rt AG   936.  1407.   568.  1390.      0.  36   3
       120        60       2.0  966   102.2 1679 1 3
  1
NB        Rt1 left  AG   552.  1408.  1013.  1432.     43811.4  0.  32   30.
  2
NB        Rt1 left  AG   934.  1428.   569.  1409.      0.  12   1
       120       103       2.0  438   102.2 1752 1 3
  1
NB        Rt1 departAG  1017.  1410.  1345.  1432.    110211.4  0.  56   30.
  1
NB        Rt1 departAG  1345.  1432.  1632.  1463.    110211.4  0.  44   30.
  1
NB        Rt1 departAG  1632.  1463.  1999.  1510.    110211.4  0.  44   30.
  1
SB        Rt1 aprch AG  1995.  1546.  1680.  1502.    256511.4  0.  44   30.
  1
SB        Rt1 aprch AG  1680.  1502.  1429.  1473.    256511.4  0.  44   30.
  1
SB        Rt1 aprch AG  1429.  1473.  1228.  1465.    256511.4  0.  44   30.
  1
SB        Rt1 th+rt AG  1228.  1465.  1017.  1455.    254511.4  0.  56   30.
  2
SB        Rt1 th+rt AG  1066.  1457.  1221.  1465.      0.  36   3
       120        73       2.0 2545   102.2 1667 1 3
```

```
  1
SB        Rt1 left  AG  1165.  1444.  1020.  1436.      2011.4  0.  32   30.
  2
SB        Rt1 left  AG  1068.  1439.  1161.  1444.      0.  12   1
       120       115       2.0   20  102.2 1752 1 3
  1
SB        Rt1 departAG  1017.  1455.     2.  1403.    311611.4  0.  56   30.
  1
EB        Rt28 aprchAG  1191.  2428.  1007.  1603.     79311.4  0.  32   30.
  1
EB        Rt28 aprchAG  1007.  1603.   961.  1435.     79311.4  0.  44   30.
  2
EB        Rt28 aprchAG   979.  1500.  1000.  1578.      0.  24   2
       120        91       2.0  793  102.2 1686 1 3
  1
EB        Rt28 deparAG   987.  1425.   978.  1298.      4511.4  0.  32   30.
  1
WB        Rt28 aprchAG   986.  1300.   997.  1445.      8511.4  0.  44   30.
  2
WB        Rt28 aprchAG   993.  1391.   986.  1306.      0.  24   2
       120       109       2.0   85  102.2 1694 1 3
  1
WB        Rt28 deparAG   999.  1445.  1024.  1615.     58411.4  0.  32   30.
  1
WB        Rt28 deparAG  1024.  1615.  1201.  2425.     58411.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 1 No Build 2014 AM - 1NBAM14.DAT                RUN: Site 1 No Build 2014 AM
      DATE: 05/09/2009   TIME: 14:11:10.98


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =     .0 CM/S      VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *   LENGTH   BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)     (VEH)
      ------------------------*----------------------------------------*---------------------------------------------------------
       1. NB        Rt1 aprch *      3.0    1362.0     559.0    1390.0 *     557.    87. AG   1404.  11.4    .0 56.0
       2. NB        Rt1 th+rt *    559.0    1390.0    1016.0    1410.0 *     457.    87. AG    966.  11.4    .0 56.0
       3. NB        Rt1 th+rt *    936.0    1407.0     830.5    1402.1 *     106.   267. AG    411. 100.0    .0 36.0  .41   5.4
       4. NB        Rt1 left  *    552.0    1408.0    1013.0    1432.0 *     462.    87. AG    438.  11.4    .0 32.0
       5. NB        Rt1 left  *    934.0    1428.0   -1914.9    1279.7 *    2853.   267. AG    235. 100.0    .0 12.0 2.32 144.9
       6. NB        Rt1 depart*   1017.0    1410.0    1345.0    1432.0 *     329.    86. AG   1102.  11.4    .0 56.0
       7. NB        Rt1 depart*   1345.0    1432.0    1632.0    1463.0 *     289.    84. AG   1102.  11.4    .0 44.0
       8. NB        Rt1 depart*   1632.0    1463.0    1999.0    1510.0 *     370.    83. AG   1102.  11.4    .0 44.0
       9. SB        Rt1 aprch *   1995.0    1546.0    1680.0    1502.0 *     318.   262. AG   2565.  11.4    .0 44.0
      10. SB        Rt1 aprch *   1680.0    1502.0    1429.0    1473.0 *     253.   263. AG   2565.  11.4    .0 44.0
      11. SB        Rt1 aprch *   1429.0    1473.0    1228.0    1465.0 *     201.   268. AG   2565.  11.4    .0 44.0
      12. SB        Rt1 th+rt *   1228.0    1465.0    1017.0    1455.0 *     211.   267. AG   2545.  11.4    .0 56.0
      13. SB        Rt1 th+rt *   1066.0    1457.0    4039.7    1610.5 *    2978.    87. AG    500. 100.0    .0 36.0 1.42 151.3
      14. SB        Rt1 left  *   1165.0    1444.0    1020.0    1436.0 *     145.   267. AG     20.  11.4    .0 32.0
      15. SB        Rt1 left  *   1068.0    1439.0    1165.7    1444.3 *      98.    87. AG    263. 100.0    .0 12.0 1.43   5.0
      16. SB        Rt1 depart*   1017.0    1455.0       2.0    1403.0 *    1016.   267. AG   3116.  11.4    .0 56.0
      17. EB        Rt28 aprch*   1191.0    2428.0    1007.0    1603.0 *     845.   193. AG    793.  11.4    .0 32.0
      18. EB        Rt28 aprch*   1007.0    1603.0     961.0    1435.0 *     174.   195. AG    793.  11.4    .0 44.0
      19. EB        Rt28 aprch*    979.0    1500.0    1172.1    2217.2 *     743.    15. AG    416. 100.0    .0 24.0 1.13  37.7
      20. EB        Rt28 depar*    987.0    1425.0     978.0    1298.0 *     127.   184. AG     45.  11.4    .0 32.0
      21. WB        Rt28 aprch*    986.0    1300.0     997.0    1445.0 *     145.     4. AG     85.  11.4    .0 44.0
      22. WB        Rt28 aprch*    993.0    1391.0     990.9    1366.1 *      25.   185. AG    498. 100.0    .0 24.0  .43   1.3
      23. WB        Rt28 depar*    999.0    1445.0    1024.0    1615.0 *     172.     8. AG    584.  11.4    .0 32.0
      24. WB        Rt28 depar*   1024.0    1615.0    1201.0    2425.0 *     829.    12. AG    584.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 1 No Build 2014 AM - 1NBAM14.DAT                RUN: Site 1 No Build 2014 AM
      DATE: 05/09/2009   TIME: 14:11:10.98

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE  EM FAC    TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 th+rt *     120       60       2.0       966       1679     102.20      1        3
       5. NB        Rt1 left  *     120      103       2.0       438       1752     102.20      1        3
      13. SB        Rt1 th+rt *     120       73       2.0      2545       1667     102.20      1        3
      15. SB        Rt1 left  *     120      115       2.0        20       1752     102.20      1        3
      19. EB        Rt28 aprch*     120       91       2.0       793       1686     102.20      1        3
      22. WB        Rt28 aprch*     120      109       2.0        85       1694     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       650.0     1369.0        5.0   *
      2. SE 164 S             *       792.0     1375.0        5.0   *
      3. SE 82 S              *       874.0     1379.0        5.0   *
      4. SE CNR               *       960.0     1383.0        5.0   *
      5. SE 82 E              *       947.0     1304.0        5.0   *
      6. NE 82 E              *      1016.0     1306.0        5.0   *
      7. NE CNR               *      1022.0     1387.0        5.0   *
      8. NE 82 N              *      1094.0     1391.0        5.0   *
      9. NE 164 N             *      1175.0     1396.0        5.0   *
     10. NE MID N             *      1298.0     1405.0        5.0   *
     11. NW MID N             *      1318.0     1496.0        5.0   *
     12. NW 164 N             *      1218.0     1493.0        5.0   *
     13. NW 82 N              *      1136.0     1488.0        5.0   *
     14. NW CNR               *      1054.0     1503.0        5.0   *
     15. NW 82 W              *      1043.0     1586.0        5.0   *
     16. NW 164 W             *      1057.0     1667.0        5.0   *
     17. NW MID W             *      1083.0     1784.0        5.0   *
     18. SW MID W             *      1024.0     1777.0        5.0   *
     19. SW 164 W             *       994.0     1650.0        5.0   *
     20. SW 82 W              *       975.0     1570.0        5.0   *
     21. SW CNR               *       935.0     1495.0        5.0   *
     22. SW 82 S              *       853.0     1474.0        5.0   *
     23. SW 164 S             *       771.0     1470.0        5.0   *
     24. SW MID S             *       631.0     1463.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 1 No Build 2014 AM - 1NBAM14.DAT                RUN: Site 1 No Build 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.5   1.5   2.9   2.1   1.5   1.8   2.1   2.7   2.3   2.0    .0    .1    .5   1.0   1.7   1.9   2.0    .6    .6    .7
```

```
   5.  *   1.5   1.5   3.0   2.4   1.5   1.7   2.0   2.7   2.1   1.9    .0    .1    .4    .9   1.6   1.8   1.9    .7    .9   1.1
  10.  *   1.5   1.5   3.0   2.4   1.7   1.2   1.9   2.5   1.9   1.9    .0    .1    .2    .7   1.3   1.5   1.7   1.1   1.2   1.4
  15.  *   1.4   1.5   3.2   2.3   1.6   1.2   1.8   2.2   1.9   1.9    .0    .0    .1    .6   1.1   1.3   1.4   1.5   1.7   2.0
  20.  *   1.6   1.8   3.4   2.3   1.6   1.1   1.6   2.4   1.9   1.9    .0    .0    .1    .4    .7    .9   1.0   1.7   1.9   2.2
  25.  *   1.7   2.0   3.7   2.0   1.3   1.0   1.6   2.3   1.9   1.9    .0    .0    .1    .1    .5    .6    .7   2.0   2.1   2.4
  30.  *   1.7   2.3   3.7   1.9   1.2   1.1   1.6   2.3   1.9   1.9    .0    .0    .1    .1    .3    .3    .4   2.1   2.2   2.5
  35.  *   1.9   2.3   3.6   1.7   1.1   1.0   1.6   2.3   2.0   2.0    .0    .0    .1    .0    .1    .1    .1   2.0   2.2   2.4
  40.  *   2.0   2.4   3.5   1.8   1.3   1.2   1.8   2.4   2.0   2.2    .0    .0    .1    .0    .0    .1    .1   2.0   2.1   2.3
  45.  *   1.9   2.5   3.5   1.8   1.1   1.2   2.0   2.4   2.2   2.2    .0    .0    .1    .0    .0    .0    .0   1.9   2.1   2.3
  50.  *   2.0   2.7   3.2   1.9   1.3   1.2   2.1   2.3   2.1   2.2    .1    .0    .1    .0    .0    .0    .0   1.9   2.0   2.1
  55.  *   2.0   2.8   3.4   2.1   1.2   1.2   2.5   2.5   2.3   2.4    .2    .0    .2    .0    .0    .0    .0   1.8   1.9   2.1
  60.  *   2.2   2.9   3.2   2.3   1.4   1.2   2.5   2.6   2.5   2.6    .2    .2    .3    .0    .0    .0    .0   1.7   1.8   1.9
  65.  *   2.4   3.1   3.4   2.6   1.3   1.4   2.7   2.5   2.6   2.5    .5    .3    .6    .1    .0    .0    .0   1.7   1.8   1.8
  70.  *   2.5   3.2   3.4   2.9   1.2   1.2   2.8   2.7   2.6   2.6    .8    .8   1.0    .2    .0    .0    .0   1.6   1.7   1.7
  75.  *   2.6   3.2   3.3   3.1   1.3   1.2   2.9   2.6   2.4   2.5   1.4   1.3   1.6    .7    .1    .0    .0   1.6   1.8   1.8
  80.  *   2.4   3.2   2.9   3.1   1.0   1.1   2.5   2.3   2.4   2.3   2.3   2.0   2.3   1.1    .2    .1    .1   1.7   1.8   1.9
  85.  *   2.1   2.7   2.7   2.9    .7    .6   2.2   2.0   2.1   2.1   3.0   2.8   3.1   1.7    .6    .2    .1   1.7   1.9   2.2
  90.  *   1.6   1.9   1.9   2.4    .3    .3   1.7   1.6   1.5   1.4   3.5   3.4   3.7   2.2    .9    .4    .2   1.8   2.2   2.5
  95.  *   1.1   1.5   1.3   1.8    .2    .2   1.1   1.2   1.1   1.1   4.0   3.7   4.1   2.5   1.0    .6    .3   1.9   2.4   2.7
 100.  *    .7    .8    .8   1.2    .1    .1    .5    .5    .5    .6   4.2   4.0   4.2   2.8   1.1    .7    .4   2.0   2.4   2.9
 105.  *    .4    .4    .5   1.1    .0    .0    .3    .3    .3    .3   4.1   3.9   4.1   2.8   1.3    .8    .5   2.0   2.4   3.1
 110.  *    .1    .2    .3    .9    .0    .0    .2    .1    .1    .1   3.8   3.7   3.9   2.8   1.3    .8    .6   2.2   2.4   2.8
 115.  *    .1    .1    .1    .8    .0    .0    .1    .1    .1    .1   3.6   3.6   3.7   2.7   1.3    .8    .6   2.2   2.5   2.9
 120.  *    .1    .1    .1    .7    .0    .0    .1    .1    .1    .1   3.5   3.4   3.4   2.6   1.2    .8    .4   2.1   2.5   2.8
 125.  *    .1    .1    .1    .6    .0    .0    .1    .1    .1    .1   3.3   3.2   3.4   2.4   1.0    .9    .5   2.1   2.4   2.9
 130.  *    .1    .1    .1    .5    .0    .0    .1    .1    .1    .1   3.0   3.0   3.2   2.5   1.2    .8    .5   2.1   2.6   2.8
 135.  *    .0    .0    .1    .4    .0    .0    .1    .1    .1    .1   2.9   3.0   3.1   2.4   1.2    .7    .5   2.0   2.6   2.7
 140.  *    .0    .0    .0    .2    .0    .0    .1    .1    .1    .1   2.8   2.8   3.0   2.3   1.1    .7    .4   2.1   2.6   2.7
 145.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.8   2.7   2.9   2.2   1.0    .8    .4   2.2   2.6   2.6
 150.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.6   2.6   2.8   2.1   1.1    .9    .6   2.3   2.6   2.6
 155.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.6   2.6   2.9   1.9   1.1    .8    .6   2.3   2.5   2.4
 160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.6   2.7   2.9   1.8   1.0    .8    .6   2.4   2.6   2.4
 165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.7   2.7   2.9   1.7    .8    .7    .5   2.4   2.6   2.4
 170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.7   2.7   2.9   1.4    .8    .7    .6   2.3   2.5   2.4
 175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.6   2.7   3.1   1.3    .9    .7    .6   2.3   2.2   2.2
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.6   2.6   3.1   1.2    .7    .9    .7   2.2   2.0   2.1
 185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.6   2.6   3.0   1.1    .8   1.0    .9   2.0   2.0   1.9
 190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.6   2.5   2.9   1.2   1.1    .9   1.2   1.7   1.7   1.7
 195.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.7   2.5   2.9   1.2   1.0   1.3   1.6   1.6   1.5   1.6
 200.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.7   2.6   3.0   1.1   1.2   1.5   2.0   1.3   1.2   1.4
 205.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.7   2.6   3.0   1.1   1.5   2.0   2.3    .9   1.1   1.4
1
                                                                                                                        PAGE  4
      JOB: Site 1 No Build 2014 AM - 1NBAM14.DAT              RUN: Site 1 No Build 2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .1   2.8   2.7   3.0   1.2   1.6   2.1   2.4    .8    .9   1.3
 215.  *    .0    .0    .0    .0    .0    .0    .3    .1    .1    .1   3.0   2.9   3.2   1.5   1.8   2.2   2.5    .6    .7   1.2
 220.  *    .0    .0    .1    .1    .0    .0    .4    .1    .1    .1   3.0   3.0   3.2   1.5   2.3   2.3   2.5    .5    .7   1.2
 225.  *    .1    .1    .1    .1    .0    .0    .5    .1    .1    .1   3.2   3.3   3.5   1.9   2.4   2.3   2.5    .4    .7   1.2
 230.  *    .1    .1    .1    .1    .0    .0    .7    .1    .1    .1   3.3   3.3   3.6   1.8   2.4   2.3   2.3    .4    .7   1.0
 235.  *    .1    .1    .1    .1    .0    .0    .8    .1    .1    .1   3.5   3.5   3.5   1.9   2.4   2.3   2.4    .5    .7   1.1
 240.  *    .1    .1    .1    .1    .0    .0    .9    .2    .1    .1   3.8   3.8   3.5   2.1   2.3   2.3   2.2    .4    .8   1.0
 245.  *    .2    .1    .1    .2    .0    .0   1.1    .3    .2    .2   4.0   4.0   3.7   2.4   2.4   2.1   2.0    .4    .7   1.0
 250.  *    .4    .5    .5    .6    .0    .0   1.4    .7    .6    .4   4.2   3.9   3.7   2.4   2.2   2.0   1.8    .3    .6    .9
 255.  *    .7    .5    .7    .9    .0    .0   1.7    .9    .9    .6   4.2   3.9   3.7   2.5   2.0   1.9   1.7    .2    .6    .8
 260.  *   1.0   1.0   1.1   1.4    .2    .2   2.2   1.5   1.2   1.2   3.9   3.6   3.4   2.3   2.0   1.7   1.7    .2    .4    .7
 265.  *   1.4   1.4   1.5   2.1    .3    .3   2.8   1.9   1.6   1.8   3.7   3.4   3.1   2.1   1.9   1.6   1.6    .1    .2    .6
 270.  *   1.7   1.8   2.1   2.4    .5    .6   2.9   2.2   2.1   2.1   3.0   2.7   2.6   1.7   1.6   1.6   1.5    .0    .2    .3
 275.  *   1.9   2.0   2.4   2.9    .7    .7   3.3   2.3   2.5   2.2   1.9   2.0   1.9   1.4   1.5   1.4   1.5    .0    .0    .2
 280.  *   2.1   2.0   2.7   3.1    .9   1.0   3.1   2.3   2.0   2.6   1.4   1.5   1.4   1.1   1.3   1.4   1.5    .0    .0    .0
 285.  *   2.1   2.1   2.9   3.3    .9   1.0   2.9   2.1   2.4   2.6    .8    .9   1.1    .9   1.4   1.4   1.5    .0    .0    .0
 290.  *   2.1   2.1   2.8   3.1   1.2   1.2   2.7   2.0   2.3   2.5    .6    .6    .8    .9   1.3   1.4   1.5    .0    .0    .0
 295.  *   2.1   1.8   2.7   2.8   1.1   1.3   2.4   1.9   2.3   2.5    .4    .5    .8    .9   1.3   1.4   1.5    .0    .0    .0
 300.  *   1.8   1.8   2.8   2.8   1.2   1.3   2.1   1.9   2.4   2.5    .4    .4    .6    .9   1.3   1.4   1.5    .0    .0    .0
 305.  *   1.8   1.8   2.9   2.7   1.2   1.3   1.8   1.7   2.5   2.4    .2    .4    .7    .9   1.3   1.4   1.5    .0    .0    .0
 310.  *   1.7   1.7   2.8   2.4   1.3   1.3   1.8   1.7   2.6   2.3    .2    .5    .7    .9   1.4   1.4   1.5    .0    .0    .0
 315.  *   1.7   1.7   2.9   2.3   1.3   1.3   1.4   1.7   2.7   2.3    .3    .5    .6    .8   1.4   1.4   1.5    .0    .0    .0
 320.  *   1.6   1.6   2.8   2.1   1.3   1.2   1.4   1.9   2.5   2.1    .3    .5    .6    .8   1.4   1.4   1.5    .0    .0    .0
 325.  *   1.6   1.6   2.8   1.9   1.3   1.2   1.4   1.8   2.4   2.2    .3    .6    .6    .8   1.3   1.5   1.7    .0    .0    .0
 330.  *   1.5   1.6   2.7   1.8   1.3   1.3   1.6   2.1   2.5   2.2    .3    .6    .7   1.0   1.4   1.7   1.9    .0    .0    .0
 335.  *   1.5   1.4   2.6   1.6   1.3   1.4   1.7   2.1   2.6   2.1    .3    .5    .6   1.0   1.4   1.7   1.9    .0    .0    .0
 340.  *   1.4   1.4   2.6   1.6   1.2   1.2   1.9   2.4   2.6   2.1    .3    .5    .6   1.1   1.6   1.8   1.9    .0    .0    .0
 345.  *   1.4   1.4   2.7   1.6   1.3   1.2   1.9   2.5   2.6   2.2    .2    .5    .6   1.1   1.7   1.8   2.0    .0    .0    .0
 350.  *   1.5   1.5   2.8   1.5   1.2   1.3   2.0   2.6   2.6   2.0    .1    .4    .6   1.1   1.7   1.9   2.0    .2    .2    .1
 355.  *   1.5   1.5   2.8   1.8   1.3   1.5   2.1   2.6   2.5   2.0    .1    .3    .6   1.1   1.8   1.9   2.0    .2    .3    .4
 360.  *   1.5   1.5   2.9   2.1   1.5   1.8   2.1   2.7   2.3   2.0    .0    .1    .5   1.0   1.7   1.9   2.0    .6    .6    .7
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   2.6   3.2   3.7   3.3   1.7   1.8   3.3   2.7   2.7   2.6   4.2   4.0   4.2   2.8   2.4   2.3   2.5   2.4   2.6   3.1
 DEGR. *   75    75    25   285    10     0   275    70   315    60   255   100   100   100   230   220   215   160   160   105

1
                                                                                                                        PAGE  5
      JOB: Site 1 No Build 2014 AM - 1NBAM14.DAT              RUN: Site 1 No Build 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
   0.  *    .2    .0    .0    .0
   5.  *    .4    .1    .0    .0
  10.  *    .7    .1    .0    .0
  15.  *   1.0    .3    .1    .0
```

```
  20.  *   1.3    .6    .2    .1
  25.  *   1.4    .7    .4    .2
  30.  *   1.5    .8    .4    .2
  35.  *   1.6    .8    .6    .2
  40.  *   1.6    .8    .6    .4
  45.  *   1.4    .9    .6    .4
  50.  *   1.3    .9    .7    .5
  55.  *   1.2    .8    .6    .4
  60.  *   1.1    .8    .5    .5
  65.  *   1.1   1.0    .8    .7
  70.  *   1.2   1.2   1.2    .8
  75.  *   1.5   1.7   1.4   1.3
  80.  *   2.0   2.3   1.9   1.8
  85.  *   2.4   2.8   2.7   2.4
  90.  *   2.8   3.1   3.1   2.9
  95.  *   3.0   3.0   3.3   3.1
 100.  *   2.9   2.9   3.1   3.0
 105.  *   2.6   2.9   2.9   2.8
 110.  *   2.5   2.8   3.1   2.7
 115.  *   2.1   2.6   2.7   2.4
 120.  *   2.0   2.6   2.6   2.3
 125.  *   1.9   2.3   2.5   2.2
 130.  *   1.7   2.4   2.4   2.0
 135.  *   1.6   2.5   2.3   2.0
 140.  *   1.6   2.4   2.1   1.8
 145.  *   1.5   2.4   2.0   1.8
 150.  *   1.5   2.3   1.9   1.7
 155.  *   1.5   2.4   1.8   1.7
 160.  *   1.5   2.4   1.8   1.7
 165.  *   1.5   2.4   1.7   1.7
 170.  *   1.7   2.3   1.7   1.7
 175.  *   1.7   2.4   1.8   1.8
 180.  *   1.7   2.4   1.8   1.8
 185.  *   1.8   2.2   1.7   1.7
 190.  *   1.8   2.2   1.7   1.7
 195.  *   1.9   2.1   1.7   1.7
 200.  *   1.9   2.0   1.7   1.7
 205.  *   2.0   1.9   1.7   1.7
1
                                                                                                                        PAGE  6
      JOB: Site 1 No Build 2014 AM - 1NBAM14.DAT                RUN: Site 1 No Build 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   2.1   2.0   1.8   1.9
 215.  *   2.1   1.9   1.8   1.9
 220.  *   2.1   2.1   2.0   2.1
 225.  *   2.1   2.1   2.1   2.2
 230.  *   2.0   2.2   2.2   2.2
 235.  *   2.0   2.2   2.3   2.3
 240.  *   2.1   2.4   2.4   2.5
 245.  *   2.2   2.5   2.5   2.4
 250.  *   2.2   2.8   2.8   2.6
 255.  *   2.0   2.7   2.8   2.6
 260.  *   1.8   2.7   2.7   2.6
 265.  *   1.5   2.4   2.4   2.2
 270.  *   1.0   1.9   1.8   1.8
 275.  *    .7   1.4   1.4   1.4
 280.  *    .4    .9    .9    .9
 285.  *    .2    .7    .6    .6
 290.  *    .1    .4    .4    .4
 295.  *    .0    .3    .3    .3
 300.  *    .0    .2    .2    .2
 305.  *    .0    .2    .2    .2
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .1    .1    .1
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .0    .0    .0    .0
 355.  *    .1    .0    .0    .0
 360.  *    .2    .0    .0    .0
 ------*------------------------
 MAX   *   3.0   3.1   3.3   3.1
 DEGR. *   95    90    95    95

 THE HIGHEST CONCENTRATION IS    4.20 PPM AT  255 DEGREES FROM REC11.
 THE 2ND HIGHEST CONCENTRATION IS    4.20 PPM AT  100 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    4.00 PPM AT  100 DEGREES FROM REC12.
```

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Site 1 No Build 2030 AM - 1NBAM30.DAT   60.0321.0.0000.000240.30480000    1
1
SE MID S                  650.     1369.       5.0
SE 164 S                  792.     1375.       5.0
SE 82 S                   874.     1379.       5.0
SE CNR                    960.     1383.       5.0
SE 82 E                   947.     1304.       5.0
NE 82 E                  1016.     1306.       5.0
NE CNR                   1022.     1387.       5.0
NE 82 N                  1094.     1391.       5.0
NE 164 N                 1175.     1396.       5.0
NE MID N                 1298.     1405.       5.0
NW MID N                 1318.     1496.       5.0
NW 164 N                 1218.     1493.       5.0
NW 82 N                  1136.     1488.       5.0
NW CNR                   1054.     1503.       5.0
NW 82 W                  1043.     1586.       5.0
NW 164 W                 1057.     1667.       5.0
NW MID W                 1083.     1784.       5.0
SW MID W                 1024.     1777.       5.0
SW 164 W                  994.     1650.       5.0
SW 82 W                   975.     1570.       5.0
SW CNR                    935.     1495.       5.0
SW 82 S                   853.     1474.       5.0
SW 164 S                  771.     1470.       5.0
SW MID S                  631.     1463.       5.0
Site 1 No Build 2030 AM                  24  1   0
  1
NB        Rt1 aprch AG     3.  1362.   559.  1390.    1720 9.2  0.  56   30.
  1
NB        Rt1 th+rt AG   559.  1390.  1016.  1410.    1200 9.2  0.  56   30.
  2
NB        Rt1 th+rt AG   936.  1407.   568.  1390.      0.  36   3
       121        46       2.0 1200   84.1 1679 1 3
  1
NB        Rt1 left  AG   552.  1408.  1013.  1432.     520 9.2  0.  32   30.
  2
NB        Rt1 left  AG   934.  1428.   569.  1409.      0.  12   1
       121        98       2.0  520   84.1 1752 1 3
  1
NB        Rt1 departAG  1017.  1410.  1345.  1432.    1345 9.2  0.  56   30.
  1
NB        Rt1 departAG  1345.  1432.  1632.  1463.    1345 9.2  0.  44   30.
  1
NB        Rt1 departAG  1632.  1463.  1999.  1510.    1345 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1995.  1546.  1680.  1502.    3035 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1680.  1502.  1429.  1473.    3035 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1429.  1473.  1228.  1465.    3035 9.2  0.  44   30.
  1
SB        Rt1 th+rt AG  1228.  1465.  1017.  1455.    3015 9.2  0.  56   30.
  2
SB        Rt1 th+rt AG  1066.  1457.  1221.  1465.      0.  36   3
       121        65       2.0 3015   84.1 1668 1 3
```

```
   1
SB         Rt1 left  AG  1165.  1444.  1020.  1436.      20 9.2  0.  32   30.
   2
SB         Rt1 left  AG  1068.  1439.  1161.  1444.      0.  12   1
       121       116       2.0   20   84.1 1752 1 3
   1
SB         Rt1 departAG  1017.  1455.     2.  1403.    3630 9.2  0.  56   30.
   1
EB         Rt28 aprchAG  1191.  2428.  1007.  1603.     860 9.2  0.  32   30.
   1
EB         Rt28 aprchAG  1007.  1603.   961.  1435.     860 9.2  0.  44   30.
   2
EB         Rt28 aprchAG   979.  1500.  1000.  1578.      0.  24   2
       121       102       2.0  860   84.1 1686 1 3
   1
EB         Rt28 deparAG   987.  1425.   978.  1298.      45 9.2  0.  32   30.
   1
WB         Rt28 aprchAG   986.  1300.   997.  1445.      85 9.2  0.  44   30.
   2
WB         Rt28 aprchAG   993.  1391.   986.  1306.      0.  24   2
       121       114       2.0   85   84.1 1694 1 3
   1
WB         Rt28 deparAG   999.  1445.  1024.  1615.     680 9.2  0.  32   30.
   1
WB         Rt28 deparAG  1024.  1615.  1201.  2425.     680 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 1 No Build 2030 AM - 1NBAM30.DAT               RUN: Site 1 No Build 2030 AM
      DATE: 05/09/2009   TIME: 20:31:21.54


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2    *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*---------------------------------------*--------------------------------------------------------------
       1. NB        Rt1 aprch *      3.0    1362.0     559.0    1390.0 *     557.    87. AG  1720.   9.2    .0 56.0
       2. NB        Rt1 th+rt *    559.0    1390.0    1016.0    1410.0 *     457.    87. AG  1200.   9.2    .0 56.0
       3. NB        Rt1 th+rt *    936.0    1407.0     835.5    1402.4 *     101.   267. AG   257. 100.0    .0 36.0  .41   5.1
       4. NB        Rt1 left  *    552.0    1408.0    1013.0    1432.0 *     462.    87. AG   520.   9.2    .0 32.0
       5. NB        Rt1 left  *    934.0    1428.0   -1904.8    1280.2 *    2843.   267. AG   183. 100.0    .0 12.0 1.89 144.4
       6. NB        Rt1 depart*   1017.0    1410.0    1345.0    1432.0 *     329.    86. AG  1345.   9.2    .0 56.0
       7. NB        Rt1 depart*   1345.0    1432.0    1632.0    1463.0 *     289.    84. AG  1345.   9.2    .0 44.0
       8. NB        Rt1 depart*   1632.0    1463.0    1999.0    1510.0 *     370.    83. AG  1345.   9.2    .0 44.0
       9. SB        Rt1 aprch *   1995.0    1546.0    1680.0    1502.0 *     318.   262. AG  3035.   9.2    .0 44.0
      10. SB        Rt1 aprch *   1680.0    1502.0    1429.0    1473.0 *     253.   263. AG  3035.   9.2    .0 44.0
      11. SB        Rt1 aprch *   1429.0    1473.0    1228.0    1465.0 *     201.   268. AG  3035.   9.2    .0 44.0
      12. SB        Rt1 th+rt *   1228.0    1465.0    1017.0    1455.0 *     211.   267. AG  3015.   9.2    .0 56.0
      13. SB        Rt1 th+rt *   1066.0    1457.0    4445.8    1631.4 *    3384.    87. AG   364. 100.0    .0 36.0 1.40 171.9
      14. SB        Rt1 left  *   1165.0    1444.0    1020.0    1436.0 *     145.   267. AG    20.   9.2    .0 32.0
      15. SB        Rt1 left  *   1068.0    1439.0    1165.8    1444.3 *      98.    87. AG   216. 100.0    .0 12.0 1.43   5.0
      16. SB        Rt1 depart*   1017.0    1455.0       2.0    1403.0 *    1016.   267. AG  3630.   9.2    .0 56.0
      17. EB        Rt28 aprch*   1191.0    2428.0    1007.0    1603.0 *     845.   193. AG   860.   9.2    .0 32.0
      18. EB        Rt28 aprch*   1007.0    1603.0     961.0    1435.0 *     174.   195. AG   860.   9.2    .0 44.0
      19. EB        Rt28 aprch*    979.0    1500.0    1644.5    3971.9 *    2560.    15. AG   380. 100.0    .0 24.0 2.06 130.0
      20. EB        Rt28 depar*    987.0    1425.0     978.0    1298.0 *     127.   184. AG    45.   9.2    .0 32.0
      21. WB        Rt28 aprch*    986.0    1300.0     997.0    1445.0 *     145.     4. AG    85.   9.2    .0 44.0
      22. WB        Rt28 aprch*    993.0    1391.0     988.2    1333.3 *      58.   185. AG   425. 100.0    .0 24.0 1.00   2.9
      23. WB        Rt28 depar*    999.0    1445.0    1024.0    1615.0 *     172.     8. AG   680.   9.2    .0 32.0
      24. WB        Rt28 depar*   1024.0    1615.0    1201.0    2425.0 *     829.    12. AG   680.   9.2    .0 32.0
1
                                                                                                                        PAGE  2
      JOB: Site 1 No Build 2030 AM - 1NBAM30.DAT               RUN: Site 1 No Build 2030 AM
      DATE: 05/09/2009   TIME: 20:31:21.54

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE    SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC    TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 th+rt *     121       46       2.0      1200       1679      84.10      1        3
       5. NB        Rt1 left  *     121       98       2.0       520       1752      84.10      1        3
      13. SB        Rt1 th+rt *     121       65       2.0      3015       1668      84.10      1        3
      15. SB        Rt1 left  *     121      116       2.0        20       1752      84.10      1        3
      19. EB        Rt28 aprch*     121      102       2.0       860       1686      84.10      1        3
      22. WB        Rt28 aprch*     121      114       2.0        85       1694      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)         *
         RECEPTOR             *      X           Y          Z     *
     -------------------------*-----------------------------------*
       1. SE MID S            *       650.0     1369.0       5.0   *
       2. SE 164 S            *       792.0     1375.0       5.0   *
       3. SE 82 S             *       874.0     1379.0       5.0   *
       4. SE CNR              *       960.0     1383.0       5.0   *
       5. SE 82 E             *       947.0     1304.0       5.0   *
       6. NE 82 E             *      1016.0     1306.0       5.0   *
       7. NE CNR              *      1022.0     1387.0       5.0   *
       8. NE 82 N             *      1094.0     1391.0       5.0   *
       9. NE 164 N            *      1175.0     1396.0       5.0   *
      10. NE MID N            *      1298.0     1405.0       5.0   *
      11. NW MID N            *      1318.0     1496.0       5.0   *
      12. NW 164 N            *      1218.0     1493.0       5.0   *
      13. NW 82 N             *      1136.0     1488.0       5.0   *
      14. NW CNR              *      1054.0     1503.0       5.0   *
      15. NW 82 W             *      1043.0     1586.0       5.0   *
      16. NW 164 W            *      1057.0     1667.0       5.0   *
      17. NW MID W            *      1083.0     1784.0       5.0   *
      18. SW MID W            *      1024.0     1777.0       5.0   *
      19. SW 164 W            *       994.0     1650.0       5.0   *
      20. SW 82 W             *       975.0     1570.0       5.0   *
      21. SW CNR              *       935.0     1495.0       5.0   *
      22. SW 82 S             *       853.0     1474.0       5.0   *
      23. SW 164 S            *       771.0     1470.0       5.0   *
      24. SW MID S            *       631.0     1463.0       5.0   *
1
                                                                                                                        PAGE  3
      JOB: Site 1 No Build 2030 AM - 1NBAM30.DAT               RUN: Site 1 No Build 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.5   1.5   2.3   1.9   1.4   1.8   2.1   2.5   1.9   1.7    .2    .3    .6   1.0   1.5   1.9   2.1    .5    .6    .7
```

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   5.  *   1.5   1.6   2.4   2.3   1.4   1.8   2.1   2.4   1.9   1.7    .2    .3    .5    .9   1.5   1.8   2.0    .9   1.0   1.2
  10.  *   1.6   1.6   2.7   2.4   1.8   1.3   1.9   2.2   1.7   1.6    .1    .2    .3    .9   1.4   1.7   1.9   1.3   1.4   1.5
  15.  *   1.5   1.7   2.7   2.4   1.8   1.3   1.9   2.1   1.8   1.6    .1    .1    .3    .7   1.2   1.4   1.6   1.6   1.8   1.9
  20.  *   1.6   1.9   3.1   2.4   1.6   1.1   1.6   2.1   1.7   1.5    .0    .1    .2    .5    .9   1.1   1.2   1.9   2.1   2.3
  25.  *   1.7   2.0   3.2   2.0   1.7   1.0   1.4   2.0   1.5   1.5    .0    .0    .2    .2    .6    .7    .8   2.0   2.2   2.4
  30.  *   1.8   2.1   3.1   1.8   1.4   1.0   1.4   1.9   1.6   1.6    .0    .0    .1    .1    .2    .4    .5   2.0   2.2   2.4
  35.  *   1.8   2.1   2.9   1.6   1.5    .9   1.5   1.9   1.7   1.7    .0    .0    .1    .0    .1    .1    .2   2.0   2.1   2.2
  40.  *   1.8   2.2   2.8   1.6   1.6   1.1   1.5   2.0   1.8   1.8    .0    .0    .1    .0    .0    .1    .1   1.9   1.9   2.2
  45.  *   1.8   2.1   2.8   1.5   1.4   1.1   1.8   2.0   1.9   1.8    .0    .0    .1    .0    .0    .0    .0   1.7   1.9   2.0
  50.  *   1.9   2.3   2.7   1.7   1.5   1.0   1.9   2.0   1.8   1.9    .0    .0    .1    .0    .0    .0    .0   1.7   1.8   1.9
  55.  *   1.9   2.5   2.5   1.9   1.4   1.0   2.2   2.1   1.9   2.1    .2    .0    .1    .0    .0    .0    .0   1.6   1.8   1.8
  60.  *   2.0   2.4   2.7   2.0   1.3   1.1   2.1   2.2   2.1   2.2    .2    .1    .3    .0    .0    .0    .0   1.6   1.7   1.7
  65.  *   2.0   2.4   2.7   2.3   1.5   1.1   2.3   2.2   2.2   2.1    .4    .3    .5    .1    .0    .0    .0   1.6   1.7   1.6
  70.  *   2.2   2.6   2.7   2.4   1.2   1.0   2.4   2.4   2.3   2.2    .7    .6    .8    .2    .0    .0    .0   1.5   1.6   1.6
  75.  *   2.3   2.6   2.7   2.6   1.2   1.0   2.4   2.3   2.1   2.2   1.2   1.1   1.4    .6    .1    .0    .0   1.5   1.6   1.6
  80.  *   2.1   2.5   2.5   2.8    .9    .9   2.2   2.0   2.1   2.0   1.9   1.7   1.9    .9    .2    .1    .0   1.5   1.6   1.7
  85.  *   2.0   2.2   2.4   2.7    .6    .5   1.9   1.8   1.8   1.8   2.4   2.3   2.5   1.4    .4    .2    .1   1.6   1.7   1.9
  90.  *   1.4   1.6   1.6   2.1    .2    .2   1.4   1.4   1.3   1.2   2.9   2.8   3.1   1.9    .7    .3    .2   1.7   1.8   2.3
  95.  *   1.1   1.2   1.2   1.7    .1    .1    .8   1.0    .9   1.0   3.3   3.1   3.4   2.1    .8    .5    .2   1.7   2.1   2.4
 100.  *    .6    .7    .9   1.3    .1    .1    .5    .5    .5    .5   3.4   3.4   3.4   2.1    .9    .6    .4   1.9   2.2   2.6
 105.  *    .3    .5    .7   1.2    .0    .0    .3    .3    .3    .3   3.3   3.2   3.4   2.4    .9    .6    .4   1.9   2.1   2.7
 110.  *    .1    .2    .3   1.2    .0    .0    .2    .1    .1    .1   3.0   3.0   3.3   2.3   1.0    .7    .5   2.0   2.0   2.5
 115.  *    .1    .2    .3   1.1    .0    .0    .1    .1    .1    .1   3.0   3.1   3.1   2.2   1.1    .7    .5   2.0   2.1   2.6
 120.  *    .1    .1    .2   1.1    .0    .0    .1    .1    .1    .1   2.7   2.8   2.8   2.2   1.0    .6    .4   2.0   2.2   2.6
 125.  *    .1    .1    .2   1.1    .0    .0    .1    .1    .1    .1   2.7   2.7   2.7   2.1    .9    .7    .4   1.9   2.0   2.5
 130.  *    .1    .1    .2   1.0    .0    .0    .1    .1    .1    .1   2.5   2.5   2.8   2.0    .9    .7    .4   1.9   2.1   2.5
 135.  *    .0    .0    .1   1.0    .0    .0    .1    .1    .1    .1   2.5   2.4   2.6   2.0   1.0    .6    .4   1.8   2.2   2.4
 140.  *    .0    .0    .0    .8    .0    .0    .1    .1    .1    .1   2.3   2.3   2.4   1.8    .9    .6    .3   1.9   2.3   2.4
 145.  *    .0    .0    .0    .7    .0    .0    .0    .0    .0    .0   2.4   2.2   2.4   1.8    .9    .7    .3   2.0   2.2   2.4
 150.  *    .0    .0    .0    .6    .0    .0    .0    .0    .0    .0   2.2   2.2   2.4   1.7    .9    .7    .5   2.1   2.3   2.3
 155.  *    .0    .0    .0    .5    .0    .0    .0    .0    .0    .0   2.1   2.2   2.3   1.7    .8    .7    .5   2.0   2.2   2.3
 160.  *    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0   2.1   2.1   2.3   1.6    .8    .7    .5   2.1   2.2   2.3
 165.  *    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0   2.2   2.2   2.5   1.4    .7    .6    .4   2.1   2.2   2.2
 170.  *    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0   2.3   2.2   2.5   1.3    .7    .6    .5   2.0   2.3   2.1
 175.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.2   2.2   2.5   1.2    .8    .6    .5   2.0   2.1   2.0
 180.  *    .0    .0    .0    .1    .0    .0    .1    .0    .0    .0   2.2   2.2   2.5   1.3    .8    .7    .6   1.9   2.0   1.8
 185.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.2   2.2   2.5   1.1    .7   1.1    .9   1.7   1.8   1.6
 190.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   2.1   2.2   2.5   1.2   1.0   1.0   1.1   1.5   1.8   1.5
 195.  *    .0    .0    .0    .0    .0    .0    .3    .0    .0    .0   2.2   2.1   2.3   1.1    .9   1.2   1.4   1.5   1.3   1.4
 200.  *    .0    .0    .0    .0    .0    .0    .4    .0    .0    .0   2.2   2.1   2.4   1.2   1.1   1.6   1.6   1.1   1.1   1.2
 205.  *    .0    .0    .0    .0    .0    .0    .5    .0    .0    .0   2.3   2.2   2.5   1.1   1.3   1.7   2.0    .9   1.0   1.2
1
                                                                                                                 PAGE  4
      JOB: Site 1 No Build 2030 AM - 1NBAM30.DAT                RUN: Site 1 No Build 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .7    .0    .0    .1   2.4   2.3   2.6   1.2   1.6   2.0   2.1    .7    .9   1.1
 215.  *    .0    .0    .0    .0    .0    .0    .8    .1    .1    .1   2.4   2.3   2.6   1.4   1.6   2.1   2.2    .5    .7   1.0
 220.  *    .0    .0    .1    .1    .0    .0    .9    .1    .1    .1   2.6   2.6   2.8   1.5   1.7   2.1   2.2    .4    .6   1.0
 225.  *    .1    .1    .1    .1    .0    .0   1.0    .2    .1    .1   2.7   2.8   3.0   1.7   1.9   2.2   2.2    .3    .5    .9
 230.  *    .1    .1    .1    .1    .0    .0   1.1    .2    .1    .1   2.8   3.0   2.9   1.7   2.0   2.0   1.9    .3    .6   1.0
 235.  *    .1    .1    .1    .1    .0    .0   1.1    .3    .1    .1   2.9   3.0   3.1   1.7   2.0   1.9   2.0    .4    .6    .8
 240.  *    .1    .1    .1    .1    .0    .0   1.1    .3    .2    .1   3.2   3.2   3.0   1.9   2.1   2.0   1.9    .4    .7    .9
 245.  *    .2    .1    .1    .2    .0    .0   1.2    .5    .3    .2   3.3   3.5   3.2   2.0   2.1   1.9   1.9    .4    .5    .9
 250.  *    .4    .5    .4    .5    .0    .0   1.5    .8    .5    .3   3.5   3.5   3.2   2.1   2.1   1.8   1.8    .2    .5    .9
 255.  *    .6    .5    .6    .8    .0    .0   1.5   1.0    .8    .7   3.6   3.4   3.1   2.2   1.9   1.7   1.6    .2    .4    .8
 260.  *    .9    .8    .9   1.3    .2    .2   2.1   1.5   1.1   1.1   3.3   3.3   2.9   2.1   1.8   1.6   1.6    .2    .3    .7
 265.  *   1.2   1.3   1.3   1.8    .3    .3   2.4   1.7   1.5   1.8   3.0   2.9   2.8   1.6   1.6   1.5   1.4    .0    .2    .5
 270.  *   1.6   1.6   1.7   2.1    .5    .6   2.6   2.0   1.9   2.1   2.4   2.2   2.3   1.6   1.5   1.5   1.4    .0    .2    .3
 275.  *   1.7   1.9   2.1   2.4    .7    .7   2.8   2.3   2.2   2.1   1.6   1.6   1.8   1.1   1.3   1.3   1.4    .0    .0    .2
 280.  *   1.8   1.9   2.3   2.6    .8    .8   2.7   2.1   2.1   2.2   1.2   1.2   1.3   1.0   1.2   1.3   1.4    .0    .0    .0
 285.  *   2.0   1.9   2.4   2.7    .8   1.0   2.5   2.0   1.9   2.3    .7    .7   1.0    .8   1.2   1.3   1.4    .0    .0    .0
 290.  *   1.9   1.9   2.3   2.5    .9   1.0   2.2   1.7   2.0   2.2    .5    .6    .8    .8   1.2   1.3   1.4    .0    .0    .0
 295.  *   1.9   1.7   2.2   2.3   1.0   1.3   2.1   1.8   1.9   2.1    .4    .4    .7    .7   1.2   1.3   1.4    .0    .0    .0
 300.  *   1.7   1.7   2.3   2.3   1.0   1.3   1.7   1.6   2.1   2.2    .3    .3    .6    .7   1.2   1.3   1.4    .0    .0    .0
 305.  *   1.7   1.7   2.3   2.2   1.0   1.4   1.8   1.5   2.2   2.1    .2    .3    .6    .7   1.2   1.3   1.4    .0    .0    .0
 310.  *   1.5   1.5   2.2   2.0   1.1   1.4   1.7   1.3   2.3   2.0    .2    .4    .4    .7   1.1   1.3   1.4    .0    .0    .0
 315.  *   1.5   1.5   2.2   1.8   1.1   1.5   1.3   1.7   2.2   2.0    .2    .5    .4    .8   1.3   1.3   1.4    .0    .0    .0
 320.  *   1.5   1.5   2.2   1.7   1.1   1.6   1.4   1.6   2.2   1.9    .2    .5    .5    .8   1.2   1.3   1.5    .0    .0    .0
 325.  *   1.5   1.5   2.2   1.7   1.1   1.6   1.3   1.8   2.2   1.9    .2    .5    .5    .8   1.2   1.4   1.5    .0    .0    .0
 330.  *   1.5   1.5   2.2   1.5   1.1   1.7   1.5   1.8   2.2   1.8    .2    .6    .7    .9   1.3   1.4   1.5    .0    .0    .0
 335.  *   1.4   1.4   2.1   1.4   1.1   1.6   1.6   2.0   2.2   1.7    .2    .5    .6    .9   1.3   1.6   1.7    .0    .0    .0
 340.  *   1.4   1.4   2.2   1.5   1.1   1.4   1.6   2.1   2.2   1.7    .2    .5    .6   1.0   1.4   1.6   1.7    .0    .0    .0
 345.  *   1.4   1.4   2.3   1.6   1.1   1.3   1.8   2.0   2.3   1.7    .2    .5    .6   1.0   1.5   1.7   1.9    .0    .0    .0
 350.  *   1.5   1.5   2.3   1.5   1.1   1.5   1.8   2.3   2.2   1.7    .2    .4    .6   1.0   1.5   1.8   2.0    .2    .1    .1
 355.  *   1.5   1.5   2.3   1.6   1.3   1.6   2.0   2.4   2.1   1.7    .2    .3    .6   1.0   1.7   1.8   2.0    .3    .3    .4
 360.  *   1.5   1.5   2.3   1.9   1.4   1.8   2.1   2.5   1.9   1.7    .2    .3    .6   1.0   1.5   1.9   2.1    .5    .6    .7
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   2.3   2.6   3.2   2.8   1.8   1.8   2.8   2.5   2.3   2.3   3.6   3.5   3.4   2.4   2.1   2.2   2.2   2.1   2.3   2.7
 DEGR. *    75    70    25    80    10     0   275     0    70   285   255   245    95   105   240   225   215   150   140   105

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                                                                                                                 PAGE  5
      JOB: Site 1 No Build 2030 AM - 1NBAM30.DAT                RUN: Site 1 No Build 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
   0.  *    .2    .1    .0    .0
   5.  *    .5    .1    .1    .0
  10.  *    .8    .2    .1    .0
  15.  *   1.0    .4    .2    .1
```

```
  20.  *   1.3    .8    .4    .2
  25.  *   1.4    .8    .5    .3
  30.  *   1.4    .8    .6    .3
  35.  *   1.6    .8    .6    .4
  40.  *   1.5    .8    .6    .4
  45.  *   1.2    .7    .5    .3
  50.  *   1.2    .9    .5    .3
  55.  *   1.1    .7    .5    .4
  60.  *   1.1    .7    .5    .4
  65.  *   1.1    .9    .7    .5
  70.  *   1.2   1.2    .9    .8
  75.  *   1.3   1.5   1.3   1.2
  80.  *   1.7   2.0   1.7   1.6
  85.  *   2.2   2.4   2.3   2.2
  90.  *   2.5   2.7   2.8   2.6
  95.  *   2.6   2.7   2.9   2.7
 100.  *   2.6   2.7   2.7   2.6
 105.  *   2.4   2.7   2.7   2.6
 110.  *   2.1   2.4   2.6   2.5
 115.  *   1.9   2.3   2.5   2.2
 120.  *   1.8   2.4   2.4   2.1
 125.  *   1.8   2.2   2.3   1.9
 130.  *   1.6   2.3   2.3   1.9
 135.  *   1.6   2.1   2.0   1.8
 140.  *   1.6   2.0   1.9   1.7
 145.  *   1.6   2.1   1.8   1.7
 150.  *   1.5   2.0   1.7   1.6
 155.  *   1.4   1.9   1.7   1.6
 160.  *   1.4   1.9   1.5   1.5
 165.  *   1.5   1.9   1.5   1.5
 170.  *   1.7   2.0   1.6   1.6
 175.  *   1.6   2.0   1.6   1.6
 180.  *   1.6   1.9   1.6   1.6
 185.  *   1.5   1.9   1.6   1.6
 190.  *   1.5   1.8   1.5   1.5
 195.  *   1.6   1.7   1.5   1.5
 200.  *   1.6   1.8   1.6   1.6
 205.  *   1.7   1.8   1.7   1.7
1
                                                                                                     PAGE  6
      JOB: Site 1 No Build 2030 AM - 1NBAM30.DAT                RUN: Site 1 No Build 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   1.7   1.8   1.7   1.8
 215.  *   1.7   1.9   1.8   1.9
 220.  *   1.8   1.8   1.8   1.9
 225.  *   1.7   1.9   1.9   2.0
 230.  *   1.8   2.0   2.0   2.1
 235.  *   1.8   2.1   2.1   2.1
 240.  *   1.8   2.2   2.2   2.2
 245.  *   2.0   2.3   2.3   2.2
 250.  *   1.9   2.6   2.5   2.4
 255.  *   1.8   2.6   2.6   2.4
 260.  *   1.7   2.5   2.5   2.4
 265.  *   1.4   2.2   2.2   2.1
 270.  *   1.0   1.7   1.7   1.6
 275.  *    .6   1.4   1.4   1.3
 280.  *    .4    .9    .9    .8
 285.  *    .1    .5    .5    .5
 290.  *    .1    .4    .3    .3
 295.  *    .0    .2    .2    .2
 300.  *    .0    .2    .2    .2
 305.  *    .0    .2    .1    .1
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .1    .1    .1
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .0    .0    .0    .0
 355.  *    .1    .0    .0    .0
 360.  *    .2    .1    .0    .0
 ------*------------------------
 MAX   *   2.6   2.7   2.9   2.7
 DEGR. *   95    90    95    95

 THE HIGHEST CONCENTRATION IS    3.60 PPM AT  255 DEGREES FROM REC11.
 THE 2ND HIGHEST CONCENTRATION IS    3.50 PPM AT  245 DEGREES FROM REC12.
 THE 3RD HIGHEST CONCENTRATION IS    3.40 PPM AT   95 DEGREES FROM REC13.
```

```
Site 1 No Build 2014 PM - 1NBPM14.DAT   60.0321.0.0000.000240.30480000    1
1
SE MID S                  650.     1369.       5.0
SE 164 S                  792.     1375.       5.0
SE 82 S                   874.     1379.       5.0
SE CNR                    960.     1383.       5.0
SE 82 E                   947.     1304.       5.0
NE 82 E                  1016.     1306.       5.0
NE CNR                   1022.     1387.       5.0
NE 82 N                  1094.     1391.       5.0
NE 164 N                 1175.     1396.       5.0
NE MID N                 1298.     1405.       5.0
NW MID N                 1318.     1496.       5.0
NW 164 N                 1218.     1493.       5.0
NW 82 N                  1136.     1488.       5.0
NW CNR                   1054.     1503.       5.0
NW 82 W                  1043.     1586.       5.0
NW 164 W                 1057.     1667.       5.0
NW MID W                 1083.     1784.       5.0
SW MID W                 1024.     1777.       5.0
SW 164 W                  994.     1650.       5.0
SW 82 W                   975.     1570.       5.0
SW CNR                    935.     1495.       5.0
SW 82 S                   853.     1474.       5.0
SW 164 S                  771.     1470.       5.0
SW MID S                  631.     1463.       5.0
Site 1 No Build 2014 PM                  24  1   0
  1
NB         Rt1 aprch AG     3.  1362.   559.  1390.    288311.4  0.  56   30.
  1
NB         Rt1 th+rt AG   559.  1390.  1016.  1410.    212411.4  0.  56   30.
  2
NB         Rt1 th+rt AG   936.  1407.   568.  1390.      0.  36   3
       120        55       2.0 2124  102.2 1678 1 3
  1
NB         Rt1 left  AG   552.  1408.  1013.  1432.     75911.4  0.  32   30.
  2
NB         Rt1 left  AG   934.  1428.   569.  1409.      0.  12   1
       120        93       2.0  759  102.2 1752 1 3
  1
NB         Rt1 departAG  1017.  1410.  1345.  1432.    229511.4  0.  56   30.
  1
NB         Rt1 departAG  1345.  1432.  1632.  1463.    229511.4  0.  44   30.
  1
NB         Rt1 departAG  1632.  1463.  1999.  1510.    229511.4  0.  44   30.
  1
SB         Rt1 aprch AG  1995.  1546.  1680.  1502.    156211.4  0.  44   30.
  1
SB         Rt1 aprch AG  1680.  1502.  1429.  1473.    156211.4  0.  44   30.
  1
SB         Rt1 aprch AG  1429.  1473.  1228.  1465.    156211.4  0.  44   30.
  1
SB         Rt1 th+rt AG  1228.  1465.  1017.  1455.    155711.4  0.  56   30.
  2
SB         Rt1 th+rt AG  1066.  1457.  1221.  1465.      0.  36   3
       120        79       2.0 1557  102.2 1660 1 3
```

```
  1
SB        Rt1 left  AG  1165.  1444.  1020.  1436.      1011.4  0.  32   30.
  2
SB        Rt1 left  AG  1068.  1439.  1161.  1444.      0.  12   1
       120       115       2.0   10  102.2 1752 1 3
  1
SB        Rt1 departAG  1017.  1455.     2.  1403.    192511.4  0.  56   30.
  1
EB        Rt28 aprchAG  1191.  2428.  1007.  1603.     59611.4  0.  32   30.
  1
EB        Rt28 aprchAG  1007.  1603.   961.  1435.     59611.4  0.  44   30.
  2
EB        Rt28 aprchAG   979.  1500.  1000.  1578.      0.  24   2
       120        99       2.0  596  102.2 1684 1 3
  1
EB        Rt28 deparAG   987.  1425.   978.  1298.      3011.4  0.  32   30.
  1
WB        Rt28 aprchAG   986.  1300.   997.  1445.     16011.4  0.  44   30.
  2
WB        Rt28 aprchAG   993.  1391.   986.  1306.      0.  24   2
       120       104       2.0  160  102.2 1706 1 3
  1
WB        Rt28 deparAG   999.  1445.  1024.  1615.     95111.4  0.  32   30.
  1
WB        Rt28 deparAG  1024.  1615.  1201.  2425.     95111.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 1 No Build 2014 PM - 1NBPM14.DAT                RUN: Site 1 No Build 2014 PM
      DATE: 05/09/2009   TIME: 20:20:20.90


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt1 aprch *      3.0    1362.0     559.0    1390.0 *     557.    87. AG   2883.  11.4    .0 56.0
       2. NB        Rt1 th+rt *    559.0    1390.0    1016.0    1410.0 *     457.    87. AG   2124.  11.4    .0 56.0
       3. NB        Rt1 th+rt *    936.0    1407.0     717.4    1396.9 *     219.   267. AG    377. 100.0    .0 36.0  .83  11.1
       4. NB        Rt1 left  *    552.0    1408.0    1013.0    1432.0 *     462.    87. AG    759.  11.4    .0 32.0
       5. NB        Rt1 left  *    934.0    1428.0   -3820.4    1180.5 *    4761.   267. AG    212. 100.0    .0 12.0 2.27 241.9
       6. NB        Rt1 depart*   1017.0    1410.0    1345.0    1432.0 *     329.    86. AG   2295.  11.4    .0 56.0
       7. NB        Rt1 depart*   1345.0    1432.0    1632.0    1463.0 *     289.    84. AG   2295.  11.4    .0 44.0
       8. NB        Rt1 depart*   1632.0    1463.0    1999.0    1510.0 *     370.    83. AG   2295.  11.4    .0 44.0
       9. SB        Rt1 aprch *   1995.0    1546.0    1680.0    1502.0 *     318.   262. AG   1562.  11.4    .0 44.0
      10. SB        Rt1 aprch *   1680.0    1502.0    1429.0    1473.0 *     253.   263. AG   1562.  11.4    .0 44.0
      11. SB        Rt1 aprch *   1429.0    1473.0    1228.0    1465.0 *     201.   268. AG   1562.  11.4    .0 44.0
      12. SB        Rt1 th+rt *   1228.0    1465.0    1017.0    1455.0 *     211.   267. AG   1557.  11.4    .0 56.0
      13. SB        Rt1 th+rt *   1066.0    1457.0    1480.0    1478.4 *     415.    87. AG    541. 100.0    .0 36.0 1.02  21.1
      14. SB        Rt1 left  *   1165.0    1444.0    1020.0    1436.0 *     145.   267. AG     10.  11.4    .0 32.0
      15. SB        Rt1 left  *   1068.0    1439.0    1078.4    1439.6 *      10.    87. AG    263. 100.0    .0 12.0  .71    .5
      16. SB        Rt1 depart*   1017.0    1455.0       2.0    1403.0 *    1016.   267. AG   1925.  11.4    .0 56.0
      17. EB        Rt28 aprch*   1191.0    2428.0    1007.0    1603.0 *     845.   193. AG    596.  11.4    .0 32.0
      18. EB        Rt28 aprch*   1007.0    1603.0     961.0    1435.0 *     174.   195. AG    596.  11.4    .0 44.0
      19. EB        Rt28 aprch*    979.0    1500.0    1198.9    2316.8 *     846.    15. AG    452. 100.0    .0 24.0 1.25  43.0
      20. EB        Rt28 depar*    987.0    1425.0     978.0    1298.0 *     127.   184. AG     30.  11.4    .0 32.0
      21. WB        Rt28 aprch*    986.0    1300.0     997.0    1445.0 *     145.     4. AG    160.  11.4    .0 44.0
      22. WB        Rt28 aprch*    993.0    1391.0     989.3    1345.7 *      45.   185. AG    475. 100.0    .0 24.0  .47   2.3
      23. WB        Rt28 depar*    999.0    1445.0    1024.0    1615.0 *     172.     8. AG    951.  11.4    .0 32.0
      24. WB        Rt28 depar*   1024.0    1615.0    1201.0    2425.0 *     829.    12. AG    951.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 1 No Build 2014 PM - 1NBPM14.DAT                RUN: Site 1 No Build 2014 PM
      DATE: 05/09/2009   TIME: 20:20:20.90

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 th+rt *    120       55       2.0      2124       1678     102.20      1        3
       5. NB        Rt1 left  *    120       93       2.0       759       1752     102.20      1        3
      13. SB        Rt1 th+rt *    120       79       2.0      1557       1660     102.20      1        3
      15. SB        Rt1 left  *    120      115       2.0        10       1752     102.20      1        3
      19. EB        Rt28 aprch*    120       99       2.0       596       1684     102.20      1        3
      22. WB        Rt28 aprch*    120      104       2.0       160       1706     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       650.0     1369.0        5.0   *
      2. SE 164 S             *       792.0     1375.0        5.0   *
      3. SE 82 S              *       874.0     1379.0        5.0   *
      4. SE CNR               *       960.0     1383.0        5.0   *
      5. SE 82 E              *       947.0     1304.0        5.0   *
      6. NE 82 E              *      1016.0     1306.0        5.0   *
      7. NE CNR               *      1022.0     1387.0        5.0   *
      8. NE 82 N              *      1094.0     1391.0        5.0   *
      9. NE 164 N             *      1175.0     1396.0        5.0   *
     10. NE MID N             *      1298.0     1405.0        5.0   *
     11. NW MID N             *      1318.0     1496.0        5.0   *
     12. NW 164 N             *      1218.0     1493.0        5.0   *
     13. NW 82 N              *      1136.0     1488.0        5.0   *
     14. NW CNR               *      1054.0     1503.0        5.0   *
     15. NW 82 W              *      1043.0     1586.0        5.0   *
     16. NW 164 W             *      1057.0     1667.0        5.0   *
     17. NW MID W             *      1083.0     1784.0        5.0   *
     18. SW MID W             *      1024.0     1777.0        5.0   *
     19. SW 164 W             *       994.0     1650.0        5.0   *
     20. SW 82 W              *       975.0     1570.0        5.0   *
     21. SW CNR               *       935.0     1495.0        5.0   *
     22. SW 82 S              *       853.0     1474.0        5.0   *
     23. SW 164 S             *       771.0     1470.0        5.0   *
     24. SW MID S             *       631.0     1463.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 1 No Build 2014 PM - 1NBPM14.DAT                RUN: Site 1 No Build 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.7   2.9   3.0   2.4   1.8   1.9   2.4   2.6   2.5   2.3    .1    .3    .6   1.2   1.9   2.2   2.3    .5    .6    .8
```

```
   5.  *   1.7   2.9   3.1   2.6   1.7   1.6   2.3   2.7   2.4   2.3    .0    .1    .4   1.0   1.8   2.0   2.2    .8   1.0   1.1
  10.  *   1.7   2.9   3.2   2.7   1.9   1.7   2.2   2.4   2.1   2.1    .0    .1    .3    .9   1.6   1.9   2.0   1.2   1.4   1.6
  15.  *   1.7   3.0   3.4   2.8   2.1   1.5   2.2   2.3   2.1   2.1    .0    .0    .1    .6   1.2   1.5   1.6   1.6   1.9   1.9
  20.  *   1.8   3.2   3.6   2.5   2.1   1.1   1.9   2.2   2.1   2.1    .0    .0    .1    .4    .9   1.1   1.2   1.9   2.1   2.3
  25.  *   1.8   3.4   3.8   2.5   1.8   1.1   1.7   2.2   2.2   2.1    .0    .0    .0    .2    .7    .8    .9   2.1   2.3   2.5
  30.  *   1.9   3.5   3.9   2.4   1.5   1.1   1.7   2.2   2.3   2.2    .0    .0    .1    .1    .3    .4    .4   2.2   2.5   2.7
  35.  *   2.3   3.7   3.9   2.0   1.6   1.1   1.9   2.3   2.2   2.2    .0    .0    .1    .0    .1    .2    .3   2.3   2.4   2.6
  40.  *   2.4   3.7   3.5   1.8   1.6   1.1   2.2   2.3   2.4   2.3    .0    .0    .1    .0    .0    .1    .1   2.2   2.3   2.5
  45.  *   2.6   3.9   3.5   2.2   1.5   1.3   2.4   2.5   2.4   2.4    .0    .0    .1    .0    .0    .0    .0   2.1   2.2   2.4
  50.  *   2.6   3.9   3.6   2.3   1.6   1.2   2.5   2.6   2.5   2.5    .0    .0    .1    .0    .0    .0    .0   2.0   2.2   2.3
  55.  *   2.7   3.9   3.6   2.4   1.5   1.3   2.7   2.7   2.6   2.5    .1    .0    .2    .0    .0    .0    .0   1.9   2.1   2.2
  60.  *   3.0   4.2   3.5   2.6   1.4   1.2   2.6   2.7   2.8   2.7    .1    .1    .2    .0    .0    .0    .0   1.9   1.9   2.1
  65.  *   3.2   4.0   3.5   2.7   1.3   1.2   2.8   2.9   2.8   2.6    .3    .3    .3    .1    .0    .0    .0   1.8   1.9   1.9
  70.  *   3.3   3.9   3.5   3.1   1.3   1.1   2.9   2.8   2.7   2.6    .5    .4    .6    .1    .0    .0    .0   1.7   1.8   1.8
  75.  *   3.3   3.8   3.3   3.3    .9    .9   2.9   2.8   2.6   2.3    .9   1.0   1.1    .2    .0    .0    .0   1.7   1.8   1.8
  80.  *   3.3   3.7   3.3   3.3    .6    .5   2.5   2.5   2.4   2.2   1.4   1.4   1.7    .8    .0    .0    .0   1.7   1.8   1.8
  85.  *   2.9   3.1   2.9   3.1    .4    .4   2.2   2.1   2.1   1.8   1.9   2.0   2.3   1.2    .1    .0    .0   1.7   1.8   1.8
  90.  *   2.4   2.5   2.1   2.7    .3    .1   1.8   1.8   1.5   1.4   2.6   2.4   3.0   1.6    .3    .0    .0   1.7   1.8   2.1
  95.  *   1.8   1.7   1.5   2.1    .0    .0   1.1   1.2   1.1   1.1   3.0   3.1   3.3   2.2    .6    .1    .0   1.7   2.0   2.4
 100.  *   1.1   1.1   1.1   1.8    .0    .0    .8    .8    .7    .6   3.1   3.2   3.6   2.4    .7    .3    .0   1.6   2.2   2.8
 105.  *    .6    .8    .7   1.5    .0    .0    .5    .4    .5    .4   3.4   3.6   3.9   2.3    .9    .4    .1   1.7   2.3   2.9
 110.  *    .4    .5    .7   1.4    .0    .0    .3    .3    .3    .3   3.4   3.5   3.6   2.5   1.0    .6    .1   1.8   2.4   2.8
 115.  *    .2    .3    .3   1.4    .0    .0    .3    .2    .2    .2   3.3   3.3   3.5   2.5   1.0    .7    .4   2.1   2.4   3.0
 120.  *    .2    .2    .3   1.2    .0    .0    .2    .2    .2    .1   3.2   3.3   3.5   2.4   1.1    .6    .4   2.1   2.5   3.0
 125.  *    .1    .1    .2   1.2    .0    .0    .2    .2    .1    .1   3.1   3.1   3.3   2.2   1.1    .7    .4   2.1   2.7   2.8
 130.  *    .1    .1    .1   1.1    .0    .0    .1    .1    .1    .1   3.0   3.1   3.0   2.3   1.1    .7    .5   2.3   2.8   2.7
 135.  *    .1    .1    .1   1.0    .0    .0    .1    .1    .1    .1   3.0   3.1   2.9   2.1   1.1    .8    .4   2.3   2.6   2.7
 140.  *    .1    .1    .1    .9    .0    .0    .1    .1    .1    .1   2.9   2.8   2.8   2.0   1.1    .8    .6   2.3   2.4   2.7
 145.  *    .1    .1    .1    .8    .0    .0    .1    .1    .1    .1   2.8   2.8   2.8   1.9   1.1    .8    .6   2.4   2.6   2.9
 150.  *    .1    .1    .1    .7    .0    .0    .1    .1    .1    .1   2.8   2.7   2.6   1.8   1.0    .7    .5   2.4   2.7   2.7
 155.  *    .1    .1    .1    .6    .0    .0    .1    .1    .1    .1   2.6   2.6   2.6   1.7   1.0    .7    .6   2.4   2.7   2.5
 160.  *    .0    .0    .0    .3    .0    .0    .1    .0    .0    .0   2.6   2.7   2.6   1.6    .9    .7    .5   2.5   2.6   2.7
 165.  *    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0   2.7   2.6   2.6   1.5    .8    .6    .5   2.4   2.7   2.4
 170.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.8   2.7   2.7   1.4    .8    .6    .7   2.5   2.6   2.5
 175.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.8   2.7   2.7   1.2    .7    .7    .6   2.4   2.5   2.2
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.8   2.7   2.7   1.1   1.0    .7    .8   2.4   2.3   2.1
 185.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.7   2.7   2.7   1.2    .9   1.0   1.0   2.3   2.1   2.0
 190.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.6   2.6   2.6   1.0   1.0   1.3   1.7   1.8   2.0   1.8
 195.  *    .0    .0    .0    .0    .0    .0    .2    .1    .1    .1   2.6   2.6   2.6   1.2   1.2   1.6   1.9   1.5   1.6   1.6
 200.  *    .1    .1    .1    .1    .0    .0    .3    .1    .1    .1   2.6   2.6   2.6   1.1   1.6   1.6   2.0   1.2   1.4   1.5
 205.  *    .1    .1    .1    .1    .0    .0    .5    .1    .1    .1   2.7   2.6   2.7   1.2   1.5   2.3   2.4    .9   1.2   1.4
1
                                                                                                                 PAGE   4
      JOB: Site 1 No Build 2014 PM - 1NBPM14.DAT                RUN: Site 1 No Build 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .1    .0    .0    .7    .1    .1    .1   2.8   2.8   2.9   1.4   2.0   2.5   2.7    .7   1.1   1.3
 215.  *    .1    .1    .1    .1    .0    .0    .9    .1    .1    .1   3.0   2.8   2.9   1.4   2.1   2.6   2.6    .6    .9   1.2
 220.  *    .1    .1    .1    .1    .0    .0   1.0    .1    .1    .1   3.1   2.9   3.0   1.4   2.3   2.7   2.7    .6    .8   1.3
 225.  *    .1    .1    .1    .1    .0    .0   1.1    .2    .1    .1   3.3   3.0   3.1   1.6   2.5   2.7   2.7    .6    .8   1.2
 230.  *    .1    .1    .1    .1    .0    .0   1.2    .2    .2    .2   3.3   3.3   3.3   1.9   2.7   2.9   2.7    .5    .8   1.2
 235.  *    .1    .2    .2    .2    .0    .0   1.4    .3    .2    .2   3.4   3.4   3.3   2.0   2.6   2.6   2.5    .5    .7   1.2
 240.  *    .3    .2    .3    .3    .0    .0   1.4    .5    .3    .3   3.7   3.6   3.5   2.2   2.7   2.4   2.3    .3    .7   1.2
 245.  *    .3    .5    .4    .4    .0    .0   1.6    .7    .5    .4   3.9   3.8   3.5   2.4   2.7   2.4   2.2    .3    .7   1.2
 250.  *    .6    .7    .8    .8    .0    .0   2.1   1.0    .8    .6   4.2   3.9   3.8   2.5   2.4   2.3   2.1    .3    .6   1.0
 255.  *   1.0   1.1   1.2   1.3    .0    .0   2.4   1.5   1.3   1.3   4.2   3.8   3.4   2.4   2.3   2.1   2.1    .3    .5    .8
 260.  *   1.4   1.7   2.0   2.1    .2    .2   2.9   2.1   1.9   1.9   3.8   3.5   3.2   2.2   2.0   2.0   1.8    .1    .4    .7
 265.  *   1.9   2.3   2.7   2.7    .5    .5   3.4   2.7   2.2   2.4   3.3   3.0   2.9   2.1   1.9   1.9   1.8    .1    .3    .5
 270.  *   2.2   2.7   3.2   3.3    .6    .7   3.8   2.9   2.6   2.6   2.6   2.5   2.2   1.7   1.7   1.7   1.7    .0    .1    .3
 275.  *   2.5   3.2   3.7   3.7    .9    .9   4.0   3.1   2.8   2.9   2.0   1.9   1.8   1.4   1.5   1.7   1.8    .0    .0    .2
 280.  *   2.6   3.5   3.9   3.9   1.0   1.3   3.7   2.9   2.8   3.1   1.1   1.3   1.1   1.1   1.3   1.7   1.8    .0    .0    .0
 285.  *   2.6   3.6   3.9   3.8   1.3   1.3   3.5   2.8   2.6   3.0    .8    .8    .9    .9   1.3   1.7   1.8    .0    .0    .0
 290.  *   2.4   3.4   3.9   3.6   1.3   1.5   3.0   2.4   2.7   2.9    .5    .6    .7    .9   1.4   1.7   1.8    .0    .0    .0
 295.  *   2.3   3.5   3.7   3.3   1.5   1.7   2.7   2.1   2.5   2.9    .3    .6    .7    .9   1.4   1.7   1.7    .0    .0    .0
 300.  *   2.2   3.4   3.6   3.2   1.4   1.6   2.5   2.2   2.5   2.8    .3    .4    .7    .9   1.4   1.6   1.7    .0    .0    .0
 305.  *   2.2   3.4   3.5   2.9   1.5   1.7   2.2   2.0   2.5   2.7    .3    .4    .6    .9   1.5   1.6   1.7    .0    .0    .0
 310.  *   2.1   3.3   3.4   2.6   1.5   1.7   2.2   1.9   2.7   2.6    .3    .5    .6   1.0   1.5   1.7   1.8    .0    .0    .0
 315.  *   1.9   3.2   3.2   2.5   1.5   1.6   1.8   2.0   2.7   2.5    .3    .5    .6   1.0   1.5   1.7   1.8    .0    .0    .0
 320.  *   1.8   3.0   3.1   2.2   1.5   1.7   1.9   2.1   2.6   2.6    .3    .5    .7   1.0   1.4   1.7   1.8    .0    .0    .0
 325.  *   1.7   2.9   2.9   2.0   1.5   1.7   1.8   2.1   2.6   2.6    .3    .5    .6   1.0   1.6   1.7   1.9    .0    .0    .0
 330.  *   1.7   2.9   2.9   1.9   1.5   1.7   1.8   2.2   2.5   2.6    .4    .5    .6   1.0   1.7   1.8   2.0    .0    .0    .0
 335.  *   1.7   2.8   2.8   1.7   1.4   1.5   1.8   2.1   2.5   2.5    .3    .5    .6   1.2   1.7   1.9   2.0    .0    .0    .0
 340.  *   1.7   2.8   2.8   1.9   1.2   1.8   2.1   2.4   2.7   2.4    .3    .5    .7   1.3   1.8   2.0   2.2    .0    .0    .0
 345.  *   1.7   2.8   2.9   1.8   1.3   1.8   2.1   2.6   2.7   2.5    .3    .5    .7   1.2   1.8   2.0   2.2    .0    .0    .1
 350.  *   1.7   2.9   2.9   1.7   1.3   1.9   2.3   2.8   2.7   2.5    .2    .4    .6   1.2   1.9   2.1   2.3    .1    .1    .1
 355.  *   1.7   2.9   2.9   2.0   1.2   2.0   2.5   2.8   2.7   2.3    .1    .3    .6   1.2   1.9   2.2   2.3    .3    .3    .4
 360.  *   1.7   2.9   3.0   2.4   1.8   1.9   2.4   2.6   2.5   2.3    .1    .3    .6   1.2   1.9   2.2   2.3    .5    .6    .8
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   3.3   4.2   3.9   3.9   2.1   2.0   4.0   3.1   2.8   3.1   4.2   3.9   3.9   2.5   2.7   2.9   2.7   2.5   2.8   3.0
 DEGR. *   70    60   290   280    15   355   275   275    60   280   250   250   105   110   230   230   220   160   130   115

1
                                                                                                                 PAGE   5
      JOB: Site 1 No Build 2014 PM - 1NBPM14.DAT                RUN: Site 1 No Build 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*-----------------------
   0.  *    .2    .0    .0    .0
   5.  *    .6    .1    .0    .0
  10.  *    .8    .1    .0    .0
  15.  *   1.0    .3    .1    .0
```

```
  20.  *   1.4    .5    .2    .0
  25.  *   1.6    .7    .4    .1
  30.  *   1.7    .8    .6    .2
  35.  *   1.6    .9    .7    .3
  40.  *   1.7    .9    .7    .4
  45.  *   1.5    .9    .7    .4
  50.  *   1.5    .9    .6    .5
  55.  *   1.4    .8    .6    .5
  60.  *   1.3    .8    .5    .5
  65.  *   1.3    .9    .7    .4
  70.  *   1.2   1.1    .8    .6
  75.  *   1.3   1.4   1.2    .8
  80.  *   1.7   1.6   1.5   1.3
  85.  *   2.1   2.2   1.8   1.8
  90.  *   2.3   2.3   2.4   2.3
  95.  *   2.7   2.6   2.3   2.4
 100.  *   2.5   2.5   2.6   2.8
 105.  *   2.4   2.4   2.7   2.8
 110.  *   2.2   2.2   2.5   2.7
 115.  *   1.8   2.3   2.8   2.5
 120.  *   1.9   2.2   2.6   2.3
 125.  *   1.7   2.2   2.6   2.3
 130.  *   1.7   2.3   2.5   2.1
 135.  *   1.6   2.3   2.4   2.0
 140.  *   1.5   2.4   2.4   2.0
 145.  *   1.4   2.3   2.3   1.8
 150.  *   1.4   2.4   2.3   1.8
 155.  *   1.4   2.3   2.3   1.7
 160.  *   1.4   2.3   2.3   1.7
 165.  *   1.4   2.3   2.3   1.7
 170.  *   1.6   2.3   2.3   1.7
 175.  *   1.6   2.3   2.3   1.7
 180.  *   1.6   2.3   2.3   1.7
 185.  *   1.5   2.3   2.3   1.7
 190.  *   1.7   2.3   2.3   1.7
 195.  *   1.7   2.3   2.3   1.7
 200.  *   1.8   2.3   2.2   1.6
 205.  *   1.8   2.3   2.2   1.7
1
                                                                                                                      PAGE  6
      JOB: Site 1 No Build 2014 PM - 1NBPM14.DAT                RUN: Site 1 No Build 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   1.8   2.3   2.1   1.7
 215.  *   2.0   2.4   2.2   1.9
 220.  *   2.1   2.4   2.1   1.9
 225.  *   2.2   2.4   2.0   1.8
 230.  *   2.1   2.4   2.2   1.9
 235.  *   2.1   2.7   2.3   2.1
 240.  *   2.2   2.6   2.3   2.2
 245.  *   2.2   2.7   2.4   2.3
 250.  *   2.1   2.6   2.3   2.2
 255.  *   2.0   2.6   2.3   2.1
 260.  *   1.7   2.4   2.2   2.0
 265.  *   1.4   2.1   2.0   1.8
 270.  *    .9   1.6   1.5   1.5
 275.  *    .6   1.1   1.1   1.1
 280.  *    .4    .7    .7    .7
 285.  *    .1    .4    .4    .4
 290.  *    .0    .2    .2    .2
 295.  *    .0    .2    .2    .2
 300.  *    .0    .1    .1    .1
 305.  *    .0    .1    .1    .1
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .0    .0    .0
 335.  *    .0    .0    .0    .0
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .0    .0    .0    .0
 355.  *    .1    .0    .0    .0
 360.  *    .2    .0    .0    .0
 ------*------------------------
 MAX   *   2.7   2.7   2.8   2.8
 DEGR. *   95   235   115   100

 THE HIGHEST CONCENTRATION IS    4.20 PPM AT   60 DEGREES FROM REC2 .
 THE 2ND HIGHEST CONCENTRATION IS    4.20 PPM AT  250 DEGREES FROM REC11.
 THE 3RD HIGHEST CONCENTRATION IS    4.00 PPM AT  275 DEGREES FROM REC7 .
```

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Site 1 No Build 2030 PM - 1NBPM30.DAT   60.0321.0.0000.000240.30480000    1
1
SE MID S                  650.     1369.       5.0
SE 164 S                  792.     1375.       5.0
SE 82 S                   874.     1379.       5.0
SE CNR                    960.     1383.       5.0
SE 82 E                   947.     1304.       5.0
NE 82 E                  1016.     1306.       5.0
NE CNR                   1022.     1387.       5.0
NE 82 N                  1094.     1391.       5.0
NE 164 N                 1175.     1396.       5.0
NE MID N                 1298.     1405.       5.0
NW MID N                 1318.     1496.       5.0
NW 164 N                 1218.     1493.       5.0
NW 82 N                  1136.     1488.       5.0
NW CNR                   1054.     1503.       5.0
NW 82 W                  1043.     1586.       5.0
NW 164 W                 1057.     1667.       5.0
NW MID W                 1083.     1784.       5.0
SW MID W                 1024.     1777.       5.0
SW 164 W                  994.     1650.       5.0
SW 82 W                   975.     1570.       5.0
SW CNR                    935.     1495.       5.0
SW 82 S                   853.     1474.       5.0
SW 164 S                  771.     1470.       5.0
SW MID S                  631.     1463.       5.0
Site 1 No Build 2030 PM                  24  1   0
  1
NB        Rt1 aprch AG     3.  1362.   559.  1390.    3250 9.2  0.  56   30.
  1
NB        Rt1 th+rt AG   559.  1390.  1016.  1410.    2365 9.2  0.  56   30.
  2
NB        Rt1 th+rt AG   936.  1407.   568.  1390.      0.  36   3
       125        45       2.0 2365   84.1 1678 1 3
  1
NB        Rt1 left  AG   552.  1408.  1013.  1432.     885 9.2  0.  32   30.
  2
NB        Rt1 left  AG   934.  1428.   569.  1409.      0.  12   1
       125        84       2.0  885   84.1 1752 1 3
  1
NB        Rt1 departAG  1017.  1410.  1345.  1432.    2655 9.2  0.  56   30.
  1
NB        Rt1 departAG  1345.  1432.  1632.  1463.    2655 9.2  0.  44   30.
  1
NB        Rt1 departAG  1632.  1463.  1999.  1510.    2655 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1995.  1546.  1680.  1502.    1795 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1680.  1502.  1429.  1473.    1795 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1429.  1473.  1228.  1465.    1795 9.2  0.  44   30.
  1
SB        Rt1 th+rt AG  1228.  1465.  1017.  1455.    1790 9.2  0.  56   30.
  2
SB        Rt1 th+rt AG  1066.  1457.  1221.  1465.      0.  36   3
       125        83       2.0 1790   84.1 1653 1 3
```

```
  1
SB        Rt1 left  AG  1165.  1444.  1020.  1436.      10 9.2  0.  32   30.
  2
SB        Rt1 left  AG  1068.  1439.  1161.  1444.      0.  12   1
       125       122       2.0   10   84.1 1752 1 3
  1
SB        Rt1 departAG  1017.  1455.     2.  1403.    2220 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1191.  2428.  1007.  1603.     845 9.2  0.  32   30.
  1
EB        Rt28 aprchAG  1007.  1603.   961.  1435.     845 9.2  0.  44   30.
  2
EB        Rt28 aprchAG   979.  1500.  1000.  1578.      0.  24   2
       125       108       2.0  845   84.1 1682 1 3
  1
EB        Rt28 deparAG   987.  1425.   978.  1298.      30 9.2  0.  32   30.
  1
WB        Rt28 aprchAG   986.  1300.   997.  1445.     160 9.2  0.  44   30.
  2
WB        Rt28 aprchAG   993.  1391.   986.  1306.      0.  24   2
       125       116       2.0  160   84.1 1706 1 3
  1
WB        Rt28 deparAG   999.  1445.  1024.  1615.    1145 9.2  0.  32   30.
  1
WB        Rt28 deparAG  1024.  1615.  1201.  2425.    1145 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 1 No Build 2030 PM - 1NBPM30.DAT                RUN: Site 1 No Build 2030 PM
      DATE: 05/09/2009   TIME: 21:16:21.84


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt1 aprch *      3.0    1362.0     559.0    1390.0 *     557.    87. AG   3250.   9.2    .0 56.0
       2. NB        Rt1 th+rt *    559.0    1390.0    1016.0    1410.0 *     457.    87. AG   2365.   9.2    .0 56.0
       3. NB        Rt1 th+rt *    936.0    1407.0     742.3    1398.1 *     194.   267. AG    244. 100.0    .0 36.0  .77   9.9
       4. NB        Rt1 left  *    552.0    1408.0    1013.0    1432.0 *     462.    87. AG    885.   9.2    .0 32.0
       5. NB        Rt1 left  *    934.0    1428.0   -3267.8    1209.3 *    4208.   267. AG    152. 100.0    .0 12.0 1.71 213.7
       6. NB        Rt1 depart*   1017.0    1410.0    1345.0    1432.0 *     329.    86. AG   2655.   9.2    .0 56.0
       7. NB        Rt1 depart*   1345.0    1432.0    1632.0    1463.0 *     289.    84. AG   2655.   9.2    .0 44.0
       8. NB        Rt1 depart*   1632.0    1463.0    1999.0    1510.0 *     370.    83. AG   2655.   9.2    .0 44.0
       9. SB        Rt1 aprch *   1995.0    1546.0    1680.0    1502.0 *     318.   262. AG   1795.   9.2    .0 44.0
      10. SB        Rt1 aprch *   1680.0    1502.0    1429.0    1473.0 *     253.   263. AG   1795.   9.2    .0 44.0
      11. SB        Rt1 aprch *   1429.0    1473.0    1228.0    1465.0 *     201.   268. AG   1795.   9.2    .0 44.0
      12. SB        Rt1 th+rt *   1228.0    1465.0    1017.0    1455.0 *     211.   267. AG   1790.   9.2    .0 56.0
      13. SB        Rt1 th+rt *   1066.0    1457.0    2389.2    1525.3 *    1325.    87. AG    449. 100.0    .0 36.0 1.19  67.3
      14. SB        Rt1 left  *   1165.0    1444.0    1020.0    1436.0 *     145.   267. AG     10.   9.2    .0 32.0
      15. SB        Rt1 left  *   1068.0    1439.0    1075.9    1439.4 *       8.    87. AG    220. 100.0    .0 12.0 -.71    .4
      16. SB        Rt1 depart*   1017.0    1455.0       2.0    1403.0 *    1016.   267. AG   2220.   9.2    .0 56.0
      17. EB        Rt28 aprch*   1191.0    2428.0    1007.0    1603.0 *     845.   193. AG    845.   9.2    .0 32.0
      18. EB        Rt28 aprch*   1007.0    1603.0     961.0    1435.0 *     174.   195. AG    845.   9.2    .0 44.0
      19. EB        Rt28 aprch*    979.0    1500.0    1718.9    4248.2 *    2846.    15. AG    390. 100.0    .0 24.0 2.43 144.6
      20. EB        Rt28 depar*    987.0    1425.0     978.0    1298.0 *     127.   184. AG     30.   9.2    .0 32.0
      21. WB        Rt28 aprch*    986.0    1300.0     997.0    1445.0 *     145.     4. AG    160.   9.2    .0 44.0
      22. WB        Rt28 aprch*    993.0    1391.0     975.2    1175.5 *     216.   185. AG    419. 100.0    .0 24.0 1.18  11.0
      23. WB        Rt28 depar*    999.0    1445.0    1024.0    1615.0 *     172.     8. AG   1145.   9.2    .0 32.0
      24. WB        Rt28 depar*   1024.0    1615.0    1201.0    2425.0 *     829.    12. AG   1145.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 1 No Build 2030 PM - 1NBPM30.DAT                RUN: Site 1 No Build 2030 PM
      DATE: 05/09/2009   TIME: 21:16:21.84

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 th+rt *     125       45       2.0      2365       1678      84.10     1        3
       5. NB        Rt1 left  *     125       84       2.0       885       1752      84.10     1        3
      13. SB        Rt1 th+rt *     125       83       2.0      1790       1653      84.10     1        3
      15. SB        Rt1 left  *     125      122       2.0        10       1752      84.10     1        3
      19. EB        Rt28 aprch*     125      108       2.0       845       1682      84.10     1        3
      22. WB        Rt28 aprch*     125      116       2.0       160       1706      84.10     1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       650.0     1369.0        5.0   *
      2. SE 164 S             *       792.0     1375.0        5.0   *
      3. SE 82 S              *       874.0     1379.0        5.0   *
      4. SE CNR               *       960.0     1383.0        5.0   *
      5. SE 82 E              *       947.0     1304.0        5.0   *
      6. NE 82 E              *      1016.0     1306.0        5.0   *
      7. NE CNR               *      1022.0     1387.0        5.0   *
      8. NE 82 N              *      1094.0     1391.0        5.0   *
      9. NE 164 N             *      1175.0     1396.0        5.0   *
     10. NE MID N             *      1298.0     1405.0        5.0   *
     11. NW MID N             *      1318.0     1496.0        5.0   *
     12. NW 164 N             *      1218.0     1493.0        5.0   *
     13. NW 82 N              *      1136.0     1488.0        5.0   *
     14. NW CNR               *      1054.0     1503.0        5.0   *
     15. NW 82 W              *      1043.0     1586.0        5.0   *
     16. NW 164 W             *      1057.0     1667.0        5.0   *
     17. NW MID W             *      1083.0     1784.0        5.0   *
     18. SW MID W             *      1024.0     1777.0        5.0   *
     19. SW 164 W             *       994.0     1650.0        5.0   *
     20. SW 82 W              *       975.0     1570.0        5.0   *
     21. SW CNR               *       935.0     1495.0        5.0   *
     22. SW 82 S              *       853.0     1474.0        5.0   *
     23. SW 164 S             *       771.0     1470.0        5.0   *
     24. SW MID S             *       631.0     1463.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 1 No Build 2030 PM - 1NBPM30.DAT                RUN: Site 1 No Build 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.5   2.3   2.4   2.4   1.5   1.9   2.4   2.5   2.4   2.1    .2    .4    .7   1.2   1.9   2.1   2.2    .5    .6    .8
```

```
  5.  *   1.5   2.4   2.5   2.5   1.7   1.7   2.2   2.5   2.3   2.1    .2    .3    .6   1.1   1.8   2.0   2.2    .9   1.0   1.2
 10.  *   1.6   2.4   2.8   2.7   1.8   1.7   2.3   2.4   2.2   2.1    .2    .2    .5   1.0   1.7   1.9   2.0   1.4   1.5   1.6
 15.  *   1.6   2.5   2.9   2.8   1.9   1.7   2.2   2.2   2.1   2.0    .1    .2    .3    .8   1.3   1.7   1.7   1.8   1.9   1.9
 20.  *   1.7   2.8   3.0   2.6   2.2   1.1   1.9   2.1   2.0   1.9    .0    .1    .2    .5   1.0   1.2   1.4   2.0   2.2   2.3
 25.  *   1.8   2.9   3.2   2.4   1.9   1.0   1.6   2.0   2.0   1.9    .0    .0    .1    .2    .6    .8   1.0   2.1   2.3   2.5
 30.  *   1.8   3.0   3.3   2.2   1.6   1.0   1.7   1.9   1.9   2.0    .0    .0    .0    .1    .3    .4    .5   2.2   2.3   2.6
 35.  *   2.0   3.0   3.3   1.8   1.6   1.0   1.6   2.0   2.0   2.0    .0    .0    .1    .0    .1    .2    .3   2.1   2.3   2.4
 40.  *   2.0   2.9   3.0   1.7   1.7   1.1   1.8   2.0   2.1   2.2    .0    .0    .1    .0    .0    .1    .1   2.0   2.1   2.3
 45.  *   2.3   3.0   3.0   1.8   1.8   1.1   1.9   2.2   2.2   2.3    .0    .0    .1    .0    .0    .0    .0   1.9   2.0   2.1
 50.  *   2.2   3.1   3.0   1.8   1.9   1.1   2.1   2.3   2.2   2.4    .0    .0    .1    .0    .0    .0    .0   1.8   1.9   2.0
 55.  *   2.3   3.1   3.0   2.2   1.9   1.1   2.2   2.4   2.5   2.5    .1    .0    .1    .0    .0    .0    .0   1.8   1.9   2.0
 60.  *   2.5   3.5   3.0   2.4   2.0   1.2   2.5   2.5   2.7   2.5    .1    .1    .2    .0    .0    .0    .0   1.7   1.8   1.9
 65.  *   2.4   3.5   2.9   2.5   2.0   1.2   2.7   2.7   2.7   2.8    .3    .3    .3    .1    .0    .0    .0   1.7   1.8   1.7
 70.  *   2.7   3.3   3.0   2.8   2.0   1.1   2.7   2.8   2.7   2.8    .6    .5    .7    .2    .0    .0    .0   1.6   1.7   1.6
 75.  *   2.8   3.2   3.0   3.1   1.9   1.1   2.9   2.9   2.8   2.8   1.2   1.1   1.1    .3    .1    .0    .0   1.6   1.6   1.7
 80.  *   2.9   3.1   2.9   3.1   1.7    .7   2.6   2.6   2.6   2.6   1.8   1.6   1.8   1.0    .1    .0    .0   1.5   1.7   1.8
 85.  *   2.5   2.8   2.6   2.9   1.5    .6   2.3   2.2   2.1   2.1   2.4   2.1   2.5   1.4    .2    .1    .0   1.5   1.7   1.8
 90.  *   2.0   2.4   2.2   2.5   1.2    .3   1.8   1.8   1.8   1.7   2.9   2.6   2.9   1.8    .6    .2    .1   1.7   1.8   2.3
 95.  *   1.7   1.6   1.5   2.0   1.0    .1   1.2   1.2   1.2   1.1   3.2   3.2   3.4   2.1    .9    .4    .1   1.7   2.0   2.5
100.  *   1.0   1.2   1.3   1.7    .9    .0    .9    .8    .8    .8   3.4   3.3   3.6   2.2   1.0    .4    .2   1.8   2.2   2.8
105.  *    .8    .9   1.0   1.4    .9    .0    .5    .5    .5    .4   3.4   3.4   3.4   2.2   1.1    .7    .3   1.9   2.2   2.7
110.  *    .5    .6    .7   1.3    .9    .0    .3    .3    .3    .3   3.3   3.2   3.2   2.2   1.0    .7    .4   2.0   2.3   2.8
115.  *    .3    .5    .6   1.2    .9    .0    .2    .2    .2    .2   3.1   3.0   3.0   2.3   1.0    .7    .5   2.1   2.2   2.8
120.  *    .3    .4    .5   1.1    .9    .0    .2    .2    .2    .1   3.0   3.0   3.0   2.1   1.1    .7    .6   1.9   2.3   2.8
125.  *    .2    .4    .5   1.1    .9    .0    .2    .1    .1    .1   2.8   2.7   2.8   2.0   1.1    .7    .5   1.9   2.4   2.5
130.  *    .2    .3    .5   1.1    .9    .0    .1    .1    .1    .1   2.6   2.6   2.7   1.9   1.0    .7    .4   2.1   2.4   2.6
135.  *    .1    .3    .5   1.2    .9    .0    .1    .1    .1    .1   2.6   2.7   2.6   1.9    .9    .8    .5   2.2   2.3   2.6
140.  *    .1    .2    .5   1.2    .9    .0    .1    .1    .1    .1   2.6   2.5   2.5   1.7   1.0    .8    .6   2.2   2.2   2.5
145.  *    .1    .2    .5   1.2    .9    .0    .1    .1    .1    .1   2.3   2.5   2.4   1.6   1.0    .7    .6   2.3   2.3   2.4
150.  *    .1    .2    .4   1.3    .9    .0    .1    .1    .1    .1   2.4   2.3   2.3   1.6   1.0    .7    .5   2.2   2.4   2.5
155.  *    .1    .1    .3   1.3    .9    .0    .1    .1    .1    .1   2.2   2.3   2.3   1.5    .8    .6    .5   2.2   2.4   2.4
160.  *    .0    .0    .2   1.1    .8    .0    .1    .0    .0    .0   2.4   2.4   2.3   1.4    .7    .6    .5   2.2   2.5   2.5
165.  *    .0    .0    .1   1.1    .7    .0    .1    .0    .0    .0   2.4   2.3   2.3   1.3    .7    .6    .4   2.2   2.4   2.3
170.  *    .0    .0    .1   1.0    .6    .1    .2    .0    .0    .0   2.4   2.4   2.3   1.3    .8    .6    .6   2.4   2.7   2.5
175.  *    .0    .0    .0    .8    .4    .2    .3    .0    .0    .0   2.4   2.3   2.4   1.2    .8    .7    .7   2.2   2.4   2.3
180.  *    .0    .0    .0    .7    .3    .3    .4    .0    .0    .0   2.3   2.4   2.4   1.2   1.0    .8    .8   2.5   2.1   2.0
185.  *    .0    .0    .0    .5    .2    .4    .6    .0    .0    .0   2.4   2.4   2.3   1.2   1.0   1.2   1.1   2.1   1.8   2.1
190.  *    .0    .0    .0    .3    .1    .6    .8    .1    .0    .0   2.4   2.3   2.4   1.3   1.1   1.4   1.7   1.8   1.9   1.7
195.  *    .0    .0    .0    .2    .1    .7   1.0    .2    .0    .1   2.4   2.3   2.4   1.3   1.2   1.5   1.8   1.6   1.6   1.5
200.  *    .1    .1    .1    .2    .0    .9   1.1    .3    .1    .1   2.4   2.3   2.5   1.2   1.6   1.6   2.1   1.1   1.3   1.4
205.  *    .1    .1    .1    .2    .0   1.0   1.2    .4    .1    .1   2.4   2.4   2.5   1.3   1.6   2.0   2.3    .8   1.1   1.2
1
                                                                                                               PAGE  4
      JOB: Site 1 No Build 2030 PM - 1NBPM30.DAT               RUN: Site 1 No Build 2030 PM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .1    .1    .1    .1    .0   1.1   1.3    .4    .2    .1   2.4   2.5   2.7   1.3   1.7   2.3   2.3    .7   1.0   1.1
215.  *    .1    .1    .1    .1    .0   1.1   1.4    .5    .2    .1   2.5   2.6   2.8   1.5   1.9   2.4   2.3    .5    .8   1.0
220.  *    .1    .1    .1    .1    .0   1.2   1.3    .5    .3    .1   2.8   2.8   2.9   1.4   2.1   2.3   2.3    .4    .7   1.0
225.  *    .1    .1    .1    .1    .0   1.2   1.3    .6    .3    .2   2.8   2.8   2.8   1.3   2.2   2.6   2.3    .4    .7    .9
230.  *    .1    .1    .1    .1    .0   1.1   1.3    .6    .4    .3   3.1   3.0   2.9   1.8   2.3   2.6   2.3    .4    .8    .9
235.  *    .1    .1    .2    .2    .0   1.1   1.3    .7    .5    .3   3.3   3.1   2.8   1.7   2.2   2.4   2.2    .4    .6    .9
240.  *    .3    .2    .2    .2    .0   1.1   1.3    .8    .5    .5   3.4   3.2   3.2   1.7   2.3   2.1   2.1    .3    .5    .9
245.  *    .3    .4    .4    .4    .0   1.1   1.4    .8    .7    .6   3.3   3.3   2.8   2.2   2.2   2.1   2.0    .3    .5   1.0
250.  *    .6    .4    .6    .6    .0   1.0   1.5   1.0    .8    .8   3.6   3.4   2.9   2.0   2.2   2.1   2.0    .3    .4    .9
255.  *    .8   1.0   1.0   1.1    .0   1.0   2.0   1.5   1.4   1.3   3.8   3.2   2.9   1.9   2.0   1.7   1.9    .3    .3    .8
260.  *   1.2   1.2   1.6   1.6    .2   1.2   2.5   2.0   1.7   1.7   3.4   3.0   2.9   1.9   1.8   1.7   1.6    .1    .3    .6
265.  *   1.6   1.8   2.0   2.1    .4   1.4   2.8   2.3   2.0   2.1   3.0   2.7   2.4   1.7   1.6   1.7   1.6    .1    .3    .4
270.  *   1.9   2.1   2.5   2.5    .5   1.4   3.1   2.4   2.2   2.4   2.2   2.2   2.1   1.5   1.6   1.5   1.5    .0    .1    .3
275.  *   2.1   2.4   2.8   2.9    .7   1.9   3.3   2.5   2.4   2.7   1.8   1.7   1.6   1.3   1.3   1.4   1.5    .0    .0    .2
280.  *   2.2   2.6   3.1   3.0    .9   2.0   3.2   2.6   2.3   2.7   1.0   1.2   1.1   1.0   1.3   1.4   1.5    .0    .0    .0
285.  *   2.3   2.7   3.1   3.0   1.2   2.2   2.9   2.5   2.3   2.6    .8    .7    .9    .9   1.3   1.4   1.5    .0    .0    .0
290.  *   2.1   2.6   3.1   2.9   1.2   2.2   2.6   2.0   2.4   2.6    .5    .5    .7    .8   1.3   1.4   1.5    .0    .0    .0
295.  *   2.0   2.7   2.9   2.7   1.2   2.2   2.4   2.1   2.4   2.5    .3    .4    .6    .8   1.3   1.4   1.5    .0    .0    .0
300.  *   2.0   2.6   2.9   2.6   1.0   2.2   2.0   1.9   2.4   2.4    .2    .4    .6    .8   1.3   1.4   1.5    .0    .0    .0
305.  *   1.9   2.6   2.8   2.4   1.2   2.2   2.1   1.9   2.4   2.4    .3    .4    .6    .8   1.4   1.4   1.5    .0    .0    .0
310.  *   1.9   2.4   2.7   2.2   1.1   2.1   1.9   1.8   2.3   2.4    .3    .5    .5    .9   1.3   1.4   1.5    .0    .0    .0
315.  *   1.6   2.3   2.4   2.0   1.1   2.1   1.5   1.7   2.2   2.3    .3    .6    .5    .9   1.4   1.5   1.7    .0    .0    .0
320.  *   1.6   2.3   2.4   1.9   1.0   2.0   1.7   1.7   2.3   2.3    .3    .5    .8    .9   1.3   1.6   1.7    .0    .0    .0
325.  *   1.5   2.2   2.3   1.7   1.0   2.0   1.7   1.9   2.2   2.3    .3    .5    .6    .9   1.5   1.6   1.7    .0    .0    .0
330.  *   1.5   2.2   2.3   1.6   1.0   1.9   1.6   2.0   2.3   2.2    .3    .5    .6   1.0   1.5   1.6   1.8    .0    .0    .0
335.  *   1.5   2.2   2.2   1.5   1.0   2.0   1.8   2.2   2.4   2.2    .3    .5    .6   1.1   1.5   1.7   1.8    .0    .0    .0
340.  *   1.5   2.2   2.2   1.7    .9   1.9   1.8   2.3   2.4   2.2    .3    .5    .6   1.2   1.7   1.8   2.0    .0    .0    .0
345.  *   1.5   2.2   2.2   1.6   1.0   1.9   2.0   2.3   2.4   2.2    .3    .5    .6   1.1   1.6   2.0   2.1    .0    .0    .0
350.  *   1.5   2.2   2.3   1.6   1.0   1.7   2.1   2.5   2.4   2.3    .3    .5    .6   1.1   1.8   2.0   2.2    .2    .1    .1
355.  *   1.5   2.3   2.3   1.9   1.1   1.8   2.3   2.5   2.5   2.2    .3    .4    .6   1.2   1.8   2.1   2.3    .3    .3    .4
360.  *   1.5   2.3   2.4   2.4   1.5   1.9   2.4   2.5   2.4   2.1    .2    .4    .7   1.2   1.9   2.1   2.2    .5    .6    .8
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   2.9   3.5   3.3   3.1   2.2   2.2   3.3   2.9   2.8   2.8   3.8   3.4   3.6   2.3   2.3   2.6   2.3   2.5   2.7   2.8
DEGR. *   80    60    30    80    20    285   275   75    75    65    255   105   100   115   230   225   205   180   170   100

1
                                                                                                               PAGE  5
      JOB: Site 1 No Build 2030 PM - 1NBPM30.DAT               RUN: Site 1 No Build 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *    .2    .1    .0    .0
  5.  *    .6    .1    .1    .0
 10.  *    .9    .2    .1    .1
 15.  *   1.1    .6    .2    .1
```

```
  20.  *   1.4    .7    .3    .2
  25.  *   1.6    .7    .5    .2
  30.  *   1.6    .9    .7    .4
  35.  *   1.6    .9    .7    .4
  40.  *   1.5    .8    .7    .5
  45.  *   1.4    .8    .7    .5
  50.  *   1.3    .9    .6    .4
  55.  *   1.2    .7    .5    .4
  60.  *   1.2    .7    .4    .3
  65.  *   1.2    .9    .6    .4
  70.  *   1.2    .9    .8    .6
  75.  *   1.3   1.2   1.2    .8
  80.  *   1.5   1.6   1.5   1.2
  85.  *   2.2   2.1   1.9   1.7
  90.  *   2.3   2.5   2.2   2.2
  95.  *   2.5   2.6   2.4   2.4
 100.  *   2.4   2.3   2.3   2.4
 105.  *   2.4   2.4   2.4   2.5
 110.  *   1.9   2.1   2.3   2.5
 115.  *   1.7   2.0   2.4   2.2
 120.  *   1.5   2.0   2.4   2.1
 125.  *   1.5   2.1   2.3   2.0
 130.  *   1.7   2.2   2.3   1.9
 135.  *   1.5   2.1   2.1   1.8
 140.  *   1.4   2.1   2.1   1.5
 145.  *   1.4   2.2   2.1   1.5
 150.  *   1.5   2.1   1.9   1.4
 155.  *   1.4   2.1   1.9   1.4
 160.  *   1.4   2.0   1.8   1.4
 165.  *   1.6   1.9   1.8   1.4
 170.  *   1.6   2.0   1.9   1.5
 175.  *   1.7   1.9   1.9   1.5
 180.  *   1.6   1.9   1.9   1.5
 185.  *   1.5   1.9   1.8   1.5
 190.  *   1.5   1.8   1.7   1.4
 195.  *   1.5   1.8   1.7   1.4
 200.  *   1.5   1.8   1.6   1.4
 205.  *   1.5   1.8   1.6   1.5
1
                                                                                                                PAGE  6
      JOB: Site 1 No Build 2030 PM - 1NBPM30.DAT                RUN: Site 1 No Build 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   1.6   1.9   1.6   1.6
 215.  *   1.7   1.9   1.6   1.6
 220.  *   1.7   1.9   1.6   1.5
 225.  *   1.7   2.0   1.6   1.7
 230.  *   1.7   2.0   1.7   1.7
 235.  *   1.8   2.3   1.9   2.0
 240.  *   1.9   2.1   2.0   1.9
 245.  *   1.7   2.2   2.0   2.1
 250.  *   1.9   2.3   2.1   2.0
 255.  *   1.7   2.2   2.0   2.0
 260.  *   1.6   2.0   2.0   1.8
 265.  *   1.1   1.8   1.8   1.6
 270.  *    .8   1.5   1.3   1.3
 275.  *    .5   1.0    .8    .9
 280.  *    .3    .7    .7    .6
 285.  *    .1    .3    .3    .3
 290.  *    .0    .2    .2    .2
 295.  *    .0    .2    .1    .1
 300.  *    .0    .1    .1    .1
 305.  *    .0    .1    .1    .1
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .0    .0    .0
 335.  *    .0    .0    .0    .0
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .0    .0    .0    .0
 355.  *    .1    .0    .0    .0
 360.  *    .2    .1    .0    .0
 ------*------------------------
 MAX   *   2.5   2.6   2.4   2.5
 DEGR. *   95    95    95   105

 THE HIGHEST CONCENTRATION IS    3.80 PPM AT  255 DEGREES FROM REC11.
 THE 2ND HIGHEST CONCENTRATION IS    3.60 PPM AT  100 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    3.50 PPM AT   60 DEGREES FROM REC2 .
```

```
Site 1 Opt 1/2 2014 1B1AM14.DAT         60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 1/2 2014 AM                   27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    213311.4  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    160611.4  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       120        57       2.0 1606  102.2 1679 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.     52711.4  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       120       107       2.0  527  102.2 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    183011.4  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    183011.4  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    183011.4  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    356811.4  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    356811.4  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    354811.4  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       120        65       2.0 3548  102.2 1665 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      2011.4  0.  32   30.
```

```
  1
SB        Rt1 left  AG  1240.  1217.  1058.  1208.      2011.4  0.  32   30.
  2
SB        Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       120       115       2.0   20  102.2 1752 1 3
  1
SB        Rt1 departAG  1056.  1231.   921.  1221.    413011.4  0.  56   30.
  1
SB        Rt1 departAG   921.  1221.    58.  1172.    413011.4  0.  56   30.
  1
EB        Rt28 aprchAG  1226.  2185.  1087.  1547.     95811.4  0.  32   30.
  1
EB        Rt28 aprchAG  1088.  1547.  1072.  1425.     95811.4  0.  56   30.
  1
EB        Rt28 aprchAG  1072.  1425.  1025.  1202.     95811.4  0.  56   30.
  2
EB        Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       120        94       2.0  958  102.2 1523 1 3
  1
EB        Rt28 deparAG  1039.  1194.  1043.  1015.      4511.4  0.  32   30.
  1
WB        Rt28 aprchAG  1052.  1015.  1049.  1190.      8511.4  0.  44   30.
  2
WB        Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       120       109       2.0   85  102.2 1694 1 3
  1
WB        Rt28 deparAG  1069.  1197.  1121.  1424.     73911.4  0.  44   30.
  1
WB        Rt28 deparAG  1121.  1424.  1126.  1570.     73911.4  0.  32   30.
  1
WB        Rt28 deparAG  1126.  1570.  1257.  2180.     73911.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 1 Opt 1/2 2014 1B1AM14.DAT                      RUN: Site 1 Opt 1/2 2014 AM
      DATE: 05/10/2009   TIME: 09:50:16.72


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt1 aprch *     58.0    1109.0     581.0    1136.0 *    524.    87. AG    2133.  11.4    .0 56.0
       2. NB        Rt1 thru  *    582.0    1136.0    1083.0    1166.0 *    502.    87. AG    1606.  11.4    .0 56.0
       3. NB        Rt1 thru  *    984.0    1160.0     817.5    1150.4 *    167.   267. AG     391. 100.0    .0 36.0  .65   8.5
       4. NB        Rt1 left  *    572.0    1167.0    1065.0    1195.0 *    494.    87. AG     527.  11.4    .0 44.0
       5. NB        Rt1 left  *    983.0    1190.0    -620.9    1101.1 *   1606.   267. AG     489. 100.0    .0 24.0 2.07  81.6
       6. NB        Rt1 depart*   1085.0    1167.0    1470.0    1188.0 *    386.    87. AG    1830.  11.4    .0 56.0
       7. NB        Rt1 depart*   1470.0    1188.0    1784.0    1227.0 *    316.    83. AG    1830.  11.4    .0 44.0
       8. NB        Rt1 depart*   1784.0    1227.0    2072.0    1272.0 *    291.    81. AG    1830.  11.4    .0 44.0
       9. SB        Rt1 aprch *   2069.0    1311.0    1694.0    1264.0 *    378.   263. AG    3568.  11.4    .0 44.0
      10. SB        Rt1 aprch *   1694.0    1264.0    1395.0    1248.0 *    299.   267. AG    3568.  11.4    .0 44.0
      11. SB        Rt1 th+rt *   1395.0    1248.0    1057.0    1231.0 *    338.   267. AG    3548.  11.4    .0 56.0
      12. SB        Rt1th+rt  *   1144.0    1236.0    6449.0    1496.9 *   5311.    87. AG     445. 100.0    .0 36.0 1.67 269.8
      13. SB        Rt1 left  *   1378.0    1236.0    1241.0    1217.0 *    138.   262. AG      20.  11.4    .0 32.0
      14. SB        Rt1 left  *   1240.0    1217.0    1058.0    1208.0 *    182.   267. AG      20.  11.4    .0 32.0
      15. SB        Rt1 left  *   1147.0    1212.0    1244.8    1216.3 *     98.    87. AG     263. 100.0    .0 12.0 1.43   5.0
      16. SB        Rt1 depart*   1056.0    1231.0     921.0    1221.0 *    135.   266. AG    4130.  11.4    .0 56.0
      17. SB        Rt1 depart*    921.0    1221.0      58.0    1172.0 *    864.   267. AG    4130.  11.4    .0 56.0
      18. EB        Rt28 aprch*   1226.0    2185.0    1087.0    1547.0 *    653.   192. AG     958.  11.4    .0 32.0
      19. EB        Rt28 aprch*   1088.0    1547.0    1072.0    1425.0 *    123.   187. AG     958.  11.4    .0 56.0
      20. EB        Rt28 aprch*   1072.0    1425.0    1025.0    1202.0 *    228.   192. AG     958.  11.4    .0 56.0
      21. EB        Rt28 aprch*   1043.0    1287.0    1173.6    1924.4 *    651.    12. AG     644. 100.0    .0 36.0 1.14  33.1
      22. EB        Rt28 depar*   1039.0    1194.0    1043.0    1015.0 *    179.   179. AG      45.  11.4    .0 32.0
      23. WB        Rt28 aprch*   1052.0    1015.0    1049.0    1190.0 *    175.   359. AG      85.  11.4    .0 44.0
      24. WB        Rt28 aprch*   1050.0    1141.0    1050.2    1116.0 *     25.   180. AG     498. 100.0    .0 24.0  .43   1.3
      25. WB        Rt28 depar*   1069.0    1197.0    1121.0    1424.0 *    233.    13. AG     739.  11.4    .0 44.0
      26. WB        Rt28 depar*   1121.0    1424.0    1126.0    1570.0 *    146.     2. AG     739.  11.4    .0 32.0
      27. WB        Rt28 depar*   1126.0    1570.0    1257.0    2180.0 *    624.    12. AG     739.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 1 Opt 1/2 2014 1B1AM14.DAT                      RUN: Site 1 Opt 1/2 2014 AM
      DATE: 05/10/2009   TIME: 09:50:16.72

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)     (SEC)     (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 thru  *     120       57       2.0      1606       1679     102.20      1        3
       5. NB        Rt1 left  *     120      107       2.0       527       1700     102.20      1        3
      12. SB        Rt1th+rt  *     120       65       2.0      3548       1665     102.20      1        3
      15. SB        Rt1 left  *     120      115       2.0        20       1752     102.20      1        3
      21. EB        Rt28 aprch*     120       94       2.0       958       1523     102.20      1        3
      24. WB        Rt28 aprch*     120      109       2.0        85       1694     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)         *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*-------------------------------------*
      1. SE MID S             *       743.0     1116.0        5.0   *
      2. SE 164 S             *       857.0     1123.0        5.0   *
      3. SE 82 S              *       939.0     1128.0        5.0   *
      4. SE CNR               *      1020.0     1134.0        5.0   *
      5. SE 82 E              *      1022.0     1053.0        5.0   *
      6. NE 82 E              *      1075.0     1056.0        5.0   *
      7. NE CNR               *      1076.0     1137.0        5.0   *
      8. NE 82 N              *      1156.0     1142.0        5.0   *
      9. NE 164 N             *      1238.0     1146.0        5.0   *
     10. NE MID N             *      1341.0     1153.0        5.0   *
     11. NW MID N             *      1453.0     1280.0        5.0   *
     12. NW 164 N             *      1316.0     1272.0        5.0   *
     13. NW 82 N              *      1234.0     1269.0        5.0   *
     14. NW CNR               *      1138.0     1288.0        5.0   *
     15. NW 82 W              *      1137.0     1385.0        5.0   *
     16. NW 164 W             *      1145.0     1466.0        5.0   *
     17. NW MID W             *      1156.0     1626.0        5.0   *
     18. SW MID W             *      1072.0     1597.0        5.0   *
     19. SW 164 W             *      1043.0     1434.0        5.0   *
     20. SW 82 W              *      1026.0     1354.0        5.0   *
     21. SW CNR               *       995.0     1273.0        5.0   *
     22. SW 82 S              *       900.0     1248.0        5.0   *
     23. SW 164 S             *       819.0     1243.0        5.0   *
     24. SW MID S             *       692.0     1235.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 1 Opt 1/2 2014 1B1AM14.DAT                      RUN: Site 1 Opt 1/2 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

```
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   2.2   3.3   3.5   2.5   1.9   2.0   2.8   2.6   2.3   2.0    .0    .1    .5   1.3   1.5   1.7   2.1    .6   1.0   1.0
  5.  *   2.2   3.4   3.7   2.7   1.9   1.8   2.5   2.5   2.2   1.9    .0    .0    .2   1.0   1.3   1.4   1.9   1.1   1.5   1.4
 10.  *   2.2   3.5   3.9   2.8   1.9   1.8   2.5   2.2   2.0   1.9    .0    .0    .1    .7   1.0    .9   1.5   1.5   2.1   2.1
 15.  *   2.1   3.6   4.0   2.6   1.8   1.3   2.3   2.1   1.9   1.8    .0    .0    .0    .4    .8    .7   1.1   1.9   2.6   2.5
 20.  *   2.3   3.8   4.1   2.5   1.8   1.2   1.8   2.2   1.9   1.9    .0    .1    .1    .2    .5    .3    .8   2.3   2.9   3.0
 25.  *   2.4   3.9   4.1   2.4   1.6   1.1   1.7   2.1   1.8   1.9    .0    .1    .1    .1    .1    .1    .4   2.7   3.3   3.3
 30.  *   2.5   4.2   4.1   2.1   1.4   1.2   1.8   2.2   1.9   1.9    .0    .1    .1    .0    .0    .0    .2   2.9   3.3   3.3
 35.  *   2.7   4.2   3.8   2.0   1.3   1.1   1.7   2.2   1.9   2.0    .0    .1    .1    .0    .0    .0    .1   2.9   3.2   3.0
 40.  *   2.9   4.1   3.4   2.0   1.3   1.2   2.0   2.3   2.1   2.1    .0    .1    .1    .0    .0    .0    .1   2.8   3.1   2.9
 45.  *   3.1   4.3   3.5   2.0   1.2   1.3   2.1   2.4   2.2   2.2    .0    .1    .1    .0    .0    .0    .0   2.7   2.8   3.0
 50.  *   3.2   4.1   3.1   2.1   1.4   1.3   2.3   2.4   2.2   2.3    .1    .2    .2    .0    .0    .0    .0   2.6   2.7   2.9
 55.  *   3.4   4.0   3.0   2.3   1.3   1.3   2.4   2.4   2.3   2.4    .1    .2    .2    .0    .0    .0    .0   2.6   2.6   2.7
 60.  *   3.4   4.2   3.1   2.5   1.3   1.3   2.5   2.5   2.6   2.4    .2    .4    .3    .0    .0    .0    .0   2.5   2.5   2.5
 65.  *   3.6   3.9   3.0   2.8   1.4   1.4   2.8   2.7   2.6   2.6    .5    .6    .6    .1    .0    .0    .0   2.4   2.4   2.3
 70.  *   3.4   3.7   3.1   3.2   1.3   1.2   2.8   2.6   2.5   2.8    .8   1.0   1.0    .2    .0    .0    .0   2.3   2.3   2.3
 75.  *   3.4   3.8   2.9   3.2   1.1   1.2   2.7   2.5   2.8   2.6   1.3   1.6   1.6    .7    .1    .0    .0   2.2   2.4   2.3
 80.  *   3.2   3.3   2.7   3.2    .9    .9   2.4   2.4   2.5   2.4   2.2   2.6   2.4   1.1    .2    .1    .1   2.3   2.3   2.6
 85.  *   2.7   2.8   2.3   3.0    .8    .8   2.0   2.0   2.0   2.1   2.9   3.5   3.3   1.6    .6    .2    .1   2.2   2.6   2.8
 90.  *   2.1   2.0   1.8   2.5    .3    .3   1.5   1.5   1.4   1.5   3.6   4.0   3.9   2.1    .7    .4    .2   2.3   2.9   3.1
 95.  *   1.3   1.4   1.2   2.0    .2    .2   1.1   1.1   1.0   1.0   4.0   4.4   4.4   2.5    .9    .5    .3   2.4   3.1   3.5
100.  *    .7    .8    .6   1.5    .1    .1    .5    .6    .6    .6   4.2   4.6   4.4   2.7   1.1    .7    .4   2.5   3.0   3.7
105.  *    .4    .4    .5   1.2    .0    .0    .3    .3    .3    .4   4.3   4.5   4.4   2.8   1.1    .8    .4   2.5   3.3   3.8
110.  *    .2    .1    .2   1.0    .0    .0    .1    .2    .2    .2   4.0   4.2   4.1   2.8   1.2    .8    .4   2.7   3.3   3.5
115.  *    .1    .1    .2    .8    .0    .0    .1    .1    .1    .1   3.8   4.1   4.0   2.8   1.3    .8    .5   2.7   3.3   3.8
120.  *    .1    .1    .1    .8    .0    .0    .0    .1    .1    .1   3.6   3.8   3.8   2.7   1.2    .9    .5   2.8   3.2   3.6
125.  *    .1    .1    .1    .7    .0    .0    .0    .1    .1    .1   3.4   3.6   3.4   2.6   1.2    .9    .6   2.7   3.1   3.5
130.  *    .1    .1    .1    .6    .0    .0    .0    .1    .1    .1   3.3   3.6   3.3   2.6   1.2   1.0    .7   2.7   3.3   3.5
135.  *    .1    .1    .1    .5    .0    .0    .0    .1    .1    .1   3.2   3.3   3.2   2.5   1.2    .8    .5   2.8   3.4   3.4
140.  *    .0    .0    .0    .4    .0    .0    .0    .1    .1    .1   3.0   3.0   3.1   2.4   1.3    .8    .5   2.9   3.5   3.4
145.  *    .0    .0    .0    .2    .0    .0    .0    .0    .0    .1   2.9   3.0   3.0   2.5   1.3    .8    .5   3.1   3.6   3.4
150.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.8   2.8   2.9   2.3   1.2    .7    .5   3.1   3.5   3.1
155.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.8   2.8   2.9   2.2   1.2    .7    .6   3.1   3.4   2.9
160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.8   2.8   2.9   2.1   1.1    .8    .5   3.3   3.3   2.8
165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.8   2.8   2.9   2.0   1.1    .8    .5   3.2   3.3   2.7
170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.9   2.9   3.1   1.9   1.2    .9    .7   3.2   3.1   2.6
175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.9   3.0   3.1   1.7   1.1    .8    .9   3.3   3.0   2.1
180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.9   2.9   3.2   1.6   1.0    .9   1.0   2.8   2.8   2.3
185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.9   2.9   3.2   1.4    .8   1.0   1.4   2.6   2.4   2.0
190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.8   2.8   3.1   1.3   1.0   1.3   1.7   2.4   2.0   1.9
195.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.8   2.8   3.1   1.4   1.1   1.2   2.3   1.7   1.8   1.7
200.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   2.8   2.8   3.1   1.5   1.2   1.6   2.8   1.4   1.6   1.7
205.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   2.9   2.9   3.2   1.3   1.5   1.8   2.8   1.2   1.5   1.6
1
                                                                                                                PAGE  4
     JOB: Site 1 Opt 1/2 2014 1B1AM14.DAT                      RUN: Site 1 Opt 1/2 2014 AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0    .0    .3    .1    .0    .1   3.0   3.0   3.2   1.5   1.6   2.1   3.0    .9   1.2   1.8
215.  *    .0    .0    .0    .1    .0    .0    .5    .1    .1    .1   3.0   3.2   3.4   1.6   2.1   2.4   3.1    .7   1.3   1.8
220.  *    .1    .1    .1    .1    .0    .0    .6    .1    .1    .1   3.4   3.4   3.4   2.0   2.4   2.4   3.1    .6    .9   1.5
225.  *    .1    .1    .1    .1    .0    .0    .7    .1    .1    .1   3.4   3.4   3.6   2.0   2.7   2.8   3.1    .7   1.1   1.6
230.  *    .1    .1    .1    .1    .0    .0    .8    .1    .1    .1   3.6   3.7   3.9   2.4   2.7   2.8   3.0    .7   1.1   1.6
235.  *    .1    .1    .1    .1    .0    .0    .9    .1    .1    .1   3.6   4.0   4.0   2.5   2.8   2.9   2.9    .7   1.1   1.7
240.  *    .1    .1    .1    .1    .0    .0   1.0    .2    .1    .1   3.8   4.4   4.0   2.7   2.9   2.7   2.6    .7   1.1   1.6
245.  *    .2    .2    .3    .3    .0    .0   1.4    .3    .1    .2   4.2   4.4   4.3   3.0   2.9   2.7   2.5    .5   1.0   1.4
250.  *    .4    .4    .5    .6    .0    .0   1.6    .6    .5    .5   4.5   4.8   4.6   3.2   2.8   2.5   2.3    .4    .9   1.4
255.  *    .8    .7    .9   1.2    .1    .1   2.1   1.1    .9    .9   4.5   4.9   4.6   3.1   2.6   2.3   2.2    .2    .7   1.2
260.  *   1.2   1.2   1.5   1.7    .3    .3   2.6   1.7   1.5   1.4   4.5   4.8   4.3   2.9   2.3   2.0   2.1    .2    .5   1.0
265.  *   1.7   1.8   2.2   2.6    .4    .6   3.3   2.5   2.2   2.0   3.9   4.2   3.8   2.6   2.1   1.8   2.0    .1    .3    .7
270.  *   2.2   2.4   2.9   3.3    .8    .9   3.7   2.9   2.5   2.3   3.2   3.8   3.2   2.1   1.8   1.8   2.0    .0    .2    .4
275.  *   2.5   3.0   3.6   3.7   1.0   1.1   4.2   3.1   2.9   2.8   2.1   2.7   2.4   1.6   1.7   1.6   2.0    .0    .0    .2
280.  *   2.8   3.2   4.0   4.0   1.4   1.5   4.0   3.2   2.7   2.7   1.4   1.9   1.7   1.5   1.5   1.6   2.0    .0    .0    .0
285.  *   2.9   3.4   4.2   4.2   1.5   1.7   3.9   2.8   2.5   2.8   1.0   1.5   1.4   1.2   1.5   1.6   2.0    .0    .0    .0
290.  *   2.9   3.4   4.1   3.7   1.8   1.9   3.5   2.5   2.5   2.6    .6   1.1   1.1   1.2   1.7   1.6   2.0    .0    .0    .0
295.  *   2.8   3.4   4.1   3.5   1.8   1.8   3.0   2.4   2.4   2.7    .6   1.0    .9   1.2   1.5   1.6   2.0    .0    .0    .0
300.  *   2.7   3.3   3.9   3.3   1.8   1.9   2.7   2.5   2.4   2.9    .3    .6    .9   1.2   1.5   1.6   2.0    .0    .0    .0
305.  *   2.5   3.3   3.8   3.0   1.8   1.8   2.3   2.1   2.4   2.7    .3    .6    .8   1.3   1.6   1.6   2.0    .0    .0    .0
310.  *   2.5   3.3   3.8   2.8   1.9   1.8   2.1   1.9   2.5   2.5    .3    .6    .9   1.3   1.6   1.7   2.0    .0    .0    .0
315.  *   2.3   3.3   3.6   2.6   1.9   1.7   1.9   1.9   2.6   2.5    .3    .5    .9   1.3   1.6   1.8   2.0    .0    .0    .0
320.  *   2.3   3.3   3.4   2.3   1.7   1.6   1.8   1.9   2.6   2.4    .3    .5    .9   1.3   1.6   1.8   2.1    .0    .0    .0
325.  *   2.2   3.2   3.5   2.1   1.7   1.4   1.6   1.8   2.8   2.3    .4    .6    .8   1.3   1.6   1.7   2.1    .0    .0    .0
330.  *   2.2   3.2   3.3   2.0   1.7   1.5   1.7   2.0   2.7   2.2    .4    .6    .8   1.4   1.7   1.8   2.3    .0    .0    .0
335.  *   2.1   3.1   3.3   1.9   1.5   1.6   1.9   2.2   2.7   2.2    .2    .6    .8   1.4   1.9   1.8   2.4    .0    .0    .0
340.  *   2.1   3.2   3.2   1.9   1.5   1.5   2.0   2.3   2.6   2.2    .1    .6    .7   1.4   1.9   2.0   2.5    .0    .0    .0
345.  *   2.2   3.3   3.3   1.8   1.6   1.4   2.2   2.4   2.7   2.3    .1    .5    .7   1.6   1.8   1.9   2.5    .1    .2    .1
350.  *   2.2   3.3   3.4   2.0   1.6   1.7   2.4   2.7   2.6   2.1    .1    .4    .7   1.5   1.9   1.9   2.5    .1    .3    .2
355.  *   2.2   3.3   3.5   2.2   1.7   1.7   2.5   2.7   2.5   2.0    .0    .2    .6   1.5   1.9   1.7   2.4    .4    .6    .5
360.  *   2.2   3.3   3.5   2.5   1.9   2.0   2.8   2.6   2.3   2.0    .0    .1    .5   1.3   1.5   1.7   2.1    .6   1.0   1.0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   3.6   4.3   4.2   4.2   1.9   2.0   4.2   3.2   2.9   2.9   4.5   4.9   4.6   3.2   2.9   2.9   3.1   3.3   3.6   3.8
DEGR. *   65    45   285   285     5     0   275   280   275   300   260   255   250   250   245   235   215   160   145   115

1
                                                                                                                PAGE  5
     JOB: Site 1 Opt 1/2 2014 1B1AM14.DAT                      RUN: Site 1 Opt 1/2 2014 AM

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *    .4    .0    .0    .0
```

```
   5.  *    .9    .1    .0    .0
  10.  *   1.4    .2    .1    .0
  15.  *   1.8    .4    .2    .1
  20.  *   2.1    .6    .3    .1
  25.  *   2.3    .8    .5    .2
  30.  *   2.4    .9    .6    .3
  35.  *   2.3    .9    .8    .4
  40.  *   2.1    .9    .8    .6
  45.  *   2.0    .9    .8    .6
  50.  *   1.8    .8    .8    .6
  55.  *   1.7   1.0    .8    .7
  60.  *   1.5    .9    .9    .8
  65.  *   1.6   1.1   1.1    .9
  70.  *   1.5   1.5   1.6   1.3
  75.  *   1.9   2.1   2.0   1.8
  80.  *   2.2   2.8   2.7   2.7
  85.  *   2.8   3.2   3.3   3.5
  90.  *   3.1   3.8   3.6   3.7
  95.  *   3.4   3.9   4.0   4.2
 100.  *   3.1   4.0   3.8   4.1
 105.  *   3.0   3.4   3.6   4.2
 110.  *   2.8   3.3   3.5   4.0
 115.  *   2.5   3.3   3.8   3.8
 120.  *   2.3   3.0   3.6   3.6
 125.  *   2.2   3.2   3.6   3.5
 130.  *   2.1   3.1   3.5   3.3
 135.  *   2.0   3.2   3.3   3.0
 140.  *   1.9   3.2   3.3   2.9
 145.  *   1.9   3.1   3.2   2.8
 150.  *   1.9   3.1   3.1   2.7
 155.  *   1.9   3.1   3.1   2.6
 160.  *   1.7   3.1   3.0   2.5
 165.  *   1.7   3.2   3.0   2.7
 170.  *   1.9   3.2   3.1   2.7
 175.  *   2.0   3.3   3.1   2.8
 180.  *   2.1   3.2   3.1   2.8
 185.  *   2.2   3.2   2.9   2.7
 190.  *   2.1   3.1   2.7   2.7
 195.  *   2.2   3.1   2.6   2.5
 200.  *   2.4   3.2   2.7   2.6
 205.  *   2.6   3.2   2.7   2.7
1
                                                                                                                         PAGE  6
      JOB: Site 1 Opt 1/2 2014 1B1AM14.DAT                        RUN: Site 1 Opt 1/2 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   2.7   3.2   2.8   2.9
 215.  *   2.9   3.3   2.8   2.9
 220.  *   2.9   3.2   2.9   2.9
 225.  *   3.0   3.3   3.1   3.2
 230.  *   3.0   3.4   3.3   3.3
 235.  *   3.1   3.5   3.4   3.5
 240.  *   3.1   3.8   3.6   3.7
 245.  *   3.0   3.8   3.8   3.9
 250.  *   3.0   4.0   4.0   3.9
 255.  *   2.8   4.0   3.9   3.8
 260.  *   2.3   3.7   3.7   3.6
 265.  *   1.9   3.4   3.2   3.1
 270.  *   1.4   2.6   2.6   2.5
 275.  *    .8   1.9   1.8   1.9
 280.  *    .4   1.2   1.2   1.3
 285.  *    .3    .8    .8    .8
 290.  *    .1    .5    .5    .5
 295.  *    .0    .3    .3    .4
 300.  *    .0    .2    .2    .3
 305.  *    .0    .2    .2    .2
 310.  *    .0    .2    .2    .2
 315.  *    .0    .2    .2    .2
 320.  *    .0    .1    .1    .2
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .1    .1    .1
 340.  *    .0    .0    .0    .1
 345.  *    .0    .0    .0    .0
 350.  *    .1    .0    .0    .0
 355.  *    .2    .0    .0    .0
 360.  *    .4    .0    .0    .0
 ------*------------------------
 MAX   *   3.4   4.0   4.0   4.2
 DEGR. *   95   100    95    95

 THE HIGHEST CONCENTRATION IS    4.90 PPM AT  255 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS    4.60 PPM AT  250 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    4.50 PPM AT  260 DEGREES FROM REC11.
```

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Site 1 Opt 1/2 2030 AM 1B1AM30.DAT      60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 1/2 2030 AM                   27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    2255 9.2  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    1725 9.2  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       112        55       2.0 1725   84.1 1679 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.     530 9.2  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       112        99       2.0  530   84.1 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    1935 9.2  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    1935 9.2  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    1935 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    3310 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    3310 9.2  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    3290 9.2  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       112        64       2.0 3290   84.1 1667 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      20 9.2  0.  32   30.
```

```
  1
SB        Rt1 left  AG  1240.  1217.  1058.  1208.      20 9.2  0.  32   30.
  2
SB        Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       112       107       2.0   20   84.1 1752 1 3
  1
SB        Rt1 departAG  1056.  1231.   921.  1221.    3915 9.2  0.  56   30.
  1
SB        Rt1 departAG   921.  1221.    58.  1172.    3915 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1226.  2185.  1087.  1547.     950 9.2  0.  32   30.
  1
EB        Rt28 aprchAG  1088.  1547.  1072.  1425.     950 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1072.  1425.  1025.  1202.     950 9.2  0.  56   30.
  2
EB        Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       112        89       2.0  950   84.1 1524 1 3
  1
EB        Rt28 deparAG  1039.  1194.  1043.  1015.      45 9.2  0.  32   30.
  1
WB        Rt28 aprchAG  1052.  1015.  1049.  1190.      85 9.2  0.  44   30.
  2
WB        Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       112       101       2.0   85   84.1 1694 1 3
  1
WB        Rt28 deparAG  1069.  1197.  1121.  1424.     705 9.2  0.  44   30.
  1
WB        Rt28 deparAG  1121.  1424.  1126.  1570.     705 9.2  0.  32   30.
  1
WB        Rt28 deparAG  1126.  1570.  1257.  2180.     705 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 1 Opt 1/2 2030 AM 1B1AM30.DAT                   RUN: Site 1 Opt 1/2 2030 AM
      DATE: 05/10/2009   TIME: 16:50:44.50


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt1 aprch *      58.0    1109.0     581.0    1136.0 *      524.   87. AG   2255.   9.2    .0 56.0
       2. NB        Rt1 thru  *     582.0    1136.0    1083.0    1166.0 *      502.   87. AG   1725.   9.2    .0 56.0
       3. NB        Rt1 thru  *     984.0    1160.0     811.4    1150.0 *      173.  267. AG    332. 100.0    .0 36.0  .72   8.8
       4. NB        Rt1 left  *     572.0    1167.0    1065.0    1195.0 *      494.   87. AG    530.   9.2    .0 44.0
       5. NB        Rt1 left  *     983.0    1190.0    -538.7    1105.7 *     1524.  267. AG    399. 100.0    .0 24.0 1.95  77.4
       6. NB        Rt1 depart*    1085.0    1167.0    1470.0    1188.0 *      386.   87. AG   1935.   9.2    .0 56.0
       7. NB        Rt1 depart*    1470.0    1188.0    1784.0    1227.0 *      316.   83. AG   1935.   9.2    .0 44.0
       8. NB        Rt1 depart*    1784.0    1227.0    2072.0    1272.0 *      291.   81. AG   1935.   9.2    .0 44.0
       9. SB        Rt1 aprch *    2069.0    1311.0    1694.0    1264.0 *      378.  263. AG   3310.   9.2    .0 44.0
      10. SB        Rt1 aprch *    1694.0    1264.0    1395.0    1248.0 *      299.  267. AG   3310.   9.2    .0 44.0
      11. SB        Rt1 th+rt *    1395.0    1248.0    1057.0    1231.0 *      338.  267. AG   3290.   9.2    .0 56.0
      12. SB        Rt1th+rt  *    1144.0    1236.0    6080.5    1478.8 *     4942.   87. AG    387. 100.0    .0 36.0 1.68 251.1
      13. SB        Rt1 left  *    1378.0    1236.0    1241.0    1217.0 *      138.  262. AG     20.   9.2    .0 32.0
      14. SB        Rt1 left  *    1240.0    1217.0    1058.0    1208.0 *      182.  267. AG     20.   9.2    .0 32.0
      15. SB        Rt1 left  *    1147.0    1212.0    1233.2    1215.8 *       86.   87. AG    216. 100.0    .0 12.0 1.33   4.4
      16. SB        Rt1 depart*    1056.0    1231.0     921.0    1221.0 *      135.  266. AG   3915.   9.2    .0 56.0
      17. SB        Rt1 depart*     921.0    1221.0      58.0    1172.0 *      864.  267. AG   3915.   9.2    .0 56.0
      18. EB        Rt28 aprch*    1226.0    2185.0    1087.0    1547.0 *      653.  192. AG    950.   9.2    .0 32.0
      19. EB        Rt28 aprch*    1088.0    1547.0    1072.0    1425.0 *      123.  187. AG    950.   9.2    .0 56.0
      20. EB        Rt28 aprch*    1072.0    1425.0    1025.0    1202.0 *      228.  192. AG    950.   9.2    .0 56.0
      21. EB        Rt28 aprch*    1043.0    1287.0    1207.7    2090.8 *      821.   12. AG    538. 100.0    .0 36.0 1.22  41.7
      22. EB        Rt28 depar*    1039.0    1194.0    1043.0    1015.0 *      179.  179. AG     45.   9.2    .0 32.0
      23. WB        Rt28 aprch*    1052.0    1015.0    1049.0    1190.0 *      175.  359. AG     85.   9.2    .0 44.0
      24. WB        Rt28 aprch*    1050.0    1141.0    1050.2    1117.8 *       23.  180. AG    407. 100.0    .0 24.0  .40   1.2
      25. WB        Rt28 depar*    1069.0    1197.0    1121.0    1424.0 *      233.   13. AG    705.   9.2    .0 44.0
      26. WB        Rt28 depar*    1121.0    1424.0    1126.0    1570.0 *      146.    2. AG    705.   9.2    .0 32.0
      27. WB        Rt28 depar*    1126.0    1570.0    1257.0    2180.0 *      624.   12. AG    705.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 1 Opt 1/2 2030 AM 1B1AM30.DAT                   RUN: Site 1 Opt 1/2 2030 AM
      DATE: 05/10/2009   TIME: 16:50:44.50

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 thru  *      112       55       2.0      1725       1679      84.10     1        3
       5. NB        Rt1 left  *      112       99       2.0       530       1700      84.10     1        3
      12. SB        Rt1th+rt  *      112       64       2.0      3290       1667      84.10     1        3
      15. SB        Rt1 left  *      112      107       2.0        20       1752      84.10     1        3
      21. EB        Rt28 aprch*      112       89       2.0       950       1524      84.10     1        3
      24. WB        Rt28 aprch*      112      101       2.0        85       1694      84.10     1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X          Y          Z         *
     -------------------------*-------------------------------------*
      1. SE MID S             *       743.0     1116.0        5.0   *
      2. SE 164 S             *       857.0     1123.0        5.0   *
      3. SE 82 S              *       939.0     1128.0        5.0   *
      4. SE CNR               *      1020.0     1134.0        5.0   *
      5. SE 82 E              *      1022.0     1053.0        5.0   *
      6. NE 82 E              *      1075.0     1056.0        5.0   *
      7. NE CNR               *      1076.0     1137.0        5.0   *
      8. NE 82 N              *      1156.0     1142.0        5.0   *
      9. NE 164 N             *      1238.0     1146.0        5.0   *
     10. NE MID N             *      1341.0     1153.0        5.0   *
     11. NW MID N             *      1453.0     1280.0        5.0   *
     12. NW 164 N             *      1316.0     1272.0        5.0   *
     13. NW 82 N              *      1234.0     1269.0        5.0   *
     14. NW CNR               *      1138.0     1288.0        5.0   *
     15. NW 82 W              *      1137.0     1385.0        5.0   *
     16. NW 164 W             *      1145.0     1466.0        5.0   *
     17. NW MID W             *      1156.0     1626.0        5.0   *
     18. SW MID W             *      1072.0     1597.0        5.0   *
     19. SW 164 W             *      1043.0     1434.0        5.0   *
     20. SW 82 W              *      1026.0     1354.0        5.0   *
     21. SW CNR               *       995.0     1273.0        5.0   *
     22. SW 82 S              *       900.0     1248.0        5.0   *
     23. SW 164 S             *       819.0     1243.0        5.0   *
     24. SW MID S             *       692.0     1235.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 1 Opt 1/2 2030 AM 1B1AM30.DAT                   RUN: Site 1 Opt 1/2 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
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(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   1.8   2.7   2.9   2.0   1.4   1.4   2.2   2.3   2.0   1.7    .0    .1    .3   1.2   1.3   1.3   2.0    .6    .9   1.0
  5.  *   1.8   2.7   3.0   2.3   1.4   1.4   2.2   2.1   1.9   1.7    .0    .1    .2    .9   1.2   1.2   1.8   1.0   1.3   1.3
 10.  *   1.8   2.8   3.2   2.4   1.5   1.5   1.9   1.9   1.6   1.5    .0    .0    .1    .7   1.0    .9   1.3   1.4   1.8   1.8
 15.  *   1.9   3.0   3.3   2.4   1.5   1.2   1.7   1.9   1.5   1.5    .0    .0    .1    .3    .8    .6   1.1   1.8   2.3   2.2
 20.  *   2.0   3.1   3.3   2.1   1.5   1.0   1.5   1.8   1.5   1.5    .0    .0    .0    .2    .2    .4    .7   2.0   2.6   2.5
 25.  *   2.1   3.3   3.3   1.8   1.3    .9   1.5   1.8   1.6   1.6    .0    .1    .1    .1    .1    .1    .4   2.3   2.7   2.8
 30.  *   2.2   3.3   3.3   1.7   1.0    .9   1.6   1.8   1.6   1.7    .0    .1    .1    .0    .0    .1    .2   2.4   2.8   2.7
 35.  *   2.3   3.5   3.1   1.6   1.1    .9   1.4   1.9   1.7   1.7    .0    .1    .1    .0    .0    .0    .2   2.4   2.7   2.6
 40.  *   2.6   3.6   2.9   1.5   1.0   1.0   1.6   1.9   1.8   1.7    .0    .1    .1    .0    .0    .0    .0   2.3   2.4   2.5
 45.  *   2.6   3.6   2.8   1.6   1.0   1.1   1.6   1.9   1.8   1.8    .0    .1    .1    .0    .0    .0    .0   2.2   2.4   2.4
 50.  *   2.5   3.5   2.6   1.8    .9   1.2   1.8   2.0   1.9   1.8    .0    .1    .1    .0    .0    .0    .0   2.1   2.3   2.3
 55.  *   2.9   3.4   2.6   1.9   1.2   1.0   2.0   1.9   1.8   1.8    .1    .1    .1    .0    .0    .0    .0   2.0   2.2   2.2
 60.  *   2.9   3.4   2.4   2.2   1.0   1.0   2.1   2.1   2.0   2.0    .2    .3    .3    .0    .0    .0    .0   2.0   2.1   2.1
 65.  *   2.8   3.3   2.4   2.3   1.0   1.0   2.1   2.1   2.2   2.1    .3    .5    .4    .1    .0    .0    .0   1.9   2.0   2.0
 70.  *   3.1   3.1   2.5   2.6   1.1   1.1   2.3   2.2   2.1   2.2    .6    .9    .7    .1    .0    .0    .0   1.9   2.0   2.0
 75.  *   3.0   3.1   2.4   2.7   1.1    .9   2.3   2.1   2.0   2.1   1.0   1.4   1.3    .5    .1    .0    .0   1.8   2.0   2.0
 80.  *   2.7   2.5   2.2   2.5    .8    .8   2.1   2.0   1.9   2.1   1.8   1.9   1.9    .8    .2    .1    .0   1.8   1.9   2.1
 85.  *   2.2   2.3   1.8   2.3    .8    .8   1.6   1.7   1.7   1.6   2.5   2.9   2.6   1.3    .4    .2    .1   1.9   2.0   2.5
 90.  *   1.7   1.5   1.6   2.0    .2    .2   1.3   1.3   1.2   1.4   3.0   3.3   3.1   1.7    .6    .4    .2   2.0   2.3   2.7
 95.  *   1.2    .9   1.0   1.5    .1    .1    .9    .9    .9    .8   3.3   3.6   3.6   2.1    .7    .5    .2   2.0   2.5   2.9
100.  *    .6    .5    .5   1.1    .1    .1    .4    .4    .5    .4   3.5   3.6   3.5   2.2    .9    .6    .3   2.2   2.5   3.0
105.  *    .3    .3    .3   1.0    .0    .0    .3    .3    .3    .3   3.3   3.7   3.7   2.3   1.0    .6    .4   2.2   2.7   3.1
110.  *    .1    .1    .2    .8    .0    .0    .1    .1    .1    .1   3.2   3.5   3.3   2.2   1.0    .7    .4   2.3   2.6   3.0
115.  *    .1    .1    .1    .7    .0    .0    .1    .1    .1    .1   3.1   3.4   3.1   2.3   1.1    .8    .3   2.4   2.7   3.0
120.  *    .1    .1    .1    .6    .0    .0    .0    .1    .1    .1   2.9   3.1   3.1   2.0   1.0    .7    .4   2.3   2.8   3.1
125.  *    .1    .1    .1    .5    .0    .0    .0    .1    .1    .1   2.8   3.0   2.9   2.0   1.0    .7    .4   2.2   2.7   3.0
130.  *    .1    .1    .1    .4    .0    .0    .0    .1    .1    .1   2.7   2.7   2.7   2.1    .9    .7    .4   2.4   2.7   2.9
135.  *    .0    .0    .0    .4    .0    .0    .0    .1    .1    .1   2.6   2.7   2.7   2.1    .8    .7    .4   2.3   2.7   2.9
140.  *    .0    .0    .0    .2    .0    .0    .0    .0    .0    .1   2.5   2.5   2.5   1.9    .9    .7    .4   2.5   2.7   2.9
145.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.4   2.5   2.5   1.8    .9    .6    .4   2.5   2.8   2.7
150.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.2   2.4   2.3   1.8   1.0    .6    .5   2.6   2.9   2.5
155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.3   2.3   2.3   1.8   1.0    .6    .4   2.6   2.7   2.3
160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.3   2.3   2.3   1.7    .8    .6    .4   2.7   2.6   2.3
165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.3   2.3   2.4   1.6    .9    .6    .5   2.7   2.7   2.2
170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.2   2.4   2.5   1.5    .8    .6    .6   2.8   2.6   2.1
175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.3   2.5   2.5   1.4    .8    .7    .7   2.6   2.6   1.7
180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.3   2.5   2.5   1.3    .8    .5    .8   2.3   2.2   1.8
185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.2   2.4   2.6   1.2    .6    .7    .9   2.1   2.0   1.5
190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.3   2.3   2.5   1.0    .8   1.0   1.5   1.8   1.6   1.2
195.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.3   2.3   2.5   1.1    .8   1.0   1.8   1.5   1.5   1.3
200.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.3   2.3   2.5   1.1   1.0   1.3   2.1   1.1   1.3   1.3
205.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   2.3   2.4   2.6   1.1   1.2   1.5   2.3   1.0   1.1   1.4
1
                                                                                                                PAGE  4
     JOB: Site 1 Opt 1/2 2030 AM 1B1AM30.DAT                   RUN: Site 1 Opt 1/2 2030 AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   2.5   2.5   2.8   1.2   1.3   2.0   2.6    .9   1.1   1.3
215.  *    .0    .0    .0    .0    .0    .0    .3    .1    .0    .1   2.5   2.5   2.8   1.4   1.4   2.0   2.6    .7   1.0   1.3
220.  *    .0    .0    .0    .1    .0    .0    .5    .1    .1    .1   2.7   2.8   2.9   1.4   1.9   2.1   2.7    .5    .9   1.4
225.  *    .1    .1    .1    .1    .0    .0    .6    .1    .1    .1   2.7   2.9   2.8   1.5   2.0   2.1   2.5    .5    .9   1.4
230.  *    .1    .1    .1    .1    .0    .0    .6    .1    .1    .1   2.9   3.0   3.0   1.9   2.1   2.3   2.4    .5    .8   1.2
235.  *    .1    .1    .1    .1    .0    .0    .7    .1    .1    .1   2.9   3.2   3.2   2.0   2.3   2.3   2.4    .5    .9   1.2
240.  *    .1    .1    .1    .1    .0    .0    .8    .2    .1    .1   3.1   3.3   3.2   2.2   2.4   2.2   2.3    .5    .9   1.2
245.  *    .1    .1    .1    .3    .0    .0   1.0    .3    .1    .2   3.4   3.7   3.3   2.4   2.4   2.1   2.2    .5    .7   1.1
250.  *    .4    .4    .4    .4    .0    .0   1.2    .5    .4    .3   3.6   4.0   3.7   2.6   2.3   2.1   2.0    .3    .7   1.1
255.  *    .7    .7    .9    .9    .1    .1   1.7    .9    .7    .7   3.7   3.8   3.5   2.6   2.1   1.8   1.9    .2    .5    .9
260.  *    .9    .9   1.2   1.6    .1    .1   2.3   1.4   1.3   1.0   3.6   3.8   3.6   2.3   2.0   1.7   1.7    .1    .4    .8
265.  *   1.4   1.6   1.8   2.0    .4    .5   2.7   1.9   1.6   1.6   3.1   3.3   3.1   2.0   1.7   1.6   1.7    .0    .2    .6
270.  *   1.7   2.0   2.5   2.7    .7    .7   3.1   2.5   2.1   2.0   2.2   2.7   2.6   1.6   1.5   1.5   1.7    .0    .2    .3
275.  *   2.1   2.5   2.9   3.1    .8   1.0   3.5   2.5   2.4   2.3   1.8   1.9   1.8   1.3   1.5   1.4   1.6    .0    .0    .2
280.  *   2.3   2.7   3.3   3.3   1.1   1.1   3.5   2.5   2.1   2.1   1.1   1.4   1.4   1.0   1.2   1.3   1.6    .0    .0    .0
285.  *   2.4   2.9   3.5   3.5   1.3   1.4   3.0   2.5   2.1   2.2    .7   1.1   1.2    .9   1.2   1.3   1.6    .0    .0    .0
290.  *   2.3   2.9   3.3   3.1   1.4   1.6   2.7   2.0   1.8   2.1    .5    .8    .8    .9   1.2   1.4   1.6    .0    .0    .0
295.  *   2.3   2.9   3.4   3.0   1.5   1.5   2.5   1.8   1.9   2.3    .5    .5    .8    .9   1.3   1.4   1.7    .0    .0    .0
300.  *   2.3   2.9   3.4   2.8   1.4   1.6   2.3   1.7   2.0   2.0    .3    .6    .7    .9   1.3   1.3   1.7    .0    .0    .0
305.  *   2.0   2.7   3.1   2.5   1.5   1.4   1.8   1.7   1.9   2.1    .3    .5    .8   1.0   1.3   1.4   1.7    .0    .0    .0
310.  *   2.0   2.8   3.1   2.3   1.5   1.3   1.7   1.6   2.1   2.1    .3    .5    .8   1.1   1.3   1.4   1.7    .0    .0    .0
315.  *   1.9   2.8   3.1   2.2   1.5   1.3   1.6   1.5   2.1   1.9    .3    .5    .7   1.1   1.2   1.3   1.7    .0    .0    .0
320.  *   1.9   2.8   2.8   1.8   1.5   1.2   1.4   1.7   2.3   1.9    .3    .5    .6   1.1   1.3   1.4   1.7    .0    .0    .0
325.  *   1.9   2.8   2.8   1.8   1.3   1.1   1.3   1.6   2.3   1.9    .3    .5    .6   1.1   1.4   1.4   1.9    .0    .0    .0
330.  *   1.8   2.7   2.8   1.6   1.3   1.2   1.4   1.6   2.1   1.9    .3    .5    .6   1.2   1.4   1.5   1.9    .0    .0    .0
335.  *   1.8   2.7   2.6   1.4   1.2   1.1   1.4   1.8   2.2   1.8    .2    .5    .5   1.3   1.4   1.5   2.0    .0    .0    .0
340.  *   1.8   2.7   2.7   1.6   1.2   1.2   1.8   2.0   2.2   1.8    .2    .5    .6   1.2   1.5   1.6   2.0    .0    .0    .0
345.  *   1.8   2.7   2.6   1.6   1.2   1.2   1.9   2.1   2.2   1.8    .1    .4    .6   1.1   1.6   1.6   2.0    .1    .1    .1
350.  *   1.8   2.7   2.7   1.6   1.1   1.3   2.0   2.1   2.2   1.8    .1    .3    .6   1.3   1.7   1.7   2.0    .1    .3    .2
355.  *   1.8   2.8   2.9   1.8   1.4   1.7   2.1   2.3   2.0   1.8    .1    .2    .5   1.3   1.6   1.6   2.1    .4    .6    .5
360.  *   1.8   2.7   2.9   2.0   1.4   1.4   2.2   2.3   2.0   1.7    .0    .1    .3   1.2   1.3   1.3   2.0    .6    .9   1.0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   3.1   3.6   3.5   3.5   1.5   1.7   3.5   2.5   2.4   2.3   3.7   4.0   3.7   2.6   2.4   2.3   2.7   2.8   2.9   3.1
DEGR. *   70    40   285   285    10   355   275   270   275   275   255   250   105   250   240   230   220   170   150   105

1
                                                                                                                PAGE  5
     JOB: Site 1 Opt 1/2 2030 AM 1B1AM30.DAT                   RUN: Site 1 Opt 1/2 2030 AM

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *    .4    .0    .0    .0
```

```
   5.  *    .7    .1    .0    .0
  10.  *   1.1    .2    .1    .0
  15.  *   1.5    .3    .1    .0
  20.  *   1.7    .6    .3    .2
  25.  *   2.0    .7    .4    .2
  30.  *   1.9    .8    .6    .3
  35.  *   1.7    .7    .5    .4
  40.  *   1.7    .8    .6    .4
  45.  *   1.7    .8    .6    .5
  50.  *   1.6    .7    .6    .5
  55.  *   1.5    .8    .6    .5
  60.  *   1.2    .7    .7    .6
  65.  *   1.2   1.0   1.0    .7
  70.  *   1.3   1.3   1.0   1.1
  75.  *   1.5   1.6   1.5   1.3
  80.  *   1.8   2.3   2.0   1.8
  85.  *   2.1   2.6   2.6   2.7
  90.  *   2.4   3.0   2.9   3.1
  95.  *   2.6   3.0   3.1   3.4
 100.  *   2.6   2.8   2.9   3.3
 105.  *   2.4   2.7   2.9   3.3
 110.  *   2.0   2.5   2.9   3.3
 115.  *   2.0   2.4   3.0   3.1
 120.  *   1.9   2.4   2.8   2.9
 125.  *   1.6   2.4   2.8   2.7
 130.  *   1.6   2.4   2.9   2.7
 135.  *   1.5   2.5   2.8   2.5
 140.  *   1.4   2.4   2.7   2.4
 145.  *   1.5   2.4   2.7   2.3
 150.  *   1.6   2.6   2.6   2.1
 155.  *   1.4   2.6   2.5   2.1
 160.  *   1.5   2.5   2.5   2.1
 165.  *   1.4   2.6   2.5   2.1
 170.  *   1.6   2.7   2.6   2.2
 175.  *   1.5   2.7   2.5   2.2
 180.  *   1.6   2.7   2.5   2.2
 185.  *   1.6   2.6   2.3   2.2
 190.  *   1.7   2.6   2.3   2.1
 195.  *   1.8   2.5   2.2   2.1
 200.  *   1.9   2.5   2.2   2.1
 205.  *   2.0   2.6   2.2   2.0
1
                                                                                                                     PAGE  6
      JOB: Site 1 Opt 1/2 2030 AM 1B1AM30.DAT                    RUN: Site 1 Opt 1/2 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   2.2   2.6   2.2   2.2
 215.  *   2.2   2.7   2.3   2.4
 220.  *   2.4   2.7   2.4   2.4
 225.  *   2.4   2.7   2.5   2.5
 230.  *   2.3   2.8   2.6   2.6
 235.  *   2.4   2.9   2.8   2.8
 240.  *   2.5   2.9   2.9   3.0
 245.  *   2.5   2.9   3.1   3.1
 250.  *   2.5   3.1   3.1   3.0
 255.  *   2.3   3.1   3.1   3.0
 260.  *   1.9   3.0   2.9   2.8
 265.  *   1.6   2.5   2.4   2.5
 270.  *   1.1   1.9   1.9   1.9
 275.  *    .6   1.5   1.5   1.5
 280.  *    .3   1.0    .9    .9
 285.  *    .1    .6    .6    .6
 290.  *    .1    .4    .4    .4
 295.  *    .0    .2    .3    .3
 300.  *    .0    .2    .2    .2
 305.  *    .0    .1    .2    .2
 310.  *    .0    .1    .1    .2
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .1    .1    .1
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .1    .0    .0    .0
 355.  *    .2    .0    .0    .0
 360.  *    .4    .0    .0    .0
 ------*------------------------
 MAX   *   2.6   3.1   3.1   3.4
 DEGR. *   95   250    95    95

 THE HIGHEST CONCENTRATION IS    4.00 PPM AT  250 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS    3.70 PPM AT  255 DEGREES FROM REC11.
 THE 3RD HIGHEST CONCENTRATION IS    3.70 PPM AT  105 DEGREES FROM REC13.
```

```
Site 1 Opt 1/2 2014 PM 1B1PM14.DAT      60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 1/2 2014 PM                   27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    382311.4  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    280611.4  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       120        59       2.0 2806  102.2 1678 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.    101211.4  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       120        96       2.0 1012  102.2 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    303511.4  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    303511.4  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    303511.4  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    246911.4  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    246911.4  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    246411.4  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       120        80       2.0 2464  102.2 1659 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      1011.4  0.  32   30.
```

```
  1
SB        Rt1 left  AG  1240.  1217.  1058.  1208.      1011.4  0.  32   30.
  2
SB        Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       120       115       2.0   10  102.2 1752 1 3
  1
SB        Rt1 departAG  1056.  1231.   921.  1221.    287811.4  0.  56   30.
  1
SB        Rt1 departAG   921.  1221.    58.  1172.    287811.4  0.  56   30.
  1
EB        Rt28 aprchAG  1226.  2185.  1087.  1547.     77211.4  0.  32   30.
  1
EB        Rt28 aprchAG  1088.  1547.  1072.  1425.     77211.4  0.  56   30.
  1
EB        Rt28 aprchAG  1072.  1425.  1025.  1202.     77211.4  0.  56   30.
  2
EB        Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       120        96       2.0  772  102.2 1523 1 3
  1
EB        Rt28 deparAG  1039.  1194.  1043.  1015.      3011.4  0.  32   30.
  1
WB        Rt28 aprchAG  1052.  1015.  1049.  1190.     16011.4  0.  44   30.
  2
WB        Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       120       104       2.0  160  102.2 1706 1 3
  1
WB        Rt28 deparAG  1069.  1197.  1121.  1424.    128111.4  0.  44   30.
  1
WB        Rt28 deparAG  1121.  1424.  1126.  1570.    128111.4  0.  32   30.
  1
WB        Rt28 deparAG  1126.  1570.  1257.  2180.    128111.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 1 Opt 1/2 2014 PM 1B1PM14.DAT                   RUN: Site 1 Opt 1/2 2014 PM
      DATE: 05/10/2009   TIME: 10:06:53.73


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt1 aprch *     58.0    1109.0     581.0    1136.0 *     524.    87. AG    3823.  11.4    .0 56.0
       2. NB        Rt1 thru  *    582.0    1136.0    1083.0    1166.0 *     502.    87. AG    2806.  11.4    .0 56.0
       3. NB        Rt1 thru  *    984.0    1160.0    -834.0    1055.0 *    1821.   267. AG     404. 100.0    .0 36.0 1.17  92.5
       4. NB        Rt1 left  *    572.0    1167.0    1065.0    1195.0 *     494.    87. AG    1012.  11.4    .0 44.0
       5. NB        Rt1 left  *    983.0    1190.0   -1619.9    1045.8 *    2607.   267. AG     439. 100.0    .0 24.0 1.79 132.4
       6. NB        Rt1 depart*   1085.0    1167.0    1470.0    1188.0 *     386.    87. AG    3035.  11.4    .0 56.0
       7. NB        Rt1 depart*   1470.0    1188.0    1784.0    1227.0 *     316.    83. AG    3035.  11.4    .0 44.0
       8. NB        Rt1 depart*   1784.0    1227.0    2072.0    1272.0 *     291.    81. AG    3035.  11.4    .0 44.0
       9. SB        Rt1 aprch *   2069.0    1311.0    1694.0    1264.0 *     378.   263. AG    2469.  11.4    .0 44.0
      10. SB        Rt1 aprch *   1694.0    1264.0    1395.0    1248.0 *     299.   267. AG    2469.  11.4    .0 44.0
      11. SB        Rt1 th+rt *   1395.0    1248.0    1057.0    1231.0 *     338.   267. AG    2464.  11.4    .0 56.0
      12. SB        Rt1th+rt  *   1144.0    1236.0    4866.6    1419.1 *    3727.    87. AG     548. 100.0    .0 36.0 1.65 189.3
      13. SB        Rt1 left  *   1378.0    1236.0    1241.0    1217.0 *     138.   262. AG      10.  11.4    .0 32.0
      14. SB        Rt1 left  *   1240.0    1217.0    1058.0    1208.0 *     182.   267. AG      10.  11.4    .0 32.0
      15. SB        Rt1 left  *   1147.0    1212.0    1157.4    1212.5 *      10.    87. AG     263. 100.0    .0 12.0  .71    .5
      16. SB        Rt1 depart*   1056.0    1231.0     921.0    1221.0 *     135.   266. AG    2878.  11.4    .0 56.0
      17. SB        Rt1 depart*    921.0    1221.0      58.0    1172.0 *     864.   267. AG    2878.  11.4    .0 56.0
      18. EB        Rt28 aprch*   1226.0    2185.0    1087.0    1547.0 *     653.   192. AG     772.  11.4    .0 32.0
      19. EB        Rt28 aprch*   1088.0    1547.0    1072.0    1425.0 *     123.   187. AG     772.  11.4    .0 56.0
      20. EB        Rt28 aprch*   1072.0    1425.0    1025.0    1202.0 *     228.   192. AG     772.  11.4    .0 56.0
      21. EB        Rt28 aprch*   1043.0    1287.0    1093.8    1534.8 *     253.    12. AG     658. 100.0    .0 36.0 1.02  12.8
      22. EB        Rt28 depar*   1039.0    1194.0    1043.0    1015.0 *     179.   179. AG      30.  11.4    .0 32.0
      23. WB        Rt28 aprch*   1052.0    1015.0    1049.0    1190.0 *     175.   359. AG     160.  11.4    .0 44.0
      24. WB        Rt28 aprch*   1050.0    1141.0    1050.4    1095.5 *      45.   180. AG     475. 100.0    .0 24.0  .47   2.3
      25. WB        Rt28 depar*   1069.0    1197.0    1121.0    1424.0 *     233.    13. AG    1281.  11.4    .0 44.0
      26. WB        Rt28 depar*   1121.0    1424.0    1126.0    1570.0 *     146.     2. AG    1281.  11.4    .0 32.0
      27. WB        Rt28 depar*   1126.0    1570.0    1257.0    2180.0 *     624.    12. AG    1281.  11.4    .0 32.0
1
                                                                                                                  PAGE  2
      JOB: Site 1 Opt 1/2 2014 PM 1B1PM14.DAT                   RUN: Site 1 Opt 1/2 2014 PM
      DATE: 05/10/2009   TIME: 10:06:53.73

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE    EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)       (VPH)      (VPH)    (gm/hr)
      ------------------------*---------------------------------------------------------------------------------
       3. NB        Rt1 thru  *      120       59       2.0      2806      1678       102.20      1        3
       5. NB        Rt1 left  *      120       96       2.0      1012      1700       102.20      1        3
      12. SB        Rt1th+rt  *      120       80       2.0      2464      1659       102.20      1        3
      15. SB        Rt1 left  *      120      115       2.0        10      1752       102.20      1        3
      21. EB        Rt28 aprch*      120       96       2.0       772      1523       102.20      1        3
      24. WB        Rt28 aprch*      120      104       2.0       160      1706       102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *        743.0     1116.0        5.0  *
      2. SE 164 S             *        857.0     1123.0        5.0  *
      3. SE 82 S              *        939.0     1128.0        5.0  *
      4. SE CNR               *       1020.0     1134.0        5.0  *
      5. SE 82 E              *       1022.0     1053.0        5.0  *
      6. NE 82 E              *       1075.0     1056.0        5.0  *
      7. NE CNR               *       1076.0     1137.0        5.0  *
      8. NE 82 N              *       1156.0     1142.0        5.0  *
      9. NE 164 N             *       1238.0     1146.0        5.0  *
     10. NE MID N             *       1341.0     1153.0        5.0  *
     11. NW MID N             *       1453.0     1280.0        5.0  *
     12. NW 164 N             *       1316.0     1272.0        5.0  *
     13. NW 82 N              *       1234.0     1269.0        5.0  *
     14. NW CNR               *       1138.0     1288.0        5.0  *
     15. NW 82 W              *       1137.0     1385.0        5.0  *
     16. NW 164 W             *       1145.0     1466.0        5.0  *
     17. NW MID W             *       1156.0     1626.0        5.0  *
     18. SW MID W             *       1072.0     1597.0        5.0  *
     19. SW 164 W             *       1043.0     1434.0        5.0  *
     20. SW 82 W              *       1026.0     1354.0        5.0  *
     21. SW CNR               *        995.0     1273.0        5.0  *
     22. SW 82 S              *        900.0     1248.0        5.0  *
     23. SW 164 S             *        819.0     1243.0        5.0  *
     24. SW MID S             *        692.0     1235.0        5.0  *
1
                                                                                                                  PAGE  3
      JOB: Site 1 Opt 1/2 2014 PM 1B1PM14.DAT                   RUN: Site 1 Opt 1/2 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

```
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   3.5   3.6   3.7   2.7   1.9   2.2   2.8   2.7   2.3   2.4    .0    .1    .1    .8   1.0    .7   1.0    .1    .6    .8
  5.  *   3.5   3.5   3.7   2.8   1.9   1.8   2.9   2.5   2.3   2.3    .0    .0    .1    .6    .9    .6   1.0    .3    .8   1.1
 10.  *   3.5   3.6   4.0   3.0   2.1   1.6   2.6   2.3   2.1   2.2    .0    .0    .0    .5    .8    .5    .9    .3   1.0   1.4
 15.  *   3.5   3.7   4.0   2.9   2.4   1.4   2.2   2.1   2.1   2.2    .0    .0    .0    .3    .5    .4    .7    .5   1.6   1.9
 20.  *   3.5   3.8   4.2   2.9   2.2   1.2   2.0   2.1   2.2   2.2    .0    .0    .0    .1    .3    .2    .6    .7   2.0   2.3
 25.  *   3.7   4.1   4.2   2.6   1.8   1.2   2.0   2.2   2.3   2.4    .0    .1    .1    .0    .3    .1    .4    .7   2.2   2.6
 30.  *   3.8   4.1   4.2   2.6   1.8   1.2   1.9   2.3   2.3   2.3    .0    .1    .1    .0    .1    .0    .2    .7   2.5   2.8
 35.  *   4.0   4.4   4.1   2.2   1.9   1.2   2.0   2.4   2.4   2.5    .0    .1    .1    .0    .0    .0    .2    .7   2.6   2.9
 40.  *   4.1   4.4   4.0   2.3   1.7   1.3   2.2   2.5   2.5   2.4    .0    .1    .1    .0    .0    .0    .1    .7   2.6   2.9
 45.  *   4.5   4.7   3.8   2.4   1.6   1.3   2.4   2.6   2.6   2.6    .0    .1    .1    .0    .0    .0    .1    .6   2.7   2.9
 50.  *   4.7   4.6   3.7   2.6   1.6   1.4   2.5   2.8   2.8   2.8    .0    .1    .1    .0    .0    .0    .1    .6   2.6   2.7
 55.  *   5.0   4.6   3.5   2.9   1.6   1.4   2.7   2.8   2.8   2.9    .1    .2    .1    .0    .0    .0    .0    .6   2.6   2.7
 60.  *   4.9   4.4   3.4   3.2   1.7   1.5   2.9   3.0   2.9   3.0    .2    .2    .3    .0    .0    .0    .0    .6   2.6   2.7
 65.  *   4.9   4.6   3.4   3.3   1.8   1.4   3.1   3.3   3.3   3.2    .3    .6    .5    .1    .0    .0    .0    .6   2.5   2.5
 70.  *   5.0   4.4   3.7   3.7   1.7   1.6   3.3   3.3   3.3   3.2    .8    .9    .9    .2    .0    .0    .0    .6   2.4   2.5
 75.  *   4.9   4.3   3.6   4.0   1.5   1.4   3.2   3.4   3.2   3.3   1.4   1.5   1.5    .6    .1    .1    .0    .6   2.4   2.5
 80.  *   4.4   3.9   3.4   3.9   1.3   1.2   3.2   3.2   3.0   3.0   2.2   2.4   2.3   1.1    .2    .1    .0    .7   2.5   2.6
 85.  *   3.6   3.6   3.1   3.6    .9    .9   2.7   2.7   2.6   2.5   2.8   3.3   3.1   1.8    .5    .2    .1    .7   2.6   3.1
 90.  *   2.8   2.5   2.4   3.3    .6    .5   2.1   2.2   2.1   2.1   3.6   3.9   3.9   2.2    .9    .4    .2    .7   2.8   3.5
 95.  *   1.8   1.7   1.5   2.4    .3    .2   1.3   1.4   1.4   1.4   4.1   4.3   4.3   2.6   1.1    .7    .3    .8   3.3   3.8
100.  *   1.1   1.1   1.1   2.0    .2    .1    .8    .9    .8    .9   4.4   4.7   4.6   3.0   1.1    .9    .3   1.0   3.4   3.9
105.  *    .6    .7    .7   1.7    .1    .0    .4    .5    .6    .5   4.3   4.5   4.5   2.9   1.3    .9    .5   1.2   3.6   3.9
110.  *    .3    .3    .5   1.5    .1    .0    .2    .3    .3    .3   4.1   4.2   4.2   2.8   1.5    .9    .6   1.3   3.5   3.8
115.  *    .2    .2    .3   1.4    .1    .0    .1    .2    .2    .2   3.9   4.0   4.1   2.7   1.4    .9    .6   1.3   3.3   3.8
120.  *    .1    .1    .2   1.3    .0    .0    .1    .2    .1    .2   3.7   3.9   3.9   2.7   1.3   1.0    .7   1.4   3.5   3.7
125.  *    .1    .1    .2   1.2    .0    .0    .0    .1    .1    .1   3.5   3.8   3.7   2.5   1.3    .9    .7   1.1   3.5   3.5
130.  *    .1    .1    .1   1.2    .0    .0    .0    .1    .1    .1   3.4   3.6   3.5   2.4   1.4    .9    .5   1.4   3.3   3.5
135.  *    .1    .1    .1   1.1    .0    .0    .0    .1    .1    .1   3.3   3.4   3.4   2.4   1.2   1.0    .5   1.4   3.4   3.4
140.  *    .1    .1    .1   1.0    .0    .0    .0    .1    .1    .1   3.1   3.2   3.1   2.3   1.2   1.0    .6   1.7   3.5   3.3
145.  *    .1    .1    .1    .9    .0    .0    .0    .1    .1    .1   3.1   3.1   3.1   2.3   1.2    .8    .7   1.6   3.5   3.2
150.  *    .0    .1    .1    .7    .0    .0    .0    .1    .1    .1   3.0   3.0   3.0   2.2   1.1    .8    .7   1.8   3.6   3.2
155.  *    .0    .0    .0    .5    .0    .0    .0    .0    .0    .1   2.9   3.0   2.9   2.0   1.1    .8    .5   2.2   3.4   3.1
160.  *    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0   3.0   3.0   2.9   2.0   1.2    .8    .7   2.2   3.2   2.8
165.  *    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0   2.9   3.1   3.1   1.9   1.1    .8    .7   2.4   3.4   2.9
170.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   3.0   3.1   3.0   1.7   1.1    .8    .9   2.3   3.3   2.6
175.  *    .0    .0    .0    .1    .0    .0    .1    .0    .0    .0   3.0   3.0   3.0   1.6   1.0   1.0    .9   2.5   3.1   2.4
180.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   3.0   3.1   3.0   1.4   1.0    .9   1.2   2.5   3.0   2.3
185.  *    .0    .0    .0    .0    .0    .0    .3    .0    .0    .0   3.1   3.1   3.0   1.3   1.1   1.2   1.3   2.4   2.7   2.0
190.  *    .0    .0    .0    .0    .0    .0    .4    .0    .0    .0   3.0   3.1   2.9   1.4   1.2   1.5   1.9   1.9   2.0   1.7
195.  *    .0    .0    .0    .0    .0    .0    .5    .0    .0    .0   2.9   3.1   2.9   1.3   1.3   1.6   2.4   1.7   1.7   1.6
200.  *    .0    .0    .0    .1    .0    .0    .6    .0    .0    .1   2.9   3.1   2.9   1.4   1.7   2.0   2.4   1.5   1.7   1.5
205.  *    .1    .1    .1    .1    .0    .0    .9    .1    .1    .1   2.9   3.1   3.0   1.2   2.0   2.1   2.6   1.3   1.4   1.7
1
                                                                                                                       PAGE  4
      JOB: Site 1 Opt 1/2 2014 PM 1B1PM14.DAT                RUN: Site 1 Opt 1/2 2014 PM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .1    .1    .1    .1    .0    .0   1.0    .1    .1    .1   3.3   3.2   3.1   1.6   2.0   2.7   2.6   1.1   1.5   1.5
215.  *    .1    .1    .1    .1    .0    .1   1.1    .1    .1    .1   3.3   3.3   3.3   1.6   2.1   2.9   2.7   1.0   1.4   1.7
220.  *    .1    .1    .1    .1    .0    .1   1.2    .1    .1    .1   3.4   3.4   3.4   2.0   2.6   2.8   2.3    .9   1.2   1.6
225.  *    .1    .1    .1    .1    .0    .1   1.3    .1    .1    .1   3.6   3.6   3.4   2.2   2.8   3.1   2.1    .8   1.3   1.7
230.  *    .1    .1    .1    .1    .0    .1   1.4    .2    .1    .2   3.6   3.8   3.6   2.4   3.0   3.3   2.0    .8   1.3   1.8
235.  *    .1    .1    .1    .2    .0    .1   1.5    .2    .1    .2   3.8   4.0   4.0   2.8   3.4   3.4   1.8    .8   1.3   1.8
240.  *    .3    .3    .3    .3    .0    .1   1.6    .5    .2    .2   4.2   4.2   4.2   3.0   3.3   3.2   1.6    .7   1.4   1.8
245.  *    .5    .6    .5    .5    .0    .1   1.7    .6    .5    .5   4.3   4.8   4.4   3.1   3.3   3.0   1.4    .6   1.3   1.9
250.  *    .9    .9    .9   1.1    .0    .1   2.3   1.1    .8    .8   4.8   4.9   4.5   3.4   3.4   2.9   1.3    .6   1.2   1.8
255.  *   1.6   1.7   1.8   1.8    .3    .4   2.9   1.8   1.5   1.5   4.8   4.9   4.7   3.6   3.0   2.5   1.1    .5    .9   1.6
260.  *   2.5   2.5   2.5   2.8    .5    .7   3.8   2.5   2.2   2.1   4.6   4.8   4.4   3.1   2.9   2.6    .9    .2    .8   1.2
265.  *   3.4   3.5   3.7   3.7   1.0   1.1   4.4   3.5   3.0   2.9   4.1   4.3   3.7   2.9   2.6   2.3    .8    .1    .5    .8
270.  *   4.4   4.3   4.4   4.6   1.4   1.6   5.0   3.9   3.5   3.3   3.3   3.6   3.2   2.4   2.3   2.1    .7    .0    .2    .5
275.  *   4.8   4.9   5.0   4.9   1.7   2.0   5.2   4.1   3.6   3.5   2.3   2.7   2.5   1.8   2.1   1.9    .7    .0    .1    .3
280.  *   5.1   5.2   5.3   5.1   2.0   2.1   5.1   4.0   3.5   3.5   1.5   1.8   1.7   1.5   1.7   1.9    .7    .0    .0    .0
285.  *   5.2   5.1   5.3   5.0   2.3   2.4   4.8   3.5   3.3   3.4   1.1   1.2   1.4   1.3   1.7   1.8    .7    .0    .0    .0
290.  *   4.9   4.8   4.9   4.7   2.1   2.3   4.3   3.3   2.9   3.0    .7    .9   1.1   1.2   1.7   1.8    .7    .0    .0    .0
295.  *   4.7   4.8   4.8   4.2   2.2   2.4   3.8   3.0   2.9   3.1    .5    .8    .9   1.2   1.8   1.8    .7    .0    .0    .0
300.  *   4.4   4.5   4.6   3.8   2.1   2.1   3.2   2.5   2.7   3.0    .2    .6    .9   1.3   1.8   1.8    .7    .0    .0    .0
305.  *   4.3   4.3   4.3   3.6   2.1   2.2   2.9   2.4   2.5   3.0    .2    .6    .8   1.3   1.7   1.7    .7    .0    .0    .0
310.  *   4.1   4.2   4.3   3.3   1.8   2.0   2.5   2.2   2.7   2.9    .1    .6    .8   1.3   1.8   1.7    .7    .0    .0    .0
315.  *   4.0   4.0   3.9   2.9   1.9   2.0   2.3   2.3   2.6   2.9    .1    .5    .7   1.3   1.7   1.5    .7    .0    .0    .0
320.  *   3.7   3.7   3.7   2.7   1.8   1.9   2.1   2.3   2.7   2.9    .1    .4    .8   1.3   1.7   1.4    .8    .0    .0    .0
325.  *   3.6   3.6   3.6   2.3   1.7   1.9   1.9   2.3   2.7   2.5    .1    .4    .7   1.5   1.8   1.3    .8    .0    .0    .0
330.  *   3.6   3.6   3.6   2.3   1.7   2.0   2.2   2.4   2.6   2.5    .1    .4    .6   1.5   1.7   1.2    .8    .0    .0    .0
335.  *   3.4   3.5   3.5   2.0   1.5   1.9   2.1   2.3   2.6   2.4    .1    .3    .5   1.6   1.7   1.2    .9    .0    .0    .0
340.  *   3.4   3.5   3.7   2.2   1.5   2.0   2.3   2.5   2.5   2.4    .1    .2    .5   1.4   1.6   1.0    .9    .0    .0    .0
345.  *   3.5   3.5   3.6   2.1   1.4   2.0   2.5   2.5   2.4   2.4    .1    .2    .4   1.2   1.7    .9    .9    .0    .0    .1
350.  *   3.5   3.6   3.7   2.2   1.5   2.1   2.6   2.8   2.4   2.5    .0    .1    .3   1.3   1.5    .9   1.0    .0    .2    .1
355.  *   3.6   3.7   3.7   2.4   1.7   1.9   2.8   2.8   2.4   2.5    .0    .1    .2   1.0   1.4    .9   1.0    .1    .3    .3
360.  *   3.5   3.6   3.7   2.7   1.9   2.2   2.8   2.7   2.3   2.4    .0    .1    .1    .8   1.0    .7   1.0    .1    .6    .8
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   5.2   5.2   5.3   5.1   2.4   2.4   5.2   4.1   3.6   3.5   4.8   4.9   4.7   3.6   3.4   3.4   2.7   2.5   3.6   3.9
DEGR. *  285   280   280   280    15   285   275   275   275   275   250   250   255   255   235   235   215   175   105   100

1
                                                                                                                       PAGE  5
      JOB: Site 1 Opt 1/2 2014 PM 1B1PM14.DAT                RUN: Site 1 Opt 1/2 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *    .2    .0    .0    .0
```

```
   5.  *    .6    .0    .0    .0
  10.  *   1.0    .0    .0    .0
  15.  *   1.3    .2    .0    .0
  20.  *   1.7    .3    .1    .1
  25.  *   2.0    .4    .3    .1
  30.  *   2.2    .6    .4    .1
  35.  *   2.1    .6    .4    .2
  40.  *   2.1    .9    .5    .3
  45.  *   2.1   1.0    .5    .3
  50.  *   1.9   1.0    .5    .4
  55.  *   1.8   1.0    .6    .4
  60.  *   1.6    .9    .9    .5
  65.  *   1.5   1.1   1.0    .7
  70.  *   1.5   1.2   1.3   1.2
  75.  *   1.8   1.7   1.7   1.6
  80.  *   2.3   2.6   2.3   2.2
  85.  *   2.7   2.9   3.1   3.1
  90.  *   3.0   3.4   3.3   3.6
  95.  *   3.1   3.6   3.6   3.8
 100.  *   2.8   3.3   3.6   3.8
 105.  *   2.8   3.2   3.6   3.9
 110.  *   2.6   3.0   3.4   3.8
 115.  *   2.2   2.7   3.4   3.6
 120.  *   2.1   2.8   3.4   3.7
 125.  *   2.0   2.8   3.4   3.6
 130.  *   1.9   2.8   3.3   3.5
 135.  *   1.8   2.9   3.0   3.3
 140.  *   1.7   3.0   3.1   3.1
 145.  *   1.8   3.0   3.1   3.1
 150.  *   1.7   3.0   3.0   3.0
 155.  *   1.9   3.0   3.0   3.0
 160.  *   1.9   3.0   2.9   2.9
 165.  *   1.7   2.9   3.0   3.0
 170.  *   1.8   3.0   3.1   3.1
 175.  *   1.8   3.1   3.1   3.1
 180.  *   2.0   3.1   3.1   3.1
 185.  *   1.8   3.0   3.0   3.1
 190.  *   2.0   3.0   2.9   3.0
 195.  *   2.1   2.9   2.9   2.9
 200.  *   2.2   3.0   3.0   3.0
 205.  *   2.3   3.1   3.0   3.1
1
                                                                                                                 PAGE  6
      JOB: Site 1 Opt 1/2 2014 PM 1B1PM14.DAT                  RUN: Site 1 Opt 1/2 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   2.6   3.1   3.1   3.2
 215.  *   2.7   3.2   3.1   3.2
 220.  *   2.8   3.2   3.3   3.4
 225.  *   2.8   3.4   3.5   3.5
 230.  *   3.1   3.5   3.5   3.8
 235.  *   3.2   3.8   3.8   3.8
 240.  *   3.2   4.0   3.9   4.1
 245.  *   3.3   4.0   4.1   4.0
 250.  *   3.2   4.3   4.3   4.3
 255.  *   3.2   4.2   4.1   4.1
 260.  *   2.7   3.8   3.8   3.7
 265.  *   2.2   3.4   3.4   3.3
 270.  *   1.4   2.6   2.4   2.4
 275.  *   1.0   1.7   1.7   1.7
 280.  *    .4   1.1   1.1   1.1
 285.  *    .2    .6    .6    .6
 290.  *    .0    .3    .3    .3
 295.  *    .0    .2    .2    .2
 300.  *    .0    .2    .2    .2
 305.  *    .0    .1    .1    .2
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .0    .0    .1
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .1    .0    .0    .0
 355.  *    .1    .0    .0    .0
 360.  *    .2    .0    .0    .0
 ------*------------------------
 MAX   *   3.3   4.3   4.3   4.3
 DEGR. *  245   250   250   250

 THE HIGHEST CONCENTRATION IS    5.30 PPM AT  280 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    5.20 PPM AT  285 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    5.20 PPM AT  280 DEGREES FROM REC2 .
```

```
Site 1 Opt 1/2 2030 PM 1B1PM30.DAT      60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 1/2 2030 PM                   27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    1805 9.2  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    1305 9.2  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       113        53       2.0 1305   84.1 1132 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.      15 9.2  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       113       108       2.0   15   84.1  885 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    1505 9.2  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    1505 9.2  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    1505 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    1005 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    1005 9.2  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    1420 9.2  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       113        50       2.0 1420   84.1 1179 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      65 9.2  0.  32   30.
```

```
   1
SB         Rt1 left  AG  1240.  1217.  1058.  1208.      65 9.2  0.  32   30.
   2
SB         Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       113       105       2.0   65   84.1 1770 1 3
   1
SB         Rt1 departAG  1056.  1231.   921.  1221.    1320 9.2  0.  56   30.
   1
SB         Rt1 departAG   921.  1221.    58.  1172.    1320 9.2  0.  56   30.
   1
EB         Rt28 aprchAG  1226.  2185.  1087.  1547.      25 9.2  0.  32   30.
   1
EB         Rt28 aprchAG  1088.  1547.  1072.  1425.      25 9.2  0.  56   30.
   1
EB         Rt28 aprchAG  1072.  1425.  1025.  1202.      25 9.2  0.  56   30.
   2
EB         Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       113       106       2.0   25   84.1  575 1 3
   1
EB         Rt28 deparAG  1039.  1194.  1043.  1015.     555 9.2  0.  32   30.
   1
WB         Rt28 aprchAG  1052.  1015.  1049.  1190.     565 9.2  0.  44   30.
   2
WB         Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       113        92       2.0  565   84.1 1620 1 3
   1
WB         Rt28 deparAG  1069.  1197.  1121.  1424.      20 9.2  0.  44   30.
   1
WB         Rt28 deparAG  1121.  1424.  1126.  1570.      20 9.2  0.  32   30.
   1
WB         Rt28 deparAG  1126.  1570.  1257.  2180.      20 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 1 Opt 1/2 2030 PM 1B1PM30.DAT                   RUN: Site 1 Opt 1/2 2030 PM
      DATE: 05/10/2009   TIME: 17:17:57.60


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*--------------------------------------*-----------------------------------------------------------
       1. NB        Rt1 aprch *    58.0    1109.0     581.0    1136.0 *     524.    87. AG   1805.   9.2    .0 56.0
       2. NB        Rt1 thru  *   582.0    1136.0    1083.0    1166.0 *     502.    87. AG   1305.   9.2    .0 56.0
       3. NB        Rt1 thru  *   984.0    1160.0     856.9    1152.7 *     127.   267. AG    317. 100.0    .0 36.0  .78   6.5
       4. NB        Rt1 left  *   572.0    1167.0    1065.0    1195.0 *     494.    87. AG     15.   9.2    .0 44.0
       5. NB        Rt1 left  *   983.0    1190.0     965.9    1189.1 *      17.   267. AG    431. 100.0    .0 24.0 1.00    .9
       6. NB        Rt1 depart*  1085.0    1167.0    1470.0    1188.0 *     386.    87. AG   1505.   9.2    .0 56.0
       7. NB        Rt1 depart*  1470.0    1188.0    1784.0    1227.0 *     316.    83. AG   1505.   9.2    .0 44.0
       8. NB        Rt1 depart*  1784.0    1227.0    2072.0    1272.0 *     291.    81. AG   1505.   9.2    .0 44.0
       9. SB        Rt1 aprch *  2069.0    1311.0    1694.0    1264.0 *     378.   263. AG   1005.   9.2    .0 44.0
      10. SB        Rt1 aprch *  1694.0    1264.0    1395.0    1248.0 *     299.   267. AG   1005.   9.2    .0 44.0
      11. SB        Rt1 th+rt *  1395.0    1248.0    1057.0    1231.0 *     338.   267. AG   1420.   9.2    .0 56.0
      12. SB        Rt1th+rt  *  1144.0    1236.0    1273.2    1242.4 *     129.    87. AG    299. 100.0    .0 36.0  .77   6.6
      13. SB        Rt1 left  *  1378.0    1236.0    1241.0    1217.0 *     138.   262. AG     65.   9.2    .0 32.0
      14. SB        Rt1 left  *  1240.0    1217.0    1058.0    1208.0 *     182.   267. AG     65.   9.2    .0 32.0
      15. SB        Rt1 left  *  1147.0    1212.0    1254.1    1216.8 *     107.    87. AG    210. 100.0    .0 12.0 1.05   5.4
      16. SB        Rt1 depart*  1056.0    1231.0     921.0    1221.0 *     135.   266. AG   1320.   9.2    .0 56.0
      17. SB        Rt1 depart*   921.0    1221.0      58.0    1172.0 *     864.   267. AG   1320.   9.2    .0 56.0
      18. EB        Rt28 aprch*  1226.0    2185.0    1087.0    1547.0 *     653.   192. AG     25.   9.2    .0 32.0
      19. EB        Rt28 aprch*  1088.0    1547.0    1072.0    1425.0 *     123.   187. AG     25.   9.2    .0 56.0
      20. EB        Rt28 aprch*  1072.0    1425.0    1025.0    1202.0 *     228.   192. AG     25.   9.2    .0 56.0
      21. EB        Rt28 aprch*  1043.0    1287.0    1044.1    1292.6 *       6.    12. AG    635. 100.0    .0 36.0  .53    .3
      22. EB        Rt28 depar*  1039.0    1194.0    1043.0    1015.0 *     179.   179. AG    555.   9.2    .0 32.0
      23. WB        Rt28 aprch*  1052.0    1015.0    1049.0    1190.0 *     175.   359. AG    565.   9.2    .0 44.0
      24. WB        Rt28 aprch*  1050.0    1141.0    1055.0     527.2 *     614.   180. AG    367. 100.0    .0 24.0 1.16  31.2
      25. WB        Rt28 depar*  1069.0    1197.0    1121.0    1424.0 *     233.    13. AG     20.   9.2    .0 44.0
      26. WB        Rt28 depar*  1121.0    1424.0    1126.0    1570.0 *     146.     2. AG     20.   9.2    .0 32.0
      27. WB        Rt28 depar*  1126.0    1570.0    1257.0    2180.0 *     624.    12. AG     20.   9.2    .0 32.0
1
                                                                                                                PAGE  2
      JOB: Site 1 Opt 1/2 2030 PM 1B1PM30.DAT                   RUN: Site 1 Opt 1/2 2030 PM
      DATE: 05/10/2009   TIME: 17:17:57.60

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 thru  *     113       53       2.0      1305       1132      84.10      1        3
       5. NB        Rt1 left  *     113      108       2.0        15        885      84.10      1        3
      12. SB        Rt1th+rt  *     113       50       2.0      1420       1179      84.10      1        3
      15. SB        Rt1 left  *     113      105       2.0        65       1770      84.10      1        3
      21. EB        Rt28 aprch*     113      106       2.0        25        575      84.10      1        3
      24. WB        Rt28 aprch*     113       92       2.0       565       1620      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       743.0     1116.0        5.0   *
      2. SE 164 S             *       857.0     1123.0        5.0   *
      3. SE 82 S              *       939.0     1128.0        5.0   *
      4. SE CNR               *      1020.0     1134.0        5.0   *
      5. SE 82 E              *      1022.0     1053.0        5.0   *
      6. NE 82 E              *      1075.0     1056.0        5.0   *
      7. NE CNR               *      1076.0     1137.0        5.0   *
      8. NE 82 N              *      1156.0     1142.0        5.0   *
      9. NE 164 N             *      1238.0     1146.0        5.0   *
     10. NE MID N             *      1341.0     1153.0        5.0   *
     11. NW MID N             *      1453.0     1280.0        5.0   *
     12. NW 164 N             *      1316.0     1272.0        5.0   *
     13. NW 82 N              *      1234.0     1269.0        5.0   *
     14. NW CNR               *      1138.0     1288.0        5.0   *
     15. NW 82 W              *      1137.0     1385.0        5.0   *
     16. NW 164 W             *      1145.0     1466.0        5.0   *
     17. NW MID W             *      1156.0     1626.0        5.0   *
     18. SW MID W             *      1072.0     1597.0        5.0   *
     19. SW 164 W             *      1043.0     1434.0        5.0   *
     20. SW 82 W              *      1026.0     1354.0        5.0   *
     21. SW CNR               *       995.0     1273.0        5.0   *
     22. SW 82 S              *       900.0     1248.0        5.0   *
     23. SW 164 S             *       819.0     1243.0        5.0   *
     24. SW MID S             *       692.0     1235.0        5.0   *
1
                                                                                                                PAGE  3
      JOB: Site 1 Opt 1/2 2030 PM 1B1PM30.DAT                   RUN: Site 1 Opt 1/2 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

```
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *    .6   1.1   1.4    .7    .8    .7    .7   1.2   1.3    .7    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  5.  *    .6   1.1   1.6    .8   1.0    .6    .6   1.1   1.1    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 10.  *    .6   1.2   1.6    .8   1.3    .6    .6   1.1   1.0    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 15.  *    .6   1.3   1.6    .8   1.2    .5    .6   1.2   1.0    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 20.  *    .6   1.3   1.7    .9   1.4    .5    .7   1.2    .9    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 25.  *    .6   1.4   1.7    .9   1.6    .5    .7   1.2    .9    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 30.  *    .6   1.5   1.7    .9   1.7    .6    .9   1.3    .7    .7    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 35.  *    .6   1.5   1.7   1.0   1.9    .6    .9   1.3    .8    .7    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 40.  *    .6   1.6   1.7   1.1   1.9    .6   1.0   1.2    .8    .7    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 45.  *    .6   1.6   1.5   1.3   1.9    .6   1.1   1.2    .7    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 50.  *    .8   1.7   1.6   1.5   1.9    .5   1.1   1.2    .7    .6    .0    .1    .0    .0    .0    .0    .0    .0    .0    .0
 55.  *    .8   1.8   1.7   1.6   1.8    .5   1.3   1.1    .8    .7    .0    .1    .1    .0    .0    .0    .0    .0    .0    .0
 60.  *    .9   1.9   1.6   1.6   1.8    .4   1.2   1.0    .8    .7    .0    .1    .1    .0    .0    .0    .0    .0    .0    .0
 65.  *   1.0   2.0   1.5   1.7   1.7    .3   1.1   1.0    .9    .7    .0    .1    .1    .0    .0    .0    .0    .0    .0    .0
 70.  *   1.4   1.9   1.7   1.7   1.5    .2   1.1    .9    .9    .8    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0
 75.  *   1.2   1.9   1.5   1.6   1.5    .2   1.1    .9    .8    .9    .1    .2    .2    .0    .0    .0    .0    .0    .0    .0
 80.  *   1.2   1.5   1.5   1.9   1.4    .2    .9    .9    .7    .9    .3    .3    .4    .1    .0    .0    .0    .0    .0    .0
 85.  *   1.0   1.3   1.2   1.8   1.4    .0    .6    .6    .6    .6    .4    .4    .6    .3    .0    .0    .0    .0    .0    .0
 90.  *    .8    .9   1.1   1.6   1.3    .0    .5    .5    .5    .4    .6    .7    .7    .5    .0    .0    .0    .0    .0    .0
 95.  *    .8    .7    .8   1.4   1.3    .0    .3    .4    .4    .4    .6    .6   1.0    .7    .0    .0    .0    .0    .0    .1
100.  *    .5    .6    .7   1.4   1.3    .0    .2    .2    .2    .3    .7    .7   1.1    .9    .0    .0    .0    .0    .0    .2
105.  *    .4    .5    .7   1.4   1.2    .0    .1    .2    .1    .1    .7    .8   1.1    .9    .2    .0    .0    .0    .0    .4
110.  *    .3    .4    .7   1.4   1.2    .0    .1    .1    .1    .1    .6    .7   1.3   1.0    .3    .0    .0    .0    .0    .3
115.  *    .3    .4    .7   1.4   1.2    .0    .1    .1    .1    .1    .6    .7   1.3   1.1    .4    .1    .0    .0    .1    .6
120.  *    .3    .3    .6   1.3   1.3    .0    .0    .1    .1    .1    .6    .8   1.2   1.3    .3    .1    .0    .0    .3    .6
125.  *    .2    .3    .6   1.3   1.3    .0    .0    .1    .0    .1    .5    .9   1.3   1.3    .3    .1    .0    .0    .3    .6
130.  *    .2    .3    .4   1.4   1.3    .0    .0    .0    .0    .1    .5    .7   1.4   1.3    .3    .2    .0    .0    .3    .6
135.  *    .2    .3    .4   1.4   1.4    .0    .0    .0    .0    .0    .5    .6   1.4   1.3    .4    .2    .0    .0    .3    .6
140.  *    .2    .3    .4   1.5   1.4    .0    .0    .0    .0    .0    .5    .6   1.4   1.3    .5    .3    .0    .1    .4    .6
145.  *    .2    .3    .5   1.5   1.3    .0    .0    .0    .0    .0    .5    .6   1.5   1.3    .5    .3    .0    .3    .4    .6
150.  *    .1    .3    .5   1.5   1.4    .0    .0    .0    .0    .0    .5    .6   1.5   1.2    .5    .3    .0    .3    .4    .5
155.  *    .1    .2    .4   1.6   1.4    .1    .1    .0    .0    .0    .5    .6   1.5   1.2    .6    .3    .2    .3    .4    .4
160.  *    .1    .2    .4   1.6   1.4    .2    .2    .0    .0    .0    .5    .6   1.5   1.2    .5    .5    .3    .3    .4    .6
165.  *    .0    .1    .4   1.5   1.4    .3    .3    .0    .0    .0    .5    .6   1.6   1.1    .5    .5    .3    .4    .4    .8
170.  *    .0    .1    .3   1.4   1.3    .5    .6    .0    .0    .0    .5    .6   1.7   1.0    .6    .6    .4    .4    .4    .7
175.  *    .0    .1    .2   1.3   1.1    .9    .8    .1    .0    .0    .5    .6   1.7   1.1    .7    .5    .4    .3    .6    .7
180.  *    .0    .0    .1   1.0    .9   1.1   1.1    .2    .0    .0    .6    .6   1.8   1.0    .6    .5    .4    .2    .5    .8
185.  *    .0    .0    .1    .8    .6   1.3   1.4    .2    .1    .0    .5    .6   1.9   1.1    .6    .5    .4    .2    .6    .7
190.  *    .0    .0    .0    .5    .4   1.4   1.6    .3    .1    .0    .5    .7   2.0   1.0    .6    .5    .2    .3    .5    .6
195.  *    .0    .0    .0    .2    .2   1.5   1.7    .4    .2    .1    .5    .7   1.9    .9    .6    .3    .1    .3    .4    .5
200.  *    .0    .0    .0    .1    .1   1.5   1.6    .4    .2    .1    .6    .8   2.1   1.0    .5    .5    .2    .3    .4    .6
205.  *    .0    .0    .0    .0    .1   1.6   1.6    .5    .3    .1    .6    .9   2.1   1.0    .6    .4    .3    .2    .3    .4
1
                                                                                                                     PAGE  4
      JOB: Site 1 Opt 1/2 2030 PM 1B1PM30.DAT                  RUN: Site 1 Opt 1/2 2030 PM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0   1.5   1.6    .5    .3    .2    .6    .9   2.1    .9    .5    .4    .2    .2    .4    .4
215.  *    .0    .0    .0    .0    .0   1.5   1.5    .5    .3    .2    .6   1.0   2.1    .8    .4    .3    .1    .2    .3    .5
220.  *    .0    .0    .0    .0    .0   1.5   1.5    .5    .3    .2    .8   1.2   2.2    .7    .3    .3    .2    .2    .3    .4
225.  *    .0    .0    .0    .0    .0   1.5   1.4    .5    .3    .3    .8   1.3   2.2    .8    .3    .3    .1    .1    .2    .4
230.  *    .0    .0    .0    .1    .0   1.4   1.5    .5    .4    .3    .8   1.5   2.1    .7    .4    .3    .1    .2    .2    .3
235.  *    .1    .1    .1    .1    .0   1.4   1.4    .7    .4    .3    .9   1.6   2.0    .7    .4    .2    .1    .2    .3    .3
240.  *    .1    .1    .1    .1    .0   1.3   1.4    .7    .4    .3    .8   1.8   1.9    .8    .4    .3    .1    .2    .2    .4
245.  *    .1    .1    .1    .2    .0   1.3   1.4    .8    .4    .3   1.0   1.9   1.9    .8    .3    .2    .1    .1    .2    .4
250.  *    .2    .1    .2    .3    .0   1.3   1.5    .9    .5    .4   1.1   1.9   1.9    .7    .3    .2    .0    .0    .2    .3
255.  *    .3    .3    .4    .6    .0   1.3   1.6    .8    .6    .6   1.3   1.7   1.6    .7    .2    .1    .0    .0    .2    .2
260.  *    .4    .5    .6    .9    .0   1.3   1.9   1.2    .8    .7   1.1   1.8   1.5    .7    .2    .1    .0    .0    .1    .2
265.  *    .6    .6    .8   1.1    .1   1.4   2.0   1.3   1.0    .9   1.0   1.5   1.3    .6    .1    .0    .0    .0    .0    .1
270.  *    .7    .7   1.0   1.2    .3   1.6   2.0   1.4   1.0   1.0    .6   1.0    .8    .3    .0    .0    .0    .0    .0    .1
275.  *    .8    .8   1.3   1.5    .3   1.6   2.2   1.3   1.2   1.3    .4    .7    .7    .2    .0    .0    .0    .0    .0    .0
280.  *    .8    .8   1.5   1.6    .3   1.7   2.2   1.2   1.1   1.2    .2    .4    .4    .1    .0    .0    .0    .0    .0    .0
285.  *    .9    .8   1.6   1.5    .4   1.8   2.1   1.3   1.0   1.2    .1    .3    .2    .1    .0    .0    .0    .0    .0    .0
290.  *    .8    .8   1.5   1.5    .5   1.8   1.9    .9   1.0   1.1    .0    .2    .1    .0    .0    .0    .0    .0    .0    .0
295.  *    .8    .7   1.6   1.5    .5   1.8   1.5    .9   1.0   1.2    .0    .1    .1    .0    .0    .0    .0    .0    .0    .0
300.  *    .7    .7   1.6   1.5    .5   1.9   1.5    .7   1.0   1.2    .0    .1    .1    .0    .0    .0    .0    .0    .0    .0
305.  *    .7    .7   1.7   1.3    .6   2.0   1.3    .8    .9   1.1    .0    .1    .0    .0    .0    .0    .0    .0    .0    .0
310.  *    .6    .6   1.6   1.2    .6   2.0   1.2    .8   1.1   1.1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
315.  *    .6    .6   1.6   1.1    .6   2.0   1.0    .6   1.1   1.1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
320.  *    .6    .6   1.6   1.0    .6   2.1    .9    .7   1.2    .9    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
325.  *    .6    .6   1.5   1.0    .7   1.9    .9    .6   1.1    .8    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
330.  *    .6    .7   1.5    .9    .8   1.8    .8    .6   1.2    .7    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
335.  *    .6    .7   1.5    .8    .6   1.7    .7    .7   1.2    .7    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
340.  *    .6    .8   1.5    .8    .6   1.5    .6    .8   1.2    .7    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
345.  *    .6    .8   1.5    .7    .6   1.4    .6    .8   1.2    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
350.  *    .6    .9   1.5    .6    .7   1.2    .6    .9   1.2    .6    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
355.  *    .6   1.0   1.5    .7    .8   1.2    .7   1.0   1.3    .7    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
360.  *    .6   1.1   1.4    .7    .8    .7    .7   1.2   1.3    .7    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   1.4   2.0   1.7   1.9   1.9   2.1   2.2   1.4   1.3   1.3   1.3   1.9   2.2   1.3    .7    .6    .4    .4    .6    .8
DEGR. *   70    65    40    80    35   320   275   270     0   275   255   245   225   120   175   170   170   165   175   165

1
                                                                                                                     PAGE  5
      JOB: Site 1 Opt 1/2 2030 PM 1B1PM30.DAT                  RUN: Site 1 Opt 1/2 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *    .0    .0    .0    .0
```

```
  5.  *    .0    .0    .0    .0
 10.  *    .0    .0    .0    .0
 15.  *    .0    .0    .0    .0
 20.  *    .0    .0    .0    .0
 25.  *    .0    .0    .0    .0
 30.  *    .0    .0    .0    .0
 35.  *    .0    .0    .0    .0
 40.  *    .1    .0    .0    .0
 45.  *    .1    .0    .0    .1
 50.  *    .1    .0    .0    .1
 55.  *    .1    .0    .1    .1
 60.  *    .1    .0    .1    .1
 65.  *    .2    .1    .1    .1
 70.  *    .2    .2    .1    .2
 75.  *    .4    .3    .4    .2
 80.  *    .4    .5    .5    .4
 85.  *    .4    .8    .7    .8
 90.  *    .7    .9    .7   1.1
 95.  *   1.0    .9   1.0   1.1
100.  *    .9   1.0   1.0   1.2
105.  *    .9   1.0   1.2   1.2
110.  *    .9   1.1   1.2   1.0
115.  *    .8   1.0   1.3   1.0
120.  *    .8   1.1   1.3   1.0
125.  *    .7   1.2   1.2   1.0
130.  *    .4   1.2   1.2   1.0
135.  *    .6   1.2   1.2    .8
140.  *    .7   1.3   1.3    .8
145.  *    .8   1.3   1.2    .8
150.  *   1.0   1.6   1.2    .7
155.  *    .9   1.4   1.0    .7
160.  *   1.1   1.3   1.0    .7
165.  *   1.2   1.3    .8    .6
170.  *   1.4   1.2    .8    .6
175.  *   1.3   1.1    .7    .6
180.  *   1.1   1.1    .6    .6
185.  *   1.1   1.0    .6    .6
190.  *   1.0   1.0    .6    .6
195.  *   1.0    .9    .6    .6
200.  *    .9    .9    .6    .6
205.  *    .9    .8    .6    .6
1
                                                                                                                         PAGE  6
      JOB: Site 1 Opt 1/2 2030 PM 1B1PM30.DAT                  RUN: Site 1 Opt 1/2 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *    .9    .8    .6    .6
 215.  *    .9    .7    .6    .7
 220.  *    .9    .7    .6    .6
 225.  *    .9    .7    .7    .7
 230.  *    .8    .7    .7    .8
 235.  *    .8    .7    .8    .8
 240.  *    .7    .9    .9    .9
 245.  *    .9    .9    .8    .8
 250.  *    .6    .8    .9    .9
 255.  *    .6    .8    .9    .8
 260.  *    .6    .8    .7    .8
 265.  *    .4    .7    .7    .7
 270.  *    .3    .6    .6    .6
 275.  *    .1    .4    .4    .4
 280.  *    .1    .3    .3    .3
 285.  *    .0    .2    .2    .2
 290.  *    .0    .1    .1    .1
 295.  *    .0    .1    .1    .1
 300.  *    .0    .1    .1    .1
 305.  *    .0    .1    .1    .1
 310.  *    .0    .0    .0    .1
 315.  *    .0    .0    .0    .0
 320.  *    .0    .0    .0    .0
 325.  *    .0    .0    .0    .0
 330.  *    .0    .0    .0    .0
 335.  *    .0    .0    .0    .0
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .0    .0    .0    .0
 355.  *    .0    .0    .0    .0
 360.  *    .0    .0    .0    .0
 ------*------------------------
 MAX   *   1.4   1.6   1.3   1.2
 DEGR. *  170   150   115   100

 THE HIGHEST CONCENTRATION IS    2.20 PPM AT  275 DEGREES FROM REC7 .
 THE 2ND HIGHEST CONCENTRATION IS    2.20 PPM AT  225 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    2.10 PPM AT  320 DEGREES FROM REC6 .
```

```
Site 1 Opt 3 2014 AM 1B3AM14.DAT        60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 3 2014 AM                     27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    248111.4  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    185911.4  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       120        57       2.0 1859  102.2 1679 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.     62211.4  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       120       107       2.0  622  102.2 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    205311.4  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    205311.4  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    205311.4  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    364811.4  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    364811.4  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    362811.4  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       120        65       2.0 3628  102.2 1668 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      2011.4  0.  32   30.
```

```
  1
SB         Rt1 left  AG  1240.  1217.  1058.  1208.      2011.4  0.  32   30.
  2
SB         Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       120       115       2.0   20  102.2 1752 1 3
  1
SB         Rt1 departAG  1056.  1231.   921.  1221.    428211.4  0.  56   30.
  1
SB         Rt1 departAG   921.  1221.    58.  1172.    428211.4  0.  56   30.
  1
EB         Rt28 aprchAG  1226.  2185.  1087.  1547.     97311.4  0.  32   30.
  1
EB         Rt28 aprchAG  1088.  1547.  1072.  1425.     97311.4  0.  56   30.
  1
EB         Rt28 aprchAG  1072.  1425.  1025.  1202.     97311.4  0.  56   30.
  2
EB         Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       120        95       2.0  973  102.2 1524 1 3
  1
EB         Rt28 deparAG  1039.  1194.  1043.  1015.      4511.4  0.  32   30.
  1
WB         Rt28 aprchAG  1052.  1015.  1049.  1190.      8511.4  0.  44   30.
  2
WB         Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       120       109       2.0   85  102.2 1694 1 3
  1
WB         Rt28 deparAG  1069.  1197.  1121.  1424.     80711.4  0.  44   30.
  1
WB         Rt28 deparAG  1121.  1424.  1126.  1570.     80711.4  0.  32   30.
  1
WB         Rt28 deparAG  1126.  1570.  1257.  2180.     80711.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 1 Opt 3 2014 AM 1B3AM14.DAT                     RUN: Site 1 Opt 3 2014 AM
      DATE: 05/10/2009   TIME: 18:22:23.36


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2    *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*---------------------------------------*--------------------------------------------------------------
       1. NB        Rt1 aprch *    58.0    1109.0     581.0    1136.0 *    524.    87. AG   2481.  11.4    .0 56.0
       2. NB        Rt1 thru  *   582.0    1136.0    1083.0    1166.0 *    502.    87. AG   1859.  11.4    .0 56.0
       3. NB        Rt1 thru  *   984.0    1160.0     791.4    1148.9 *    193.   267. AG    391. 100.0    .0 36.0  .75   9.8
       4. NB        Rt1 left  *   572.0    1167.0    1065.0    1195.0 *    494.    87. AG    622.  11.4    .0 44.0
       5. NB        Rt1 left  *   983.0    1190.0   -1141.4    1072.3 *   2128.   267. AG    489. 100.0    .0 24.0 2.45 108.1
       6. NB       Rt1 depart*   1085.0    1167.0    1470.0    1188.0 *    386.    87. AG   2053.  11.4    .0 56.0
       7. NB       Rt1 depart*   1470.0    1188.0    1784.0    1227.0 *    316.    83. AG   2053.  11.4    .0 44.0
       8. NB       Rt1 depart*   1784.0    1227.0    2072.0    1272.0 *    291.    81. AG   2053.  11.4    .0 44.0
       9. SB        Rt1 aprch *  2069.0    1311.0    1694.0    1264.0 *    378.   263. AG   3648.  11.4    .0 44.0
      10. SB        Rt1 aprch *  1694.0    1264.0    1395.0    1248.0 *    299.   267. AG   3648.  11.4    .0 44.0
      11. SB        Rt1 th+rt *  1395.0    1248.0    1057.0    1231.0 *    338.   267. AG   3628.  11.4    .0 56.0
      12. SB        Rt1th+rt  *  1144.0    1236.0    6719.0    1510.2 *   5582.    87. AG    445. 100.0    .0 36.0 1.71 283.6
      13. SB        Rt1 left  *  1378.0    1236.0    1241.0    1217.0 *    138.   262. AG     20.  11.4    .0 32.0
      14. SB        Rt1 left  *  1240.0    1217.0    1058.0    1208.0 *    182.   267. AG     20.  11.4    .0 32.0
      15. SB        Rt1 left  *  1147.0    1212.0    1244.8    1216.3 *     98.    87. AG    263. 100.0    .0 12.0 1.43   5.0
      16. SB       Rt1 depart*   1056.0    1231.0     921.0    1221.0 *    135.   266. AG   4282.  11.4    .0 56.0
      17. SB       Rt1 depart*    921.0    1221.0      58.0    1172.0 *    864.   267. AG   4282.  11.4    .0 56.0
      18. EB        Rt28 aprch*  1226.0    2185.0    1087.0    1547.0 *    653.   192. AG    973.  11.4    .0 32.0
      19. EB        Rt28 aprch*  1088.0    1547.0    1072.0    1425.0 *    123.   187. AG    973.  11.4    .0 56.0
      20. EB        Rt28 aprch*  1072.0    1425.0    1025.0    1202.0 *    228.   192. AG    973.  11.4    .0 56.0
      21. EB        Rt28 aprch*  1043.0    1287.0    1210.8    2105.9 *    836.    12. AG    651. 100.0    .0 36.0 1.22  42.5
      22. EB        Rt28 depar*  1039.0    1194.0    1043.0    1015.0 *    179.   179. AG     45.  11.4    .0 32.0
      23. WB        Rt28 aprch*  1052.0    1015.0    1049.0    1190.0 *    175.   359. AG     85.  11.4    .0 44.0
      24. WB        Rt28 aprch*  1050.0    1141.0    1050.2    1116.0 *     25.   180. AG    498. 100.0    .0 24.0  .43   1.3
      25. WB        Rt28 depar*  1069.0    1197.0    1121.0    1424.0 *    233.    13. AG    807.  11.4    .0 44.0
      26. WB        Rt28 depar*  1121.0    1424.0    1126.0    1570.0 *    146.     2. AG    807.  11.4    .0 32.0
      27. WB        Rt28 depar*  1126.0    1570.0    1257.0    2180.0 *    624.    12. AG    807.  11.4    .0 32.0
1
                                                                                                             PAGE  2
      JOB: Site 1 Opt 3 2014 AM 1B3AM14.DAT                     RUN: Site 1 Opt 3 2014 AM
      DATE: 05/10/2009   TIME: 18:22:23.36

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE      RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)     (VPH)    (gm/hr)
      ------------------------*---------------------------------------------------------------------------------
       3. NB        Rt1 thru  *     120       57       2.0      1859       1679     102.20      1        3
       5. NB        Rt1 left  *     120      107       2.0       622       1700     102.20      1        3
      12. SB        Rt1th+rt  *     120       65       2.0      3628       1668     102.20      1        3
      15. SB        Rt1 left  *     120      115       2.0        20       1752     102.20      1        3
      21. EB        Rt28 aprch*     120       95       2.0       973       1524     102.20      1        3
      24. WB        Rt28 aprch*     120      109       2.0        85       1694     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *         COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*-----------------------------------*
      1. SE MID S             *       743.0     1116.0       5.0   *
      2. SE 164 S             *       857.0     1123.0       5.0   *
      3. SE 82 S              *       939.0     1128.0       5.0   *
      4. SE CNR               *      1020.0     1134.0       5.0   *
      5. SE 82 E              *      1022.0     1053.0       5.0   *
      6. NE 82 E              *      1075.0     1056.0       5.0   *
      7. NE CNR               *      1076.0     1137.0       5.0   *
      8. NE 82 N              *      1156.0     1142.0       5.0   *
      9. NE 164 N             *      1238.0     1146.0       5.0   *
     10. NE MID N             *      1341.0     1153.0       5.0   *
     11. NW MID N             *      1453.0     1280.0       5.0   *
     12. NW 164 N             *      1316.0     1272.0       5.0   *
     13. NW 82 N              *      1234.0     1269.0       5.0   *
     14. NW CNR               *      1138.0     1288.0       5.0   *
     15. NW 82 W              *      1137.0     1385.0       5.0   *
     16. NW 164 W             *      1145.0     1466.0       5.0   *
     17. NW MID W             *      1156.0     1626.0       5.0   *
     18. SW MID W             *      1072.0     1597.0       5.0   *
     19. SW 164 W             *      1043.0     1434.0       5.0   *
     20. SW 82 W              *      1026.0     1354.0       5.0   *
     21. SW CNR               *       995.0     1273.0       5.0   *
     22. SW 82 S              *       900.0     1248.0       5.0   *
     23. SW 164 S             *       819.0     1243.0       5.0   *
     24. SW MID S             *       692.0     1235.0       5.0   *
1
                                                                                                             PAGE  3
      JOB: Site 1 Opt 3 2014 AM 1B3AM14.DAT                     RUN: Site 1 Opt 3 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

```
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   2.4   3.6   3.7   2.7   1.9   2.1   2.9   3.0   2.5   2.1    .0    .2    .6   1.4   1.8   1.8   2.4    .7   1.1   1.1
  5.  *   2.4   3.5   3.8   2.9   2.1   1.9   2.8   2.8   2.3   2.0    .0    .1    .2   1.2   1.5   1.5   2.1   1.2   1.6   1.6
 10.  *   2.4   3.6   4.1   3.0   2.2   1.9   2.7   2.4   2.2   2.0    .0    .0    .1   1.0   1.1   1.2   1.9   1.7   2.3   2.2
 15.  *   2.3   3.8   4.2   2.9   2.0   1.4   2.3   2.4   2.2   1.9    .0    .0    .1    .6    .9    .8   1.3   2.2   2.7   2.6
 20.  *   2.5   4.0   4.3   2.8   1.8   1.5   1.9   2.4   2.1   2.0    .0    .1    .1    .2    .6    .4    .9   2.6   3.2   3.2
 25.  *   2.8   4.2   4.4   2.4   1.6   1.1   1.8   2.3   1.9   1.9    .0    .1    .1    .1    .1    .3    .5   2.9   3.5   3.4
 30.  *   2.9   4.5   4.3   2.2   1.6   1.2   1.9   2.4   2.0   2.1    .0    .1    .1    .0    .1    .1    .3   3.0   3.4   3.4
 35.  *   3.0   4.3   4.0   2.2   1.3   1.1   1.9   2.4   2.0   2.1    .0    .1    .1    .0    .0    .0    .2   3.0   3.3   3.1
 40.  *   3.5   4.5   3.5   2.1   1.4   1.2   2.0   2.4   2.2   2.2    .0    .1    .1    .0    .0    .0    .1   2.9   3.2   3.0
 45.  *   3.5   4.6   3.6   2.2   1.3   1.4   2.3   2.5   2.3   2.3    .1    .2    .1    .0    .0    .0    .0   2.7   2.9   3.0
 50.  *   3.8   4.5   3.3   2.2   1.4   1.4   2.4   2.6   2.3   2.4    .1    .2    .2    .0    .0    .0    .0   2.7   2.8   2.9
 55.  *   3.9   4.2   3.1   2.5   1.3   1.4   2.5   2.5   2.4   2.5    .1    .2    .2    .0    .0    .0    .0   2.6   2.7   2.7
 60.  *   3.9   4.3   3.2   2.7   1.4   1.4   2.6   2.6   2.8   2.6    .2    .4    .3    .0    .0    .0    .0   2.5   2.6   2.6
 65.  *   4.0   4.1   3.2   3.0   1.4   1.4   2.9   3.0   2.7   2.7    .5    .6    .6    .1    .0    .0    .0   2.4   2.4   2.5
 70.  *   4.0   3.9   3.3   3.3   1.4   1.2   2.9   2.8   2.6   2.9    .8   1.0   1.0    .4    .0    .0    .0   2.3   2.3   2.3
 75.  *   3.9   3.9   3.1   3.4   1.1   1.2   2.8   2.8   2.9   2.7   1.4   1.8   1.6    .7    .1    .1    .0   2.3   2.4   2.4
 80.  *   3.5   3.4   2.8   3.4   1.1    .9   2.6   2.6   2.6   2.5   2.2   2.7   2.4   1.1    .2    .1    .1   2.3   2.3   2.6
 85.  *   3.1   2.9   2.4   3.1    .8    .8   2.1   2.2   2.1   2.2   2.9   3.5   3.3   1.6    .6    .2    .1   2.3   2.7   2.9
 90.  *   2.2   2.2   2.0   2.5    .4    .3   1.6   1.5   1.6   1.6   3.6   4.1   4.1   2.3    .7    .4    .2   2.4   3.0   3.2
 95.  *   1.5   1.4   1.3   2.1    .2    .2   1.1   1.2   1.1   1.0   4.1   4.5   4.5   2.7   1.0    .5    .3   2.4   3.2   3.6
100.  *    .7    .8    .7   1.5    .1    .1    .6    .7    .6    .6   4.3   4.6   4.6   2.7   1.2    .7    .4   2.5   3.2   3.8
105.  *    .4    .5    .5   1.2    .0    .0    .3    .4    .3    .4   4.3   4.6   4.5   2.9   1.1    .9    .4   2.5   3.4   3.9
110.  *    .3    .1    .2   1.0    .0    .0    .1    .2    .2    .2   4.1   4.2   4.2   2.8   1.4    .8    .4   2.7   3.3   3.7
115.  *    .1    .1    .2    .8    .0    .0    .1    .1    .1    .1   3.9   4.1   4.0   2.8   1.3    .8    .5   2.8   3.3   3.9
120.  *    .1    .1    .1    .8    .0    .0    .1    .1    .1    .1   3.7   3.9   3.8   2.7   1.2    .9    .6   2.8   3.2   3.7
125.  *    .1    .1    .1    .7    .0    .0    .0    .1    .1    .1   3.5   3.6   3.7   2.6   1.2    .9    .6   2.8   3.4   3.6
130.  *    .1    .1    .1    .6    .0    .0    .0    .1    .1    .1   3.4   3.6   3.4   2.6   1.2   1.0    .7   2.8   3.4   3.6
135.  *    .1    .1    .1    .5    .0    .0    .0    .1    .1    .1   3.2   3.3   3.3   2.6   1.3    .9    .5   3.0   3.6   3.7
140.  *    .1    .1    .1    .4    .0    .0    .0    .1    .1    .1   3.1   3.2   3.2   2.4   1.3    .8    .5   3.0   3.6   3.4
145.  *    .0    .0    .0    .3    .0    .0    .0    .1    .1    .1   2.9   3.1   3.1   2.5   1.3    .8    .6   3.1   3.7   3.5
150.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.9   3.0   3.1   2.3   1.2    .8    .5   3.1   3.7   3.1
155.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.9   2.9   3.0   2.3   1.2    .8    .6   3.3   3.7   3.1
160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.8   2.9   3.0   2.2   1.2    .9    .5   3.3   3.4   2.8
165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.8   3.0   3.1   2.0   1.1    .9    .5   3.3   3.3   2.7
170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   3.0   3.0   3.2   2.0   1.2   1.0    .8   3.3   3.1   2.7
175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.9   3.1   3.3   1.8   1.1    .8    .9   3.3   3.0   2.5
180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   3.0   3.1   3.4   1.7   1.1    .9   1.0   2.8   2.8   2.4
185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   3.0   3.0   3.3   1.5    .8   1.0   1.4   2.6   2.6   2.1
190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.8   3.0   3.2   1.5   1.1   1.3   2.0   2.4   2.0   1.9
195.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.9   3.0   3.2   1.4   1.1   1.3   2.3   1.7   1.8   1.7
200.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   2.9   3.0   3.2   1.5   1.3   1.8   2.8   1.4   1.8   1.8
205.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .1   3.0   3.0   3.3   1.4   1.5   1.8   2.8   1.2   1.7   1.7
1
                                                                                                                  PAGE  4
     JOB: Site 1 Opt 3 2014 AM 1B3AM14.DAT                 RUN: Site 1 Opt 3 2014 AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .1    .0    .0    .4    .1    .1    .1   3.2   3.2   3.3   1.5   1.7   2.1   3.1    .9   1.4   1.8
215.  *    .1    .1    .1    .1    .0    .0    .5    .1    .1    .1   3.2   3.3   3.4   1.6   2.3   2.5   3.1    .8   1.5   1.8
220.  *    .1    .1    .1    .1    .0    .0    .6    .1    .1    .1   3.4   3.5   3.6   2.1   2.5   2.7   3.2    .7   1.2   1.7
225.  *    .1    .1    .1    .1    .0    .0    .7    .1    .1    .1   3.5   3.6   3.6   2.1   2.8   3.0   3.3    .7   1.2   1.6
230.  *    .1    .1    .1    .1    .0    .0    .8    .1    .1    .1   3.6   4.0   3.9   2.4   2.8   2.8   3.1    .8   1.2   1.7
235.  *    .1    .1    .1    .1    .0    .0    .9    .1    .1    .1   3.7   4.0   4.0   2.6   3.0   2.9   3.1    .7   1.1   1.7
240.  *    .1    .1    .1    .2    .0    .0   1.0    .2    .1    .2   4.1   4.4   4.2   2.8   3.0   2.7   2.9    .7   1.1   1.8
245.  *    .2    .2    .4    .4    .0    .0   1.4    .4    .3    .2   4.4   4.6   4.5   3.3   3.0   2.7   2.7    .6   1.1   1.5
250.  *    .4    .5    .6    .7    .0    .0   1.6    .8    .6    .5   4.6   5.1   4.8   3.3   2.9   2.7   2.5    .5    .9   1.4
255.  *    .9   1.0   1.1   1.3    .1    .1   2.2   1.4   1.1    .9   4.6   4.9   4.9   3.3   2.7   2.4   2.3    .3    .8   1.3
260.  *   1.3   1.5   1.8   1.9    .4    .4   2.7   1.8   1.5   1.6   4.5   5.0   4.5   3.1   2.4   2.3   2.2    .2    .6   1.0
265.  *   1.9   2.1   2.6   2.9    .6    .6   3.4   2.7   2.3   2.1   4.0   4.6   4.0   2.9   2.3   2.0   2.1    .1    .3    .7
270.  *   2.4   2.9   3.3   3.5    .8    .9   4.0   3.0   2.6   2.6   3.3   3.8   3.5   2.2   2.0   1.9   2.0    .0    .2    .4
275.  *   2.7   3.4   3.8   4.0   1.3   1.2   4.4   3.3   3.0   3.0   2.2   2.7   2.4   1.7   1.8   1.7   2.0    .0    .1    .2
280.  *   3.2   3.7   4.3   4.1   1.5   1.5   4.5   3.3   3.0   3.1   1.4   2.0   1.7   1.5   1.6   1.6   2.0    .0    .0    .0
285.  *   3.2   3.9   4.4   4.4   1.8   1.9   4.2   3.0   2.6   2.9   1.1   1.5   1.4   1.3   1.6   1.6   2.0    .0    .0    .0
290.  *   3.0   3.8   4.4   4.1   2.0   1.9   3.7   2.8   2.8   2.8    .6   1.1   1.1   1.2   1.7   1.7   2.0    .0    .0    .0
295.  *   2.9   3.9   4.3   4.0   2.0   1.9   3.2   2.5   2.6   2.9    .6   1.0    .9   1.2   1.6   1.7   2.0    .0    .0    .0
300.  *   2.8   3.9   4.2   3.6   1.9   1.9   2.9   2.5   2.5   3.0    .3    .7    .9   1.2   1.5   1.6   2.0    .0    .0    .0
305.  *   2.7   3.9   4.1   3.3   1.8   1.8   2.5   2.3   2.6   2.8    .3    .6    .9   1.3   1.6   1.7   2.0    .0    .0    .0
310.  *   2.6   3.8   4.0   3.0   2.0   1.8   2.3   2.0   2.5   2.7    .3    .6    .9   1.3   1.6   1.7   2.0    .0    .0    .0
315.  *   2.4   3.8   3.8   2.8   1.9   1.7   2.0   2.0   2.7   2.6    .3    .5    .9   1.3   1.8   1.8   2.1    .0    .0    .0
320.  *   2.4   3.6   3.5   2.4   1.7   1.6   1.9   1.9   2.7   2.5    .3    .6    .9   1.3   1.7   1.8   2.2    .0    .0    .0
325.  *   2.4   3.5   3.6   2.3   1.7   1.5   1.9   2.1   2.8   2.5    .4    .6    .9   1.3   1.8   1.8   2.3    .0    .0    .0
330.  *   2.3   3.4   3.4   2.1   1.7   1.5   1.8   2.1   2.8   2.4    .4    .7    .9   1.4   1.7   1.8   2.3    .0    .0    .0
335.  *   2.3   3.4   3.4   2.0   1.5   1.6   2.0   2.3   3.0   2.4    .4    .7    .9   1.4   1.9   1.8   2.5    .0    .0    .0
340.  *   2.3   3.4   3.3   1.9   1.5   1.6   2.1   2.4   2.9   2.5    .2    .6    .8   1.5   2.0   2.1   2.5    .0    .0    .0
345.  *   2.3   3.4   3.4   2.0   1.6   1.7   2.3   2.6   3.0   2.5    .2    .6    .8   1.7   1.9   2.0   2.7    .1    .2    .1
350.  *   2.4   3.5   3.5   2.1   1.6   1.9   2.6   2.8   2.8   2.4    .1    .5    .8   1.6   2.0   2.0   2.7    .2    .4    .4
355.  *   2.4   3.5   3.6   2.3   1.8   1.8   2.9   2.8   2.8   2.3    .1    .2    .7   1.5   2.0   2.0   2.6    .4    .7    .6
360.  *   2.4   3.6   3.7   2.7   1.9   2.1   2.9   3.0   2.5   2.1    .0    .2    .6   1.4   1.8   1.8   2.4    .7   1.1   1.1
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   4.0   4.6   4.4   4.4   2.2   2.1   4.5   3.3   3.0   3.1   4.6   5.1   4.9   3.3   3.0   3.0   3.3   3.3   3.7   3.9
DEGR. *   65    45    285   285   10     0    280   275   275   280   250   250   255   250   235   225   225   155   145   115

1
                                                                                                                  PAGE  5
     JOB: Site 1 Opt 3 2014 AM 1B3AM14.DAT                 RUN: Site 1 Opt 3 2014 AM

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *    .5    .1    .0    .0
```

```
   5.  *   1.0    .1    .0    .0
  10.  *   1.5    .3    .1    .0
  15.  *   1.9    .5    .3    .1
  20.  *   2.2    .7    .4    .2
  25.  *   2.5    .9    .6    .3
  30.  *   2.6   1.0    .7    .3
  35.  *   2.4   1.0    .8    .6
  40.  *   2.1   1.0    .9    .7
  45.  *   2.0    .9    .8    .6
  50.  *   1.8    .9    .8    .6
  55.  *   1.7   1.0    .8    .7
  60.  *   1.5    .9    .9    .8
  65.  *   1.6   1.1   1.2    .9
  70.  *   1.5   1.5   1.6   1.4
  75.  *   1.9   2.2   2.0   1.9
  80.  *   2.2   2.8   2.8   2.8
  85.  *   2.8   3.4   3.3   3.6
  90.  *   3.1   3.8   3.9   3.9
  95.  *   3.4   4.0   4.3   4.4
 100.  *   3.3   4.0   4.0   4.3
 105.  *   3.1   3.6   3.8   4.2
 110.  *   2.8   3.3   3.7   4.3
 115.  *   2.5   3.4   3.8   4.1
 120.  *   2.3   3.2   3.6   4.0
 125.  *   2.3   3.2   3.7   3.9
 130.  *   2.2   3.2   3.8   3.7
 135.  *   2.1   3.2   3.5   3.4
 140.  *   2.2   3.3   3.3   3.1
 145.  *   2.0   3.2   3.3   2.9
 150.  *   1.9   3.2   3.2   2.8
 155.  *   1.9   3.3   3.2   2.7
 160.  *   1.9   3.2   3.1   2.6
 165.  *   1.9   3.2   3.1   2.7
 170.  *   2.0   3.2   3.3   2.8
 175.  *   2.0   3.4   3.3   2.8
 180.  *   2.1   3.3   3.3   2.8
 185.  *   2.2   3.2   3.2   2.8
 190.  *   2.2   3.1   3.0   2.7
 195.  *   2.3   3.1   2.9   2.6
 200.  *   2.5   3.2   2.9   2.7
 205.  *   2.6   3.3   2.9   2.8
1
                                                                                                                 PAGE  6
      JOB: Site 1 Opt 3 2014 AM 1B3AM14.DAT                     RUN: Site 1 Opt 3 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   2.8   3.4   2.9   2.9
 215.  *   2.9   3.4   3.0   3.0
 220.  *   3.1   3.5   3.1   3.1
 225.  *   3.0   3.8   3.4   3.3
 230.  *   3.0   3.8   3.5   3.5
 235.  *   3.1   3.9   3.5   3.5
 240.  *   3.3   3.9   3.8   3.9
 245.  *   3.2   4.0   3.9   4.0
 250.  *   3.1   4.2   4.3   4.2
 255.  *   3.1   4.1   4.1   4.0
 260.  *   2.6   3.9   4.0   3.8
 265.  *   1.9   3.5   3.3   3.3
 270.  *   1.5   2.6   2.6   2.8
 275.  *    .9   2.0   2.0   2.0
 280.  *    .4   1.2   1.3   1.3
 285.  *    .3    .8    .8    .8
 290.  *    .1    .5    .5    .5
 295.  *    .0    .3    .3    .4
 300.  *    .0    .2    .3    .3
 305.  *    .0    .2    .2    .2
 310.  *    .0    .2    .2    .2
 315.  *    .0    .2    .2    .2
 320.  *    .0    .1    .2    .2
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .1    .1    .1
 340.  *    .0    .0    .0    .1
 345.  *    .0    .0    .0    .0
 350.  *    .1    .0    .0    .0
 355.  *    .2    .0    .0    .0
 360.  *    .5    .1    .0    .0
 ------*------------------------
 MAX   *   3.4   4.2   4.3   4.4
 DEGR. *   95   250   250    95

 THE HIGHEST CONCENTRATION IS    5.10 PPM AT  250 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS    4.90 PPM AT  255 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    4.60 PPM AT   45 DEGREES FROM REC2 .
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Site 1 Opt 3 2030 AM 1B3AM30.DAT        60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 3 2030 AM                     27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    2435 9.2  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    1820 9.2  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       122        42       2.0 1820   84.1 1679 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.     615 9.2  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       122        95       2.0  615   84.1 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    2025 9.2  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    2025 9.2  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    2025 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    3425 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    3425 9.2  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    3405 9.2  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       122        63       2.0 3405   84.1 1666 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      20 9.2  0.  32   30.
```

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  1
SB        Rt1 left  AG  1240.  1217.  1058.  1208.      20 9.2  0.  32   30.
  2
SB        Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       122       116       2.0   20   84.1 1752 1 3
  1
SB        Rt1 departAG  1056.  1231.   921.  1221.    4010 9.2  0.  56   30.
  1
SB        Rt1 departAG   921.  1221.    58.  1172.    4010 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1226.  2185.  1087.  1547.     940 9.2  0.  32   30.
  1
EB        Rt28 aprchAG  1088.  1547.  1072.  1425.     940 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1072.  1425.  1025.  1202.     940 9.2  0.  56   30.
  2
EB        Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       122       111       2.0  940   84.1 1524 1 3
  1
EB        Rt28 deparAG  1039.  1194.  1043.  1015.      45 9.2  0.  32   30.
  1
WB        Rt28 aprchAG  1052.  1015.  1049.  1190.      85 9.2  0.  44   30.
  2
WB        Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       122       113       2.0   85   84.1 1694 1 3
  1
WB        Rt28 deparAG  1069.  1197.  1121.  1424.     805 9.2  0.  44   30.
  1
WB        Rt28 deparAG  1121.  1424.  1126.  1570.     805 9.2  0.  32   30.
  1
WB        Rt28 deparAG  1126.  1570.  1257.  2180.     805 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                       CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 1 Opt 3 2030 AM 1B3AM30.DAT                    RUN: Site 1 Opt 3 2030 AM
      DATE: 05/10/2009   TIME: 18:44:47.99


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)        (VEH)
      ------------------------*--------------------------------------*-------------------------------------------------------------
       1. NB        Rt1 aprch *    58.0    1109.0     581.0    1136.0 *     524.    87. AG  2435.   9.2    .0 56.0
       2. NB        Rt1 thru  *   582.0    1136.0    1083.0    1166.0 *     502.    87. AG  1820.   9.2    .0 56.0
       3. NB        Rt1 thru  *   984.0    1160.0     845.1    1152.0 *     139.   267. AG   233. 100.0    .0 36.0  .58   7.1
       4. NB        Rt1 left  *   572.0    1167.0    1065.0    1195.0 *     494.    87. AG   615.   9.2    .0 44.0
       5. NB        Rt1 left  *   983.0    1190.0     762.4    1177.8 *     221.   267. AG   351. 100.0    .0 24.0  .96  11.2
       6. NB        Rt1 depart*  1085.0    1167.0    1470.0    1188.0 *     386.    87. AG  2025.   9.2    .0 56.0
       7. NB        Rt1 depart*  1470.0    1188.0    1784.0    1227.0 *     316.    83. AG  2025.   9.2    .0 44.0
       8. NB        Rt1 depart*  1784.0    1227.0    2072.0    1272.0 *     291.    81. AG  2025.   9.2    .0 44.0
       9. SB        Rt1 aprch *  2069.0    1311.0    1694.0    1264.0 *     378.   263. AG  3425.   9.2    .0 44.0
      10. SB        Rt1 aprch *  1694.0    1264.0    1395.0    1248.0 *     299.   267. AG  3425.   9.2    .0 44.0
      11. SB        Rt1 th+rt *  1395.0    1248.0    1057.0    1231.0 *     338.   267. AG  3405.   9.2    .0 56.0
      12. SB        Rt1th+rt  *  1144.0    1236.0    5510.6    1450.8 *    4372.    87. AG   349. 100.0    .0 36.0 1.51 222.1
      13. SB        Rt1 left  *  1378.0    1236.0    1241.0    1217.0 *     138.   262. AG    20.   9.2    .0 32.0
      14. SB        Rt1 left  *  1240.0    1217.0    1058.0    1208.0 *     182.   267. AG    20.   9.2    .0 32.0
      15. SB        Rt1 left  *  1147.0    1212.0    1164.7    1212.8 *      18.    87. AG   214. 100.0    .0 12.0  .71    .9
      16. SB        Rt1 depart*  1056.0    1231.0     921.0    1221.0 *     135.   266. AG  4010.   9.2    .0 56.0
      17. SB        Rt1 depart*   921.0    1221.0      58.0    1172.0 *     864.   267. AG  4010.   9.2    .0 56.0
      18. EB        Rt28 aprch*  1226.0    2185.0    1087.0    1547.0 *     653.   192. AG   940.   9.2    .0 32.0
      19. EB        Rt28 aprch*  1088.0    1547.0    1072.0    1425.0 *     123.   187. AG   940.   9.2    .0 56.0
      20. EB        Rt28 aprch*  1072.0    1425.0    1025.0    1202.0 *     228.   192. AG   940.   9.2    .0 56.0
      21. EB        Rt28 aprch*  1043.0    1287.0    1560.6    3812.8 *    2578.    12. AG   616. 100.0    .0 36.0 3.60 131.0
      22. EB        Rt28 depar*  1039.0    1194.0    1043.0    1015.0 *     179.   179. AG    45.   9.2    .0 32.0
      23. WB        Rt28 aprch*  1052.0    1015.0    1049.0    1190.0 *     175.   359. AG    85.   9.2    .0 44.0
      24. WB        Rt28 aprch*  1050.0    1141.0    1050.2    1112.7 *      28.   180. AG   418. 100.0    .0 24.0  .61   1.4
      25. WB        Rt28 depar*  1069.0    1197.0    1121.0    1424.0 *     233.    13. AG   805.   9.2    .0 44.0
      26. WB        Rt28 depar*  1121.0    1424.0    1126.0    1570.0 *     146.     2. AG   805.   9.2    .0 32.0
      27. WB        Rt28 depar*  1126.0    1570.0    1257.0    2180.0 *     624.    12. AG   805.   9.2    .0 32.0
1
                                                                                                                    PAGE  2
      JOB: Site 1 Opt 3 2030 AM 1B3AM30.DAT                    RUN: Site 1 Opt 3 2030 AM
      DATE: 05/10/2009   TIME: 18:44:47.99

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 thru  *     122       42       2.0      1820       1679      84.10      1        3
       5. NB        Rt1 left  *     122       95       2.0       615       1700      84.10      1        3
      12. SB        Rt1th+rt  *     122       63       2.0      3405       1666      84.10      1        3
      15. SB        Rt1 left  *     122      116       2.0        20       1752      84.10      1        3
      21. EB        Rt28 aprch*     122      111       2.0       940       1524      84.10      1        3
      24. WB        Rt28 aprch*     122      113       2.0        85       1694      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
      1. SE MID S             *       743.0     1116.0        5.0   *
      2. SE 164 S             *       857.0     1123.0        5.0   *
      3. SE 82 S              *       939.0     1128.0        5.0   *
      4. SE CNR               *      1020.0     1134.0        5.0   *
      5. SE 82 E              *      1022.0     1053.0        5.0   *
      6. NE 82 E              *      1075.0     1056.0        5.0   *
      7. NE CNR               *      1076.0     1137.0        5.0   *
      8. NE 82 N              *      1156.0     1142.0        5.0   *
      9. NE 164 N             *      1238.0     1146.0        5.0   *
     10. NE MID N             *      1341.0     1153.0        5.0   *
     11. NW MID N             *      1453.0     1280.0        5.0   *
     12. NW 164 N             *      1316.0     1272.0        5.0   *
     13. NW 82 N              *      1234.0     1269.0        5.0   *
     14. NW CNR               *      1138.0     1288.0        5.0   *
     15. NW 82 W              *      1137.0     1385.0        5.0   *
     16. NW 164 W             *      1145.0     1466.0        5.0   *
     17. NW MID W             *      1156.0     1626.0        5.0   *
     18. SW MID W             *      1072.0     1597.0        5.0   *
     19. SW 164 W             *      1043.0     1434.0        5.0   *
     20. SW 82 W              *      1026.0     1354.0        5.0   *
     21. SW CNR               *       995.0     1273.0        5.0   *
     22. SW 82 S              *       900.0     1248.0        5.0   *
     23. SW 164 S             *       819.0     1243.0        5.0   *
     24. SW MID S             *       692.0     1235.0        5.0   *
1
                                                                                                                    PAGE  3
      JOB: Site 1 Opt 3 2030 AM 1B3AM30.DAT                    RUN: Site 1 Opt 3 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

```
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   1.3   2.5   2.7   2.3   1.7   1.8   2.5   2.4   2.2   2.0    .3    .5    .6   1.5   1.8   1.9   2.6    .9   1.2   1.2
  5.  *   1.4   2.6   3.0   2.7   1.8   1.7   2.7   2.3   2.1   1.9    .2    .4    .5   1.4   1.6   1.7   2.5   1.4   1.9   1.7
 10.  *   1.6   2.6   3.1   2.8   1.9   1.9   2.5   2.2   1.9   1.8    .1    .2    .4   1.0   1.4   1.4   2.1   2.0   2.4   2.3
 15.  *   1.7   2.9   3.3   2.7   1.8   1.4   2.1   2.0   1.8   1.7    .1    .1    .2    .6   1.2   1.0   1.6   2.5   2.9   2.8
 20.  *   1.9   3.2   3.5   2.4   1.9   1.0   1.7   1.8   1.7   1.6    .0    .2    .1    .4    .7    .6   1.2   2.7   3.2   3.1
 25.  *   2.1   3.3   3.3   2.0   1.4    .9   1.6   1.7   1.6   1.6    .0    .1    .1    .2    .2    .3    .7   3.0   3.2   3.3
 30.  *   2.1   3.2   3.2   1.7   1.1    .8   1.5   1.6   1.6   1.6    .0    .1    .1    .1    .1    .1    .3   3.0   3.3   3.2
 35.  *   2.3   3.4   3.0   1.7   1.1    .9   1.5   1.6   1.6   1.6    .0    .1    .1    .0    .0    .0    .2   2.8   3.1   3.0
 40.  *   2.4   3.2   2.7   1.5   1.0    .9   1.4   1.7   1.8   1.8    .0    .1    .1    .0    .0    .0    .1   2.7   2.8   2.8
 45.  *   2.3   3.2   2.7   1.6    .9    .9   1.5   1.7   1.7   1.7    .0    .1    .1    .0    .0    .0    .0   2.5   2.6   2.7
 50.  *   2.5   3.2   2.4   1.7   1.1   1.1   1.6   1.9   1.9   1.8    .0    .1    .1    .0    .0    .0    .0   2.5   2.5   2.6
 55.  *   2.5   3.3   2.5   1.7   1.0   1.0   1.8   2.0   1.9   1.9    .1    .1    .1    .0    .0    .0    .0   2.3   2.5   2.4
 60.  *   2.6   3.1   2.2   2.0   1.0   1.0   2.0   1.9   2.1   2.0    .2    .3    .3    .0    .0    .0    .0   2.2   2.4   2.3
 65.  *   2.5   2.8   2.3   2.3   1.1   1.0   1.9   2.1   2.1   2.0    .3    .5    .5    .1    .0    .0    .0   2.1   2.3   2.3
 70.  *   2.8   2.7   2.3   2.4   1.0   1.0   2.3   2.3   2.1   2.2    .6    .9    .7    .1    .0    .0    .0   2.1   2.1   2.2
 75.  *   2.7   2.9   2.2   2.6   1.0    .9   2.3   2.1   2.1   2.3   1.1   1.3   1.3    .5    .1    .0    .0   2.1   2.1   2.3
 80.  *   2.5   2.5   2.2   2.6    .8    .8   2.0   1.9   1.9   2.0   1.7   1.9   1.8    .9    .2    .1    .0   2.0   2.1   2.3
 85.  *   2.0   2.2   2.0   2.4    .7    .7   1.6   1.6   1.6   1.5   2.4   2.7   2.5   1.3    .4    .2    .1   2.1   2.3   2.6
 90.  *   1.5   1.4   1.7   2.2    .2    .2   1.3   1.3   1.2   1.3   2.8   3.2   3.1   1.7    .6    .3    .1   2.1   2.5   2.8
 95.  *   1.0   1.0    .9   1.6    .1    .1    .8    .8    .8    .7   3.3   3.5   3.5   2.0    .6    .4    .2   2.2   2.8   3.0
100.  *    .6    .6    .5   1.3    .0    .0    .4    .4    .5    .4   3.3   3.6   3.4   2.1    .9    .5    .2   2.3   2.8   3.2
105.  *    .2    .2    .3   1.0    .0    .0    .2    .2    .2    .3   3.3   3.5   3.5   2.3   1.0    .5    .3   2.3   3.0   3.3
110.  *    .1    .1    .2   1.0    .0    .0    .1    .2    .1    .1   3.2   3.3   3.2   2.1   1.0    .6    .3   2.4   2.8   3.2
115.  *    .1    .1    .2    .8    .0    .0    .1    .1    .1    .1   3.0   3.2   3.0   2.1   1.0    .7    .3   2.5   2.9   3.1
120.  *    .1    .1    .1    .7    .0    .0    .0    .1    .1    .1   2.8   3.0   3.0   1.8    .9    .7    .4   2.5   2.9   3.2
125.  *    .1    .1    .1    .7    .0    .0    .0    .1    .1    .1   2.7   2.9   2.7   1.9   1.0    .8    .5   2.4   2.9   3.0
130.  *    .1    .1    .1    .6    .0    .0    .0    .1    .1    .1   2.6   2.8   2.6   1.9    .9    .7    .4   2.6   2.9   3.0
135.  *    .0    .0    .0    .5    .0    .0    .0    .1    .1    .1   2.5   2.7   2.5   1.9    .9    .7    .4   2.6   2.9   3.0
140.  *    .0    .0    .0    .3    .0    .0    .0    .1    .0    .1   2.4   2.4   2.5   1.8   1.0    .7    .5   2.7   2.9   2.9
145.  *    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0   2.4   2.4   2.4   1.8   1.0    .6    .5   2.7   3.0   2.9
150.  *    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0   2.2   2.3   2.3   1.5    .9    .6    .5   2.8   3.0   2.7
155.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.2   2.2   2.2   1.6    .9    .7    .4   2.9   3.0   2.5
160.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.2   2.2   2.2   1.5    .8    .6    .5   2.8   2.9   2.6
165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.2   2.3   2.2   1.6    .9    .6    .5   3.1   3.0   2.4
170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.3   2.3   2.3   1.4    .9    .7    .5   3.1   2.9   2.4
175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.3   2.4   2.3   1.3    .8    .7    .7   3.0   2.9   1.9
180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.3   2.3   2.3   1.3    .6    .6    .9   2.5   2.4   1.7
185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.2   2.3   2.3   1.1    .7    .8   1.1   2.3   2.1   1.6
190.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.2   2.3   2.2   1.0    .9   1.2   1.6   1.9   1.9   1.5
195.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.2   2.3   2.2   1.2    .9   1.2   1.9   1.6   1.6   1.4
200.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   2.2   2.3   2.2   1.1   1.1   1.1   2.2   1.2   1.2   1.3
205.  *    .0    .0    .0    .0    .0    .0    .3    .0    .0    .0   2.2   2.3   2.3   1.1   1.1   1.7   2.4    .8   1.1   1.3
1
                                                                                                                      PAGE  4
      JOB: Site 1 Opt 3 2030 AM 1B3AM30.DAT                    RUN: Site 1 Opt 3 2030 AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0    .0    .4    .0    .0    .1   2.5   2.4   2.4   1.2   1.4   2.1   2.8    .7   1.0   1.3
215.  *    .0    .0    .0    .1    .0    .0    .5    .1    .1    .1   2.5   2.5   2.5   1.3   1.5   2.0   2.7    .5    .9   1.2
220.  *    .1    .1    .1    .1    .0    .0    .7    .1    .1    .1   2.6   2.6   2.5   1.6   2.0   2.1   2.7    .4    .8   1.2
225.  *    .1    .1    .1    .1    .0    .0    .7    .1    .1    .1   2.7   2.7   2.7   1.6   2.2   2.1   2.6    .4    .6   1.2
230.  *    .1    .1    .1    .1    .0    .0    .8    .1    .1    .1   2.7   2.8   2.7   1.8   2.3   2.1   2.5    .3    .5   1.1
235.  *    .1    .1    .1    .1    .0    .0    .9    .1    .1    .1   2.9   3.0   3.0   1.9   2.4   2.3   2.4    .3    .7   1.1
240.  *    .1    .1    .1    .1    .0    .0    .9    .2    .1    .1   2.9   3.0   3.1   2.0   2.4   2.2   2.4    .3    .6    .9
245.  *    .2    .1    .1    .3    .0    .0   1.1    .3    .1    .2   3.1   3.4   3.2   2.3   2.2   1.9   2.3    .3    .5    .8
250.  *    .3    .3    .2    .3    .0    .0   1.2    .3    .3    .3   3.5   3.5   3.5   2.4   2.3   1.8   2.1    .1    .4    .8
255.  *    .5    .5    .6    .8    .0    .0   1.7   1.0    .7    .5   3.4   3.5   3.2   2.3   1.9   1.7   2.0    .1    .3    .6
260.  *    .6    .8    .8   1.1    .1    .0   2.0   1.2   1.1    .9   3.2   3.4   3.4   2.0   1.8   1.6   1.8    .0    .3    .5
265.  *    .9   1.0   1.4   1.5    .2    .3   2.3   1.7   1.6   1.5   2.8   2.8   2.8   1.8   1.6   1.6   1.8    .0    .1    .4
270.  *   1.1   1.3   1.8   1.9    .4    .4   2.6   2.0   1.9   1.7   2.2   2.6   2.3   1.5   1.5   1.5   1.9    .0    .1    .2
275.  *   1.4   1.5   2.1   2.4    .4    .6   2.8   2.1   2.2   2.0   1.7   2.0   1.9   1.2   1.5   1.5   1.9    .0    .0    .1
280.  *   1.6   1.7   2.4   2.5    .7    .8   2.9   2.2   2.0   2.0   1.0   1.4   1.3   1.2   1.4   1.5   1.9    .0    .0    .0
285.  *   1.6   1.8   2.7   2.8    .9    .9   2.8   2.2   2.0   2.0    .9   1.1   1.2   1.1   1.4   1.5   1.9    .0    .0    .0
290.  *   1.7   1.8   2.6   2.7   1.0   1.2   2.5   1.9   1.6   2.0    .6   1.0    .8   1.1   1.3   1.5   1.9    .0    .0    .0
295.  *   1.6   1.8   2.7   2.6   1.1   1.2   2.3   2.0   1.8   2.0    .4    .6    .9   1.1   1.4   1.5   1.9    .0    .0    .0
300.  *   1.5   1.9   2.8   2.5   1.2   1.4   2.1   1.8   1.9   2.0    .3    .6    .8   1.1   1.4   1.5   1.9    .0    .0    .0
305.  *   1.4   1.9   2.8   2.4   1.3   1.3   1.8   1.8   1.8   1.9    .3    .5    .8   1.1   1.4   1.5   1.9    .0    .0    .0
310.  *   1.3   1.9   2.6   2.1   1.3   1.4   1.6   1.6   2.0   2.0    .3    .5    .8   1.2   1.4   1.5   1.9    .0    .0    .0
315.  *   1.3   1.9   2.6   2.1   1.4   1.4   1.6   1.6   2.1   2.1    .3    .5    .7   1.2   1.3   1.5   2.0    .0    .0    .0
320.  *   1.3   2.0   2.6   1.9   1.3   1.2   1.5   1.7   2.0   2.0    .3    .5    .7   1.2   1.5   1.6   2.0    .0    .0    .0
325.  *   1.2   1.9   2.4   1.6   1.2   1.2   1.3   1.7   2.2   2.0    .3    .5    .7   1.2   1.5   1.7   2.1    .0    .0    .0
330.  *   1.2   1.9   2.5   1.6   1.2   1.2   1.5   1.8   2.1   2.0    .3    .6    .7   1.3   1.5   1.7   2.1    .0    .0    .0
335.  *   1.2   2.1   2.5   1.5   1.1   1.2   1.6   1.9   2.0   2.0    .4    .6    .6   1.4   1.6   1.8   2.2    .0    .0    .0
340.  *   1.2   2.1   2.4   1.5   1.1   1.4   1.9   2.1   2.2   2.0    .4    .6    .7   1.4   1.8   1.8   2.4    .0    .0    .0
345.  *   1.2   2.2   2.5   1.6   1.2   1.4   2.0   2.4   2.2   2.0    .4    .6    .7   1.5   1.9   1.9   2.4    .1    .1    .1
350.  *   1.2   2.3   2.6   1.8   1.3   1.5   2.3   2.3   2.2   2.1    .4    .5    .9   1.5   1.9   1.9   2.5    .2    .4    .3
355.  *   1.4   2.4   2.7   2.1   1.5   1.9   2.4   2.5   2.2   2.0    .3    .5    .9   1.6   2.0   2.0   2.6    .5    .7    .6
360.  *   1.3   2.5   2.7   2.3   1.7   1.8   2.5   2.4   2.2   2.0    .3    .5    .6   1.5   1.8   1.9   2.6    .9   1.2   1.2
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   2.8   3.4   3.5   2.8   1.9   1.9   2.9   2.5   2.2   2.3   3.5   3.6   3.5   2.4   2.4   2.3   2.8   3.1   3.3   3.3
DEGR. *   70    35    20    10    10    10   280   355     0    75   250   100    95   250   235   235   210   170    30    25

1
                                                                                                                      PAGE  5
      JOB: Site 1 Opt 3 2030 AM 1B3AM30.DAT                    RUN: Site 1 Opt 3 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *    .6    .1    .1    .0
```

```
   5.  *   1.1    .3    .1    .1
  10.  *   1.6    .5    .3    .1
  15.  *   2.1    .7    .4    .2
  20.  *   2.3    .9    .6    .4
  25.  *   2.5   1.0    .7    .5
  30.  *   2.2   1.0    .8    .5
  35.  *   2.1    .9    .7    .5
  40.  *   1.9    .9    .7    .5
  45.  *   1.9    .9    .7    .6
  50.  *   1.8    .8    .6    .6
  55.  *   1.5    .9    .7    .6
  60.  *   1.4    .9    .8    .7
  65.  *   1.3   1.1   1.0    .7
  70.  *   1.3   1.3   1.2   1.1
  75.  *   1.6   1.6   1.4   1.3
  80.  *   1.8   2.3   2.0   1.9
  85.  *   2.0   2.8   2.7   2.7
  90.  *   2.4   2.9   2.9   3.1
  95.  *   2.5   3.1   3.2   3.2
 100.  *   2.5   2.8   2.8   3.1
 105.  *   2.2   2.7   2.9   3.0
 110.  *   2.1   2.4   2.7   3.2
 115.  *   1.9   2.3   2.9   2.7
 120.  *   1.7   2.5   2.8   2.4
 125.  *   1.6   2.3   2.8   2.4
 130.  *   1.6   2.4   2.7   2.2
 135.  *   1.6   2.5   2.6   1.9
 140.  *   1.5   2.6   2.5   1.8
 145.  *   1.6   2.4   2.5   1.7
 150.  *   1.6   2.5   2.4   1.7
 155.  *   1.5   2.5   2.3   1.5
 160.  *   1.5   2.5   2.2   1.5
 165.  *   1.4   2.5   2.2   1.6
 170.  *   1.5   2.4   2.2   1.6
 175.  *   1.6   2.4   2.2   1.6
 180.  *   1.5   2.4   2.2   1.6
 185.  *   1.5   2.4   2.1   1.6
 190.  *   1.6   2.3   2.0   1.5
 195.  *   1.7   2.3   2.0   1.5
 200.  *   1.7   2.3   2.0   1.5
 205.  *   1.8   2.4   2.1   1.6
1
                                                                                                                         PAGE  6
      JOB: Site 1 Opt 3 2030 AM 1B3AM30.DAT                      RUN: Site 1 Opt 3 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   2.0   2.4   2.0   1.6
 215.  *   2.0   2.4   2.1   1.7
 220.  *   2.2   2.4   2.0   1.8
 225.  *   2.2   2.4   2.1   1.9
 230.  *   2.3   2.4   2.2   1.9
 235.  *   2.2   2.5   2.1   2.1
 240.  *   2.1   2.6   2.2   2.2
 245.  *   2.2   2.5   2.4   2.3
 250.  *   2.0   2.6   2.3   2.2
 255.  *   1.7   2.6   2.4   2.3
 260.  *   1.5   2.4   2.3   2.2
 265.  *   1.2   2.0   1.9   2.0
 270.  *    .8   1.6   1.6   1.6
 275.  *    .4   1.2   1.2   1.2
 280.  *    .2    .8    .8    .8
 285.  *    .1    .5    .5    .6
 290.  *    .1    .4    .4    .4
 295.  *    .0    .2    .3    .3
 300.  *    .0    .2    .2    .2
 305.  *    .0    .2    .2    .2
 310.  *    .0    .1    .1    .2
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .1    .1    .1
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .1    .0    .0    .0
 355.  *    .3    .1    .0    .0
 360.  *    .6    .1    .1    .0
 ------*------------------------
 MAX   *   2.5   3.1   3.2   3.2
 DEGR. *   25    95    95    95

 THE HIGHEST CONCENTRATION IS    3.60 PPM AT  100 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS    3.50 PPM AT   20 DEGREES FROM REC3 .
 THE 3RD HIGHEST CONCENTRATION IS    3.50 PPM AT  250 DEGREES FROM REC11.
```

```
Site 1 Opt 3 2014 PM 1B3PM14.DAT        60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 3 2014 PM                     27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    403211.4  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    300411.4  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       120        60       2.0 3004  102.2 1678 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.    102311.4  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       120       101       2.0 1023  102.2 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    325611.4  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    325611.4  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    325611.4  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    267411.4  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    267411.4  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    266911.4  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       120        76       2.0 2669  102.2 1660 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      1011.4  0.  32   30.
```

```
  1
SB        Rt1 left  AG  1240.  1217.  1058.  1208.      1011.4  0.  32   30.
  2
SB        Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       120       115       2.0   10  102.2 1752 1 3
  1
SB        Rt1 departAG  1056.  1231.   921.  1221.    310411.4  0.  56   30.
  1
SB        Rt1 departAG   921.  1221.    58.  1172.    310411.4  0.  56   30.
  1
EB        Rt28 aprchAG  1226.  2185.  1087.  1547.     82911.4  0.  32   30.
  1
EB        Rt28 aprchAG  1088.  1547.  1072.  1425.     82911.4  0.  56   30.
  1
EB        Rt28 aprchAG  1072.  1425.  1025.  1202.     82911.4  0.  56   30.
  2
EB        Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       120        94       2.0  829  102.2 1523 1 3
  1
EB        Rt28 deparAG  1039.  1194.  1043.  1015.      3011.4  0.  32   30.
  1
WB        Rt28 aprchAG  1052.  1015.  1049.  1190.     16011.4  0.  44   30.
  2
WB        Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       120       104       2.0  160  102.2 1706 1 3
  1
WB        Rt28 deparAG  1069.  1197.  1121.  1424.    130511.4  0.  44   30.
  1
WB        Rt28 deparAG  1121.  1424.  1126.  1570.    130511.4  0.  32   30.
  1
WB        Rt28 deparAG  1126.  1570.  1257.  2180.    130511.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                 PAGE  1

      JOB: Site 1 Opt 3 2014 PM 1B3PM14.DAT                    RUN: Site 1 Opt 3 2014 PM
      DATE: 05/10/2009   TIME: 18:35:23.47


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH     EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)        (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. NB        Rt1 aprch *    58.0    1109.0     581.0    1136.0 *    524.    87. AG  4032.  11.4    .0 56.0
       2. NB        Rt1 thru  *   582.0    1136.0    1083.0    1166.0 *    502.    87. AG  3004.  11.4    .0 56.0
       3. NB        Rt1 thru  *   984.0    1160.0   -1659.7    1007.3 *   2648.   267. AG   411. 100.0    .0 36.0 1.28 134.5
       4. NB        Rt1 left  *   572.0    1167.0    1065.0    1195.0 *    494.    87. AG  1023.  11.4    .0 44.0
       5. NB        Rt1 left  *   983.0    1190.0   -2407.9    1002.1 *   3396.   267. AG   461. 100.0    .0 24.0 2.41 172.5
       6. NB        Rt1 depart*  1085.0    1167.0    1470.0    1188.0 *    386.    87. AG  3256.  11.4    .0 56.0
       7. NB        Rt1 depart*  1470.0    1188.0    1784.0    1227.0 *    316.    83. AG  3256.  11.4    .0 44.0
       8. NB        Rt1 depart*  1784.0    1227.0    2072.0    1272.0 *    291.    81. AG  3256.  11.4    .0 44.0
       9. SB        Rt1 aprch *  2069.0    1311.0    1694.0    1264.0 *    378.   263. AG  2674.  11.4    .0 44.0
      10. SB        Rt1 aprch *  1694.0    1264.0    1395.0    1248.0 *    299.   267. AG  2674.  11.4    .0 44.0
      11. SB        Rt1 th+rt *  1395.0    1248.0    1057.0    1231.0 *    338.   267. AG  2669.  11.4    .0 56.0
      12. SB        Rt1th+rt  *  1144.0    1236.0    4999.6    1425.6 *   3860.    87. AG   521. 100.0    .0 36.0 1.61 196.1
      13. SB        Rt1 left  *  1378.0    1236.0    1241.0    1217.0 *    138.   262. AG    10.  11.4    .0 32.0
      14. SB        Rt1 left  *  1240.0    1217.0    1058.0    1208.0 *    182.   267. AG    10.  11.4    .0 32.0
      15. SB        Rt1 left  *  1147.0    1212.0    1157.4    1212.5 *     10.    87. AG   263. 100.0    .0 12.0  .71    .5
      16. SB        Rt1 depart*  1056.0    1231.0     921.0    1221.0 *    135.   266. AG  3104.  11.4    .0 56.0
      17. SB        Rt1 depart*   921.0    1221.0      58.0    1172.0 *    864.   267. AG  3104.  11.4    .0 56.0
      18. EB        Rt28 aprch*  1226.0    2185.0    1087.0    1547.0 *    653.   192. AG   829.  11.4    .0 32.0
      19. EB        Rt28 aprch*  1088.0    1547.0    1072.0    1425.0 *    123.   187. AG   829.  11.4    .0 56.0
      20. EB        Rt28 aprch*  1072.0    1425.0    1025.0    1202.0 *    228.   192. AG   829.  11.4    .0 56.0
      21. EB        Rt28 aprch*  1043.0    1287.0    1086.4    1499.0 *    216.    12. AG   644. 100.0    .0 36.0  .99  11.0
      22. EB        Rt28 depar*  1039.0    1194.0    1043.0    1015.0 *    179.   179. AG    30.  11.4    .0 32.0
      23. WB        Rt28 aprch*  1052.0    1015.0    1049.0    1190.0 *    175.   359. AG   160.  11.4    .0 44.0
      24. WB        Rt28 aprch*  1050.0    1141.0    1050.4    1095.5 *     45.   180. AG   475. 100.0    .0 24.0  .47   2.3
      25. WB        Rt28 depar*  1069.0    1197.0    1121.0    1424.0 *    233.    13. AG  1305.  11.4    .0 44.0
      26. WB        Rt28 depar*  1121.0    1424.0    1126.0    1570.0 *    146.     2. AG  1305.  11.4    .0 32.0
      27. WB        Rt28 depar*  1126.0    1570.0    1257.0    2180.0 *    624.    12. AG  1305.  11.4    .0 32.0
1
                                                                                                             PAGE  2
      JOB: Site 1 Opt 3 2014 PM 1B3PM14.DAT                    RUN: Site 1 Opt 3 2014 PM
      DATE: 05/10/2009   TIME: 18:35:23.47

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE      RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*---------------------------------------------------------------------------------
       3. NB        Rt1 thru  *     120      60       2.0       3004       1678     102.20      1         3
       5. NB        Rt1 left  *     120     101       2.0       1023       1700     102.20      1         3
      12. SB        Rt1th+rt  *     120      76       2.0       2669       1660     102.20      1         3
      15. SB        Rt1 left  *     120     115       2.0         10       1752     102.20      1         3
      21. EB        Rt28 aprch*     120      94       2.0        829       1523     102.20      1         3
      24. WB        Rt28 aprch*     120     104       2.0        160       1706     102.20      1         3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X          Y          Z         *
     -------------------------*--------------------------------------*
      1. SE MID S             *       743.0     1116.0        5.0    *
      2. SE 164 S             *       857.0     1123.0        5.0    *
      3. SE 82 S              *       939.0     1128.0        5.0    *
      4. SE CNR               *      1020.0     1134.0        5.0    *
      5. SE 82 E              *      1022.0     1053.0        5.0    *
      6. NE 82 E              *      1075.0     1056.0        5.0    *
      7. NE CNR               *      1076.0     1137.0        5.0    *
      8. NE 82 N              *      1156.0     1142.0        5.0    *
      9. NE 164 N             *      1238.0     1146.0        5.0    *
     10. NE MID N             *      1341.0     1153.0        5.0    *
     11. NW MID N             *      1453.0     1280.0        5.0    *
     12. NW 164 N             *      1316.0     1272.0        5.0    *
     13. NW 82 N              *      1234.0     1269.0        5.0    *
     14. NW CNR               *      1138.0     1288.0        5.0    *
     15. NW 82 W              *      1137.0     1385.0        5.0    *
     16. NW 164 W             *      1145.0     1466.0        5.0    *
     17. NW MID W             *      1156.0     1626.0        5.0    *
     18. SW MID W             *      1072.0     1597.0        5.0    *
     19. SW 164 W             *      1043.0     1434.0        5.0    *
     20. SW 82 W              *      1026.0     1354.0        5.0    *
     21. SW CNR               *       995.0     1273.0        5.0    *
     22. SW 82 S              *       900.0     1248.0        5.0    *
     23. SW 164 S             *       819.0     1243.0        5.0    *
     24. SW MID S             *       692.0     1235.0        5.0    *
1
                                                                                                             PAGE  3
      JOB: Site 1 Opt 3 2014 PM 1B3PM14.DAT                    RUN: Site 1 Opt 3 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

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 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   3.8   3.7   3.8   2.6   2.0   2.1   3.0   2.9   2.5   2.4    .0    .1    .2    .7    .9    .8   1.1    .2    .4    .7
   5.  *   3.8   3.7   4.0   3.0   1.9   1.9   2.8   2.7   2.5   2.4    .0    .0    .1    .5    .8    .6   1.0    .3    .6   1.0
  10.  *   3.7   3.6   4.1   2.9   2.2   1.7   2.5   2.4   2.3   2.3    .0    .0    .0    .5    .7    .6    .9    .4   1.0   1.2
  15.  *   3.7   3.8   4.2   3.1   2.3   1.5   2.4   2.2   2.3   2.3    .0    .0    .0    .3    .6    .4    .7    .5   1.3   1.7
  20.  *   3.7   4.0   4.3   2.8   2.3   1.2   2.2   2.3   2.3   2.3    .0    .0    .0    .1    .3    .2    .6    .7   1.6   2.2
  25.  *   3.8   4.1   4.3   2.6   1.9   1.3   2.1   2.4   2.3   2.4    .0    .1    .1    .0    .3    .1    .4    .7   1.8   2.4
  30.  *   4.0   4.1   4.3   2.6   1.8   1.1   2.1   2.4   2.4   2.4    .0    .1    .1    .0    .1    .0    .2    .7   2.0   2.7
  35.  *   4.2   4.8   4.1   2.3   1.8   1.2   2.2   2.5   2.5   2.6    .0    .1    .1    .0    .0    .0    .2    .7   2.2   2.8
  40.  *   4.4   4.6   3.9   2.5   1.6   1.3   2.3   2.6   2.7   2.6    .0    .1    .1    .0    .0    .0    .1    .7   2.3   2.8
  45.  *   4.6   4.8   3.9   2.7   1.7   1.4   2.5   2.7   2.7   2.7    .0    .1    .1    .0    .0    .0    .1    .7   2.4   2.8
  50.  *   4.9   4.8   3.9   2.7   1.7   1.5   2.7   2.9   2.9   2.8    .0    .1    .1    .0    .0    .0    .1    .6   2.4   2.7
  55.  *   5.2   4.9   3.7   3.1   1.7   1.6   2.9   3.0   3.0   3.0    .1    .2    .1    .0    .0    .0    .0    .6   2.4   2.7
  60.  *   5.3   4.5   3.7   3.2   1.7   1.5   3.0   3.1   3.2   3.2    .2    .3    .3    .0    .0    .0    .0    .6   2.4   2.6
  65.  *   5.1   4.9   3.6   3.6   1.8   1.5   3.2   3.3   3.3   3.3    .3    .6    .4    .1    .0    .0    .0    .6   2.4   2.5
  70.  *   5.2   4.8   3.9   3.9   1.6   1.6   3.5   3.5   3.4   3.6    .8   1.1    .9    .2    .0    .0    .0    .6   2.4   2.5
  75.  *   5.0   4.4   3.7   3.9   1.5   1.4   3.5   3.5   3.4   3.4   1.3   1.7   1.5    .6    .1    .0    .0    .6   2.4   2.4
  80.  *   4.6   4.2   3.6   3.9   1.3   1.2   3.3   3.2   3.0   3.1   2.2   2.4   2.4   1.1    .2    .1    .0    .7   2.3   2.6
  85.  *   3.8   3.6   3.2   3.7   1.1    .9   2.8   2.8   2.8   2.7   3.0   3.4   3.2   1.7    .5    .2    .1    .7   2.6   3.0
  90.  *   2.9   2.5   2.6   3.3    .6    .5   2.2   2.3   2.1   2.2   3.7   4.0   3.8   2.3    .8    .5    .2    .8   2.8   3.4
  95.  *   2.1   1.8   1.8   2.3    .3    .2   1.3   1.6   1.5   1.6   4.2   4.4   4.4   2.6   1.1    .7    .3    .8   3.2   3.7
 100.  *   1.0   1.2   1.1   2.1    .2    .1    .9    .9    .8    .9   4.4   4.6   4.5   2.9   1.2    .9    .3   1.0   3.3   3.8
 105.  *    .7    .7    .7   1.7    .1    .0    .5    .5    .6    .6   4.2   4.7   4.7   3.1   1.4    .9    .4   1.2   3.5   3.9
 110.  *    .4    .3    .5   1.5    .1    .0    .2    .3    .3    .4   4.1   4.4   4.2   2.9   1.5    .9    .5   1.4   3.5   3.7
 115.  *    .2    .2    .3   1.5    .1    .0    .1    .2    .2    .2   4.1   4.1   4.1   2.8   1.3   1.0    .6   1.2   3.2   4.0
 120.  *    .1    .1    .2   1.3    .0    .0    .1    .2    .2    .2   3.7   4.0   3.9   2.7   1.2   1.1    .7   1.3   3.4   3.8
 125.  *    .1    .1    .2   1.2    .0    .0    .0    .1    .1    .2   3.5   3.9   3.8   2.5   1.3    .9    .7   1.1   3.4   3.6
 130.  *    .1    .1    .1   1.2    .0    .0    .0    .1    .1    .1   3.5   3.6   3.5   2.5   1.4    .8    .5   1.3   3.4   3.5
 135.  *    .1    .1    .1   1.1    .0    .0    .0    .1    .1    .1   3.3   3.4   3.4   2.4   1.2   1.0    .5   1.2   3.5   3.5
 140.  *    .1    .1    .1   1.0    .0    .0    .0    .1    .1    .1   3.1   3.3   3.2   2.3   1.1   1.0    .7   1.5   3.7   3.3
 145.  *    .1    .1    .1    .9    .0    .0    .0    .1    .1    .1   3.1   3.2   3.2   2.2   1.1    .8    .7   1.4   3.7   3.3
 150.  *    .1    .1    .1    .7    .0    .0    .0    .1    .1    .1   3.0   3.1   3.0   2.2   1.1    .8    .7   1.6   3.5   3.2
 155.  *    .0    .0    .0    .5    .0    .0    .0    .0    .0    .1   2.9   3.0   3.0   2.1   1.1    .9    .6   1.6   3.5   3.1
 160.  *    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0   3.0   3.0   3.0   2.0   1.1    .8    .7   1.8   3.3   3.0
 165.  *    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0   2.9   3.0   3.0   1.9   1.1    .8    .7   1.9   3.5   2.9
 170.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   3.0   3.1   3.1   1.8   1.1    .9    .9   1.8   3.4   2.7
 175.  *    .0    .0    .0    .1    .0    .0    .1    .0    .0    .0   3.0   3.2   3.1   1.7   1.1    .9   1.0   2.1   3.1   2.4
 180.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.9   3.2   3.1   1.6   1.0    .9   1.1   2.1   3.1   2.4
 185.  *    .0    .0    .0    .0    .0    .0    .3    .0    .0    .0   3.0   3.1   3.1   1.5   1.1   1.2   1.2   2.0   2.6   2.0
 190.  *    .0    .0    .0    .0    .0    .0    .4    .0    .0    .0   3.0   3.0   3.0   1.5   1.2   1.5   1.9   1.8   2.1   2.0
 195.  *    .0    .0    .0    .0    .0    .0    .5    .0    .0    .0   3.0   3.0   3.0   1.5   1.3   1.7   2.2   1.5   1.8   1.6
 200.  *    .0    .0    .0    .1    .0    .0    .7    .1    .0    .1   3.0   3.0   3.0   1.5   1.7   1.9   2.2   1.4   1.8   1.5
 205.  *    .1    .1    .1    .1    .0    .0    .9    .1    .1    .1   3.0   3.2   3.0   1.3   2.0   2.2   2.4   1.3   1.5   1.7
1
                                                                                                                         PAGE  4
      JOB: Site 1 Opt 3 2014 PM 1B3PM14.DAT                     RUN: Site 1 Opt 3 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .1    .0    .0   1.0    .1    .1    .1   3.2   3.2   3.2   1.7   2.2   2.7   2.5   1.1   1.6   1.5
 215.  *    .1    .1    .1    .1    .0    .1   1.1    .1    .1    .1   3.2   3.3   3.4   1.7   2.2   2.9   2.4   1.0   1.5   1.7
 220.  *    .1    .1    .1    .1    .0    .1   1.2    .1    .1    .1   3.4   3.4   3.4   2.1   2.6   2.9   2.3    .9   1.4   1.7
 225.  *    .1    .1    .1    .1    .0    .1   1.3    .1    .1    .1   3.5   3.6   3.5   2.2   2.9   3.4   1.9    .8   1.4   1.7
 230.  *    .1    .1    .1    .1    .0    .1   1.4    .2    .1    .2   3.6   3.8   3.6   2.5   3.0   3.3   1.9    .8   1.3   1.8
 235.  *    .1    .2    .2    .2    .0    .1   1.5    .2    .2    .2   3.8   4.1   4.0   2.8   3.5   3.4   1.7   1.0   1.5   1.9
 240.  *    .3    .3    .3    .3    .0    .1   1.6    .5    .2    .3   4.2   4.2   4.3   3.1   3.5   3.2   1.6    .9   1.5   2.0
 245.  *    .5    .7    .6    .7    .0    .1   1.9    .7    .6    .5   4.3   4.9   4.5   3.5   3.6   3.2   1.6    .8   1.3   1.9
 250.  *    .9   1.0   1.0   1.1    .0    .1   2.3   1.3   1.0    .8   4.8   5.0   4.6   3.7   3.5   3.1   1.4    .7   1.2   1.9
 255.  *   1.8   1.8   1.8   1.9    .3    .4   2.9   2.0   1.6   1.6   4.9   5.0   4.8   3.8   3.2   2.8   1.3    .6   1.1   1.6
 260.  *   2.7   2.7   3.0   3.0    .5    .7   3.9   3.0   2.5   2.3   4.7   5.0   4.7   3.4   2.9   2.5   1.0    .3    .9   1.4
 265.  *   3.7   3.9   3.9   4.0   1.1   1.2   4.6   3.5   3.3   3.2   4.2   4.5   4.2   3.2   2.5   2.4    .9    .2    .6   1.0
 270.  *   4.5   4.7   4.7   4.8   1.6   1.7   5.2   4.3   3.6   3.6   3.5   3.7   3.5   2.6   2.2   2.0    .8    .1    .4    .7
 275.  *   5.2   5.2   5.3   5.1   1.9   2.1   5.5   4.3   3.9   3.7   2.6   2.7   2.7   1.9   2.0   1.9    .7    .0    .1    .3
 280.  *   5.4   5.5   5.5   5.4   2.3   2.4   5.5   4.1   3.7   3.8   1.4   1.9   1.8   1.5   1.7   1.7    .7    .0    .0    .1
 285.  *   5.3   5.3   5.5   5.2   2.4   2.5   5.0   3.9   3.5   3.7   1.0   1.3   1.4   1.3   1.6   1.6    .7    .0    .0    .0
 290.  *   5.0   5.2   5.3   4.9   2.4   2.4   4.5   3.4   3.2   3.2    .5   1.0   1.0   1.2   1.6   1.5    .7    .0    .0    .0
 295.  *   4.8   5.0   5.0   4.3   2.2   2.4   3.9   3.1   2.9   3.4    .4    .8   1.0   1.3   1.7   1.4    .7    .0    .0    .0
 300.  *   4.6   4.7   4.7   4.0   2.1   2.3   3.5   2.7   2.9   3.1    .2    .7    .9   1.2   1.7   1.3    .7    .0    .0    .0
 305.  *   4.5   4.5   4.5   3.8   2.1   2.3   2.9   2.5   2.6   3.1    .1    .5    .8   1.3   1.7   1.1    .7    .0    .0    .0
 310.  *   4.2   4.4   4.4   3.4   2.1   2.1   2.7   2.4   2.7   3.0    .1    .6    .8   1.4   1.8   1.0    .7    .0    .0    .0
 315.  *   4.1   4.1   4.2   3.1   2.0   2.0   2.5   2.4   2.7   2.9    .0    .4    .7   1.4   1.6    .9    .7    .0    .0    .0
 320.  *   3.9   4.0   3.9   2.8   1.9   2.0   2.2   2.5   2.8   2.8    .1    .4    .7   1.4   1.5    .9    .8    .0    .0    .0
 325.  *   3.9   3.9   3.8   2.5   1.7   2.0   2.2   2.3   2.9   2.6    .1    .3    .6   1.4   1.6    .9    .8    .0    .0    .0
 330.  *   3.7   3.7   3.8   2.4   1.8   2.1   2.3   2.5   2.7   2.5    .1    .4    .6   1.5   1.5    .9    .8    .0    .0    .0
 335.  *   3.7   3.7   3.6   2.0   1.5   2.0   2.2   2.5   2.7   2.5    .1    .2    .4   1.5   1.5    .9    .9    .0    .0    .0
 340.  *   3.7   3.7   3.7   2.2   1.6   2.2   2.5   2.6   2.7   2.4    .1    .2    .4   1.3   1.3    .8    .9    .0    .0    .0
 345.  *   3.7   3.7   3.6   2.2   1.5   2.2   2.6   2.6   2.7   2.4    .1    .2    .4   1.2   1.4    .9   1.0    .0    .1    .0
 350.  *   3.8   3.8   3.8   2.3   1.5   2.1   2.8   2.9   2.7   2.5    .0    .1    .2   1.2   1.3    .9   1.0    .0    .1    .1
 355.  *   3.8   3.8   3.8   2.5   1.8   2.1   2.8   2.9   2.6   2.5    .0    .1    .2    .9   1.3    .9   1.1    .1    .3    .3
 360.  *   3.8   3.7   3.8   2.6   2.0   2.1   3.0   2.9   2.5   2.4    .0    .1    .2    .7    .9    .8   1.1    .2    .4    .7
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   5.4   5.5   5.5   5.4   2.4   2.5   5.5   4.3   3.9   3.8   4.9   5.0   4.8   3.8   3.6   3.4   2.5   2.1   3.7   4.0
 DEGR. *  280   280   280   280   285   285   275   270   275   280   255   250   255   255   245   225   210   175   140   115

1
                                                                                                                         PAGE  5
      JOB: Site 1 Opt 3 2014 PM 1B3PM14.DAT                     RUN: Site 1 Opt 3 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
   0.  *    .2    .0    .0    .0
```

```
  5.  *    .6    .0    .0    .0
 10.  *    .9    .0    .0    .0
 15.  *   1.3    .3    .0    .0
 20.  *   1.7    .3    .1    .1
 25.  *   2.0    .4    .3    .1
 30.  *   2.1    .5    .4    .1
 35.  *   2.1    .6    .4    .2
 40.  *   2.0    .8    .4    .2
 45.  *   2.1    .9    .5    .4
 50.  *   1.9    .9    .4    .3
 55.  *   1.8    .9    .6    .4
 60.  *   1.6    .9    .8    .5
 65.  *   1.6   1.1   1.1    .8
 70.  *   1.6   1.3   1.3   1.2
 75.  *   1.8   1.8   1.8   1.6
 80.  *   2.4   2.6   2.3   2.3
 85.  *   2.6   3.2   3.3   3.1
 90.  *   3.0   3.5   3.5   3.7
 95.  *   3.2   3.7   3.8   4.1
100.  *   3.2   3.5   3.7   4.0
105.  *   2.9   3.3   3.7   4.0
110.  *   2.6   3.1   3.4   4.1
115.  *   2.4   3.0   3.7   4.0
120.  *   2.2   2.8   3.5   3.8
125.  *   2.1   2.9   3.6   3.7
130.  *   2.1   3.0   3.6   3.6
135.  *   1.8   3.1   3.3   3.5
140.  *   2.1   3.0   3.2   3.4
145.  *   1.9   3.1   3.1   3.3
150.  *   1.9   3.2   3.1   3.1
155.  *   1.9   3.0   3.1   3.1
160.  *   1.9   3.0   3.1   3.2
165.  *   1.9   3.1   3.2   3.2
170.  *   2.0   3.2   3.1   3.2
175.  *   2.0   3.2   3.2   3.2
180.  *   2.2   3.2   3.2   3.2
185.  *   2.1   3.1   3.1   3.1
190.  *   2.2   3.2   3.1   3.1
195.  *   2.2   3.0   3.0   3.1
200.  *   2.5   3.1   3.1   3.1
205.  *   2.6   3.2   3.1   3.2
1
                                                                                                                         PAGE  6
      JOB: Site 1 Opt 3 2014 PM 1B3PM14.DAT                    RUN: Site 1 Opt 3 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   2.8   3.2   3.2   3.4
 215.  *   2.8   3.4   3.3   3.5
 220.  *   2.8   3.5   3.5   3.5
 225.  *   3.1   3.7   3.7   3.7
 230.  *   3.1   3.9   3.7   4.0
 235.  *   3.3   4.1   4.0   4.1
 240.  *   3.4   4.2   4.2   4.2
 245.  *   3.4   4.3   4.3   4.3
 250.  *   3.6   4.5   4.5   4.6
 255.  *   3.4   4.5   4.5   4.4
 260.  *   3.1   4.1   4.1   4.0
 265.  *   2.4   3.6   3.6   3.5
 270.  *   1.8   2.8   2.6   2.6
 275.  *   1.0   1.8   1.8   1.8
 280.  *    .5   1.2   1.2   1.2
 285.  *    .2    .6    .6    .6
 290.  *    .1    .3    .4    .4
 295.  *    .0    .2    .2    .3
 300.  *    .0    .2    .2    .2
 305.  *    .0    .1    .2    .2
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .0    .1    .1
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .0    .0    .0    .0
 355.  *    .1    .0    .0    .0
 360.  *    .2    .0    .0    .0
 ------*------------------------
 MAX   *   3.6   4.5   4.5   4.6
 DEGR. *  250   250   250   250

 THE HIGHEST CONCENTRATION IS    5.50 PPM AT  280 DEGREES FROM REC2 .
 THE 2ND HIGHEST CONCENTRATION IS    5.50 PPM AT  280 DEGREES FROM REC3 .
 THE 3RD HIGHEST CONCENTRATION IS    5.50 PPM AT  275 DEGREES FROM REC7 .
```

```
Site 1 Opt 3 2030 PM 1B3PM30.DAT        60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 3 2030 PM                     27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    3860 9.2  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    2840 9.2  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       120        46       2.0 2840   84.1 1678 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.    1015 9.2  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       120        92       2.0 1015   84.1 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    3080 9.2  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    3080 9.2  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    3080 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    2575 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    2575 9.2  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    2570 9.2  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       120        70       2.0 2570   84.1 1659 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      10 9.2  0.  32   30.
```

```
  1
SB        Rt1 left  AG  1240.  1217.  1058.  1208.      10 9.2  0.  32   30.
  2
SB        Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       120       115       2.0   10   84.1 1752 1 3
  1
SB        Rt1 departAG  1056.  1231.   921.  1221.    2985 9.2  0.  56   30.
  1
SB        Rt1 departAG   921.  1221.    58.  1172.    2985 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1226.  2185.  1087.  1547.     795 9.2  0.  32   30.
  1
EB        Rt28 aprchAG  1088.  1547.  1072.  1425.     795 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1072.  1425.  1025.  1202.     795 9.2  0.  56   30.
  2
EB        Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       120       105       2.0  795   84.1 1523 1 3
  1
EB        Rt28 deparAG  1039.  1194.  1043.  1015.      30 9.2  0.  32   30.
  1
WB        Rt28 aprchAG  1052.  1015.  1049.  1190.     160 9.2  0.  44   30.
  2
WB        Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       120       109       2.0  160   84.1 1706 1 3
  1
WB        Rt28 deparAG  1069.  1197.  1121.  1424.    1295 9.2  0.  44   30.
  1
WB        Rt28 deparAG  1121.  1424.  1126.  1570.    1295 9.2  0.  32   30.
  1
WB        Rt28 deparAG  1126.  1570.  1257.  2180.    1295 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 1 Opt 3 2030 PM 1B3PM30.DAT                     RUN: Site 1 Opt 3 2030 PM
      DATE: 05/10/2009   TIME: 18:54:59.64


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)             (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-----------------------------------------------------------
       1. NB        Rt1 aprch *     58.0    1109.0     581.0    1136.0 *     524.    87. AG   3860.   9.2    .0 56.0
       2. NB        Rt1 thru  *    582.0    1136.0    1083.0    1166.0 *     502.    87. AG   2840.   9.2    .0 56.0
       3. NB        Rt1 thru  *    984.0    1160.0     648.0    1140.6 *     337.   267. AG    259. 100.0    .0 36.0  .97  17.1
       4. NB        Rt1 left  *    572.0    1167.0    1065.0    1195.0 *     494.    87. AG   1015.   9.2    .0 44.0
       5. NB        Rt1 left  *    983.0    1190.0   -1046.4    1077.6 *    2032.   267. AG    346. 100.0    .0 24.0 1.49 103.2
       6. NB        Rt1 depart*   1085.0    1167.0    1470.0    1188.0 *     386.    87. AG   3080.   9.2    .0 56.0
       7. NB        Rt1 depart*   1470.0    1188.0    1784.0    1227.0 *     316.    83. AG   3080.   9.2    .0 44.0
       8. NB        Rt1 depart*   1784.0    1227.0    2072.0    1272.0 *     291.    81. AG   3080.   9.2    .0 44.0
       9. SB        Rt1 aprch *   2069.0    1311.0    1694.0    1264.0 *     378.   263. AG   2575.   9.2    .0 44.0
      10. SB        Rt1 aprch *   1694.0    1264.0    1395.0    1248.0 *     299.   267. AG   2575.   9.2    .0 44.0
      11. SB        Rt1 th+rt *   1395.0    1248.0    1057.0    1231.0 *     338.   267. AG   2570.   9.2    .0 56.0
      12. SB        Rt1th+rt  *   1144.0    1236.0    3808.8    1367.1 *    2668.    87. AG    395. 100.0    .0 36.0 1.35 135.5
      13. SB        Rt1 left  *   1378.0    1236.0    1241.0    1217.0 *     138.   262. AG     10.   9.2    .0 32.0
      14. SB        Rt1 left  *   1240.0    1217.0    1058.0    1208.0 *     182.   267. AG     10.   9.2    .0 32.0
      15. SB        Rt1 left  *   1147.0    1212.0    1157.4    1212.5 *      10.    87. AG    216. 100.0    .0 12.0  .71    .5
      16. SB        Rt1 depart*   1056.0    1231.0     921.0    1221.0 *     135.   266. AG   2985.   9.2    .0 56.0
      17. SB        Rt1 depart*    921.0    1221.0      58.0    1172.0 *     864.   267. AG   2985.   9.2    .0 56.0
      18. EB        Rt28 aprch*   1226.0    2185.0    1087.0    1547.0 *     653.   192. AG    795.   9.2    .0 32.0
      19. EB        Rt28 aprch*   1088.0    1547.0    1072.0    1425.0 *     123.   187. AG    795.   9.2    .0 56.0
      20. EB        Rt28 aprch*   1072.0    1425.0    1025.0    1202.0 *     228.   192. AG    795.   9.2    .0 56.0
      21. EB        Rt28 aprch*   1043.0    1287.0    1344.5    2758.4 *    1502.    12. AG    592. 100.0    .0 36.0 1.91  76.3
      22. EB        Rt28 depar*   1039.0    1194.0    1043.0    1015.0 *     179.   179. AG     30.   9.2    .0 32.0
      23. WB        Rt28 aprch*   1052.0    1015.0    1049.0    1190.0 *     175.   359. AG    160.   9.2    .0 44.0
      24. WB        Rt28 aprch*   1050.0    1141.0    1050.5    1080.1 *      61.   180. AG    410. 100.0    .0 24.0  .81   3.1
      25. WB        Rt28 depar*   1069.0    1197.0    1121.0    1424.0 *     233.    13. AG   1295.   9.2    .0 44.0
      26. WB        Rt28 depar*   1121.0    1424.0    1126.0    1570.0 *     146.     2. AG   1295.   9.2    .0 32.0
      27. WB        Rt28 depar*   1126.0    1570.0    1257.0    2180.0 *     624.    12. AG   1295.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 1 Opt 3 2030 PM 1B3PM30.DAT                     RUN: Site 1 Opt 3 2030 PM
      DATE: 05/10/2009   TIME: 18:54:59.64

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 thru  *     120       46       2.0      2840       1678      84.10      1        3
       5. NB        Rt1 left  *     120       92       2.0      1015       1700      84.10      1        3
      12. SB        Rt1th+rt  *     120       70       2.0      2570       1659      84.10      1        3
      15. SB        Rt1 left  *     120      115       2.0        10       1752      84.10      1        3
      21. EB        Rt28 aprch*     120      105       2.0       795       1523      84.10      1        3
      24. WB        Rt28 aprch*     120      109       2.0       160       1706      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       743.0     1116.0        5.0   *
      2. SE 164 S             *       857.0     1123.0        5.0   *
      3. SE 82 S              *       939.0     1128.0        5.0   *
      4. SE CNR               *      1020.0     1134.0        5.0   *
      5. SE 82 E              *      1022.0     1053.0        5.0   *
      6. NE 82 E              *      1075.0     1056.0        5.0   *
      7. NE CNR               *      1076.0     1137.0        5.0   *
      8. NE 82 N              *      1156.0     1142.0        5.0   *
      9. NE 164 N             *      1238.0     1146.0        5.0   *
     10. NE MID N             *      1341.0     1153.0        5.0   *
     11. NW MID N             *      1453.0     1280.0        5.0   *
     12. NW 164 N             *      1316.0     1272.0        5.0   *
     13. NW 82 N              *      1234.0     1269.0        5.0   *
     14. NW CNR               *      1138.0     1288.0        5.0   *
     15. NW 82 W              *      1137.0     1385.0        5.0   *
     16. NW 164 W             *      1145.0     1466.0        5.0   *
     17. NW MID W             *      1156.0     1626.0        5.0   *
     18. SW MID W             *      1072.0     1597.0        5.0   *
     19. SW 164 W             *      1043.0     1434.0        5.0   *
     20. SW 82 W              *      1026.0     1354.0        5.0   *
     21. SW CNR               *       995.0     1273.0        5.0   *
     22. SW 82 S              *       900.0     1248.0        5.0   *
     23. SW 164 S             *       819.0     1243.0        5.0   *
     24. SW MID S             *       692.0     1235.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 1 Opt 3 2030 PM 1B3PM30.DAT                     RUN: Site 1 Opt 3 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

```
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
   0.  *   2.7   2.8   3.0   2.6   2.0   2.1   3.0   2.6   2.3   2.1    .1    .3    .6   1.4   1.9   1.8   2.7    .8   1.1    .9
   5.  *   2.7   2.8   3.2   3.0   2.1   2.0   2.8   2.4   2.1   2.0    .1    .2    .5   1.3   1.8   1.7   2.4   1.3   1.6   1.7
  10.  *   2.7   2.9   3.3   3.0   2.2   1.6   2.5   2.3   2.0   1.8    .0    .1    .3   1.0   1.5   1.4   2.1   1.8   2.2   2.1
  15.  *   2.8   3.2   3.7   3.0   2.3   1.4   2.3   2.1   1.8   1.7    .0    .1    .2    .6    .9   1.1   1.6   2.3   2.6   2.6
  20.  *   3.0   3.5   3.7   2.7   2.4   1.2   2.0   1.9   1.8   1.8    .0    .0    .1    .3    .7    .5   1.2   2.6   3.0   3.0
  25.  *   3.1   3.6   3.7   2.2   2.0   1.0   1.8   1.9   1.8   1.8    .0    .1    .0    .1    .4    .3    .7   2.7   3.2   3.1
  30.  *   3.3   3.7   3.5   2.1   1.8   1.0   1.7   1.9   1.9   1.9    .0    .1    .1    .0    .1    .1    .4   2.9   3.1   3.0
  35.  *   3.4   3.6   3.4   2.0   1.8    .9   1.7   2.0   2.0   2.0    .0    .1    .1    .0    .0    .0    .2   2.7   3.0   2.9
  40.  *   3.4   3.7   3.0   1.8   1.6    .9   1.8   2.0   2.1   2.0    .0    .1    .1    .0    .0    .0    .1   2.7   2.8   2.7
  45.  *   3.6   3.6   3.1   1.9   1.5   1.0   1.8   2.1   2.1   2.1    .0    .1    .1    .0    .0    .0    .1   2.6   2.8   2.6
  50.  *   3.6   3.7   2.9   2.1   1.4   1.1   2.0   2.1   2.1   2.2    .0    .1    .1    .0    .0    .0    .0   2.4   2.6   2.4
  55.  *   3.6   3.7   2.8   2.1   1.4   1.1   2.2   2.2   2.3   2.2    .0    .1    .1    .0    .0    .0    .0   2.3   2.4   2.3
  60.  *   3.8   3.6   2.6   2.4   1.4   1.1   2.3   2.3   2.4   2.4    .2    .2    .2    .0    .0    .0    .0   2.1   2.3   2.3
  65.  *   3.9   3.4   2.8   2.7   1.3   1.3   2.4   2.5   2.5   2.6    .3    .4    .4    .1    .0    .0    .0   2.1   2.2   2.2
  70.  *   3.6   3.3   3.0   3.0   1.3   1.2   2.6   2.6   2.6   2.6    .6    .7    .6    .1    .0    .0    .0   2.0   2.2   2.1
  75.  *   3.7   3.3   2.7   3.0   1.3   1.0   2.5   2.6   2.6   2.5   1.1   1.2   1.1    .5    .1    .0    .0   2.0   2.1   2.2
  80.  *   3.4   3.1   2.7   3.1   1.0   1.0   2.4   2.5   2.4   2.4   1.7   1.9   1.9    .8    .1    .1    .0   2.0   2.1   2.3
  85.  *   2.9   2.6   2.3   2.8    .5    .5   2.1   2.2   2.0   2.0   2.1   2.5   2.4   1.3    .3    .1    .1   2.1   2.2   2.4
  90.  *   2.2   1.8   2.0   2.3    .4    .4   1.4   1.7   1.7   1.7   2.7   3.0   3.1   1.8    .6    .2    .1   2.1   2.4   2.9
  95.  *   1.4   1.2   1.3   1.8    .1    .1    .9   1.0    .9   1.0   3.1   3.3   3.3   2.1    .9    .4    .2   2.2   2.7   3.1
 100.  *    .9    .8    .9   1.5    .0    .0    .6    .7    .6    .6   3.3   3.7   3.5   2.4    .9    .6    .2   2.2   3.0   3.3
 105.  *    .4    .6    .6   1.3    .0    .0    .3    .3    .3    .4   3.4   3.5   3.3   2.1   1.0    .8    .2   2.5   2.9   3.2
 110.  *    .2    .3    .5   1.2    .0    .0    .2    .2    .2    .2   3.2   3.4   3.2   2.1    .9    .8    .4   2.5   2.9   3.2
 115.  *    .1    .2    .3   1.1    .0    .0    .1    .2    .2    .2   2.9   3.1   3.1   2.1    .9    .7    .4   2.6   2.9   3.2
 120.  *    .1    .1    .2   1.1    .0    .0    .1    .1    .1    .1   2.9   3.0   3.0   2.1   1.0    .5    .6   2.5   3.0   3.0
 125.  *    .1    .1    .2   1.1    .0    .0    .0    .1    .1    .1   2.8   2.7   2.8   1.9   1.1    .7    .5   2.4   3.2   3.0
 130.  *    .1    .1    .2   1.1    .0    .0    .0    .1    .1    .1   2.5   2.8   2.7   1.9   1.0    .7    .4   2.6   2.9   3.0
 135.  *    .1    .1    .1   1.0    .0    .0    .0    .1    .1    .1   2.5   2.7   2.6   1.9    .9    .7    .4   2.6   2.9   2.9
 140.  *    .1    .1    .1   1.1    .0    .0    .0    .1    .1    .1   2.4   2.5   2.4   1.8    .9    .8    .5   2.6   2.9   2.9
 145.  *    .1    .1    .1   1.0    .0    .0    .0    .1    .1    .1   2.3   2.3   2.4   1.8   1.0    .7    .6   2.7   2.9   2.8
 150.  *    .0    .0    .0    .9    .0    .0    .0    .1    .0    .1   2.4   2.3   2.3   1.7   1.0    .7    .5   2.7   3.0   2.9
 155.  *    .0    .0    .0    .6    .0    .0    .0    .0    .0    .0   2.2   2.4   2.2   1.6   1.0    .7    .4   2.9   3.0   2.7
 160.  *    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0   2.2   2.4   2.2   1.5    .8    .7    .4   2.9   3.0   2.6
 165.  *    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0   2.3   2.4   2.3   1.4    .9    .8    .5   2.9   3.1   2.4
 170.  *    .0    .0    .0    .2    .0    .0    .1    .0    .0    .0   2.2   2.5   2.2   1.4    .9    .7    .7   2.8   2.9   2.3
 175.  *    .0    .0    .0    .1    .0    .0    .1    .0    .0    .0   2.3   2.5   2.4   1.3    .8    .8    .7   2.9   2.7   2.2
 180.  *    .0    .0    .0    .1    .0    .0    .2    .0    .0    .0   2.2   2.5   2.4   1.2    .9    .8    .9   2.6   2.4   1.8
 185.  *    .0    .0    .0    .0    .0    .0    .3    .0    .0    .0   2.3   2.5   2.2   1.1   1.1    .9   1.4   2.2   2.5   1.6
 190.  *    .0    .0    .0    .0    .0    .0    .4    .0    .0    .0   2.2   2.4   2.2   1.1    .9   1.4   1.8   1.9   1.8   1.4
 195.  *    .0    .0    .0    .0    .0    .0    .6    .0    .0    .0   2.2   2.4   2.2   1.1   1.0   1.4   2.1   1.5   1.6   1.3
 200.  *    .0    .0    .0    .0    .0    .0    .8    .0    .0    .0   2.2   2.4   2.2   1.1   1.3   1.5   2.6   1.2   1.4   1.3
 205.  *    .0    .0    .0    .1    .0    .0   1.0    .1    .1    .1   2.3   2.4   2.3   1.1   1.7   1.9   2.9    .8   1.3   1.4
1
                                                                                                                 PAGE  4
      JOB: Site 1 Opt 3 2030 PM 1B3PM30.DAT                    RUN: Site 1 Opt 3 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .1    .0    .0   1.1    .1    .1    .1   2.5   2.5   2.4   1.0   1.7   2.1   2.9    .7   1.1   1.4
 215.  *    .1    .1    .1    .1    .0    .0   1.2    .1    .1    .1   2.5   2.6   2.5   1.5   1.8   2.2   2.9    .6   1.1   1.3
 220.  *    .1    .1    .1    .1    .0    .0   1.3    .2    .1    .1   2.6   2.7   2.6   1.6   2.1   2.4   3.0    .7   1.0   1.3
 225.  *    .1    .1    .1    .1    .0    .0   1.3    .2    .1    .1   2.7   2.8   2.8   1.6   2.2   2.5   3.0    .7    .8   1.3
 230.  *    .1    .1    .1    .1    .0    .0   1.3    .2    .1    .1   2.8   3.0   2.7   1.9   2.3   2.8   2.9    .6   1.1   1.2
 235.  *    .1    .1    .1    .1    .0    .0   1.2    .3    .1    .1   3.0   3.0   2.9   2.1   2.7   2.6   2.7    .5   1.0   1.3
 240.  *    .1    .2    .2    .2    .0    .0   1.3    .4    .3    .2   3.1   3.4   3.3   2.2   2.5   2.5   2.5    .5    .9   1.3
 245.  *    .3    .4    .3    .4    .0    .0   1.5    .6    .4    .3   3.3   3.6   3.5   2.6   2.6   2.5   2.3    .4    .9   1.4
 250.  *    .6    .6    .6    .8    .0    .0   1.7    .9    .7    .7   3.6   3.7   3.6   2.5   2.4   2.2   2.3    .4    .6   1.3
 255.  *   1.0   1.2   1.1   1.3    .1    .1   2.2   1.4   1.2   1.1   3.6   3.9   3.4   2.6   2.2   2.0   2.1    .2    .5   1.0
 260.  *   1.4   1.5   1.7   1.9    .2    .2   2.6   1.9   1.6   1.5   3.5   3.6   3.4   2.5   2.1   1.9   2.0    .1    .4    .7
 265.  *   2.1   2.3   2.4   2.5    .5    .7   3.2   2.5   2.2   2.1   3.0   3.1   2.9   2.0   2.0   1.7   1.9    .1    .2    .5
 270.  *   2.5   2.9   3.1   3.1    .8    .9   3.6   3.0   2.4   2.5   2.6   2.6   2.4   1.7   1.7   1.7   1.9    .0    .1    .3
 275.  *   3.0   3.3   3.4   3.5   1.1   1.2   3.9   3.0   2.7   2.6   1.6   2.0   1.8   1.5   1.6   1.6   1.9    .0    .0    .2
 280.  *   3.2   3.6   3.8   3.7   1.4   1.5   3.8   3.0   2.8   2.8   1.1   1.4   1.2   1.2   1.5   1.5   1.9    .0    .0    .0
 285.  *   3.4   3.8   3.8   3.7   1.5   1.6   3.5   2.9   2.6   2.7    .7   1.0   1.1   1.2   1.5   1.5   1.9    .0    .0    .0
 290.  *   3.3   3.5   3.7   3.5   1.6   1.7   3.1   2.3   2.5   2.5    .5    .8    .8   1.1   1.5   1.6   1.9    .0    .0    .0
 295.  *   3.3   3.5   3.5   3.2   1.6   1.8   2.7   2.4   2.2   2.6    .4    .7    .8   1.2   1.6   1.6   1.9    .0    .0    .0
 300.  *   3.3   3.4   3.4   2.9   1.5   1.8   2.5   2.2   2.3   2.4    .3    .6    .8   1.2   1.6   1.5   1.9    .0    .0    .0
 305.  *   3.1   3.2   3.2   2.7   1.5   1.8   2.2   2.1   2.1   2.4    .3    .6    .8   1.2   1.6   1.6   1.9    .0    .0    .0
 310.  *   3.0   3.2   3.2   2.5   1.5   1.9   2.1   1.8   2.3   2.4    .3    .5    .7   1.2   1.5   1.6   1.9    .0    .0    .0
 315.  *   3.0   3.0   3.0   2.4   1.4   2.0   1.8   1.8   2.2   2.4    .3    .6    .7   1.2   1.6   1.6   1.9    .0    .0    .0
 320.  *   2.9   2.9   2.9   2.1   1.4   2.0   1.7   1.8   2.3   2.4    .3    .6    .7   1.3   1.5   1.6   2.1    .0    .0    .0
 325.  *   2.8   2.8   2.8   1.9   1.4   1.9   1.6   2.0   2.3   2.3    .4    .6    .8   1.3   1.6   1.7   2.2    .0    .0    .0
 330.  *   2.7   2.7   2.9   1.8   1.3   2.0   1.8   2.0   2.4   2.2    .4    .5    .8   1.3   1.7   1.8   2.3    .0    .0    .0
 335.  *   2.7   2.7   2.7   1.7   1.2   1.9   1.8   2.2   2.3   2.2    .4    .6    .7   1.4   1.7   1.9   2.3    .0    .0    .0
 340.  *   2.6   2.6   2.6   1.7   1.3   1.9   1.9   2.3   2.3   2.3    .4    .6    .8   1.6   2.0   1.9   2.5    .0    .0    .0
 345.  *   2.6   2.6   2.7   1.8   1.2   2.1   2.2   2.5   2.3   2.3    .3    .6    .9   1.5   2.1   1.9   2.5    .1    .1    .1
 350.  *   2.6   2.6   2.8   2.0   1.4   2.2   2.4   2.4   2.4   2.3    .3    .5    .8   1.6   2.0   2.1   2.6    .2    .4    .3
 355.  *   2.7   2.7   3.0   2.2   1.7   2.1   2.6   2.6   2.4   2.2    .2    .5    .7   1.6   2.0   2.0   2.8    .5    .6    .5
 360.  *   2.7   2.8   3.0   2.6   2.0   2.1   3.0   2.6   2.3   2.1    .1    .3    .6   1.4   1.9   1.8   2.7    .8   1.1    .9
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   3.9   3.8   3.8   3.7   2.4   2.2   3.9   3.0   2.8   2.8   3.6   3.9   3.6   2.6   2.7   2.8   3.0   2.9   3.2   3.3
 DEGR. *   65    285   280   280    20   350   275   270   280   280   250   255   250   255   235   230   220    30    25   100

1
                                                                                                                 PAGE  5
      JOB: Site 1 Opt 3 2030 PM 1B3PM30.DAT                    RUN: Site 1 Opt 3 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
   0.  *    .5    .1    .0    .0
```

```
   5.  *    .8    .2    .1    .0
  10.  *   1.5    .4    .2    .1
  15.  *   1.8    .5    .3    .1
  20.  *   2.2    .8    .4    .3
  25.  *   2.4   1.0    .7    .4
  30.  *   2.3    .9    .8    .4
  35.  *   2.1    .9    .8    .5
  40.  *   2.0    .8    .8    .6
  45.  *   1.7    .8    .6    .5
  50.  *   1.7    .9    .6    .5
  55.  *   1.6    .8    .6    .6
  60.  *   1.4    .9    .8    .6
  65.  *   1.4   1.0   1.0    .6
  70.  *   1.5   1.1   1.1    .8
  75.  *   1.4   1.4   1.5   1.1
  80.  *   1.7   1.9   1.9   1.7
  85.  *   2.2   2.5   2.4   2.1
  90.  *   2.5   2.6   2.6   2.7
  95.  *   2.6   3.0   2.7   2.8
 100.  *   2.4   2.7   2.6   2.8
 105.  *   2.3   2.6   2.7   3.2
 110.  *   2.1   2.2   2.9   3.1
 115.  *   1.9   2.3   2.8   2.8
 120.  *   1.8   2.3   2.7   2.9
 125.  *   1.6   2.3   2.6   2.8
 130.  *   1.5   2.3   2.7   2.7
 135.  *   1.6   2.4   2.6   2.6
 140.  *   1.6   2.4   2.5   2.5
 145.  *   1.6   2.4   2.5   2.5
 150.  *   1.5   2.4   2.3   2.5
 155.  *   1.4   2.4   2.3   2.3
 160.  *   1.4   2.3   2.2   2.3
 165.  *   1.4   2.3   2.3   2.4
 170.  *   1.5   2.4   2.4   2.4
 175.  *   1.6   2.4   2.4   2.4
 180.  *   1.7   2.4   2.4   2.3
 185.  *   1.8   2.4   2.4   2.3
 190.  *   1.7   2.4   2.3   2.3
 195.  *   1.7   2.2   2.2   2.2
 200.  *   1.9   2.4   2.3   2.2
 205.  *   2.0   2.4   2.5   2.3
1
                                                                                                                 PAGE  6
      JOB: Site 1 Opt 3 2030 PM 1B3PM30.DAT                     RUN: Site 1 Opt 3 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   2.1   2.5   2.5   2.3
 215.  *   2.2   2.6   2.6   2.4
 220.  *   2.3   2.6   2.6   2.4
 225.  *   2.2   2.7   2.6   2.5
 230.  *   2.3   2.7   2.7   2.4
 235.  *   2.4   2.9   2.9   2.6
 240.  *   2.5   3.0   2.9   2.7
 245.  *   2.5   3.1   3.0   2.7
 250.  *   2.4   3.0   2.8   2.8
 255.  *   2.1   2.9   2.9   2.8
 260.  *   1.8   2.8   2.6   2.5
 265.  *   1.7   2.4   2.4   2.2
 270.  *    .8   1.9   1.7   1.7
 275.  *    .6   1.2   1.2   1.3
 280.  *    .3    .7    .8    .7
 285.  *    .1    .5    .5    .5
 290.  *    .0    .3    .3    .3
 295.  *    .0    .2    .2    .2
 300.  *    .0    .1    .1    .2
 305.  *    .0    .1    .1    .1
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .0    .0    .0
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .1    .0    .0    .0
 355.  *    .3    .0    .0    .0
 360.  *    .5    .1    .0    .0
 ------*------------------------
 MAX   *   2.6   3.1   3.0   3.2
 DEGR. *   95   245   245   105

 THE HIGHEST CONCENTRATION IS    3.90 PPM AT  275 DEGREES FROM REC7 .
 THE 2ND HIGHEST CONCENTRATION IS    3.90 PPM AT   65 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    3.90 PPM AT  255 DEGREES FROM REC12.
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Site 1 Opt 8 2014 AM 1B8AM14.DAT        60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 8 2014 AM                     27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    223511.4  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    168511.4  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       120        58       2.0 1685  102.2 1679 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.     55011.4  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       120       107       2.0  550  102.2 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    192511.4  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    192511.4  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    192511.4  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    376011.4  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    376011.4  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    374011.4  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       120        66       2.0 3740  102.2 1665 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      2011.4  0.  32   30.
```

```
  1
SB        Rt1 left  AG  1240.  1217.  1058.  1208.      2011.4  0.  32   30.
  2
SB        Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       120       115       2.0   20  102.2 1752 1 3
  1
SB        Rt1 departAG  1056.  1231.   921.  1221.    433011.4  0.  56   30.
  1
SB        Rt1 departAG   921.  1221.    58.  1172.    433011.4  0.  56   30.
  1
EB        Rt28 aprchAG  1226.  2185.  1087.  1547.    100011.4  0.  32   30.
  1
EB        Rt28 aprchAG  1088.  1547.  1072.  1425.    100011.4  0.  56   30.
  1
EB        Rt28 aprchAG  1072.  1425.  1025.  1202.    100011.4  0.  56   30.
  2
EB        Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       120        93       2.0 1000  102.2 1523 1 3
  1
EB        Rt28 deparAG  1039.  1194.  1043.  1015.      4511.4  0.  32   30.
  1
WB        Rt28 aprchAG  1052.  1015.  1049.  1190.      8511.4  0.  44   30.
  2
WB        Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       120       109       2.0   85  102.2 1694 1 3
  1
WB        Rt28 deparAG  1069.  1197.  1121.  1424.     78011.4  0.  44   30.
  1
WB        Rt28 deparAG  1121.  1424.  1126.  1570.     78011.4  0.  32   30.
  1
WB        Rt28 deparAG  1126.  1570.  1257.  2180.     78011.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 1 Opt 8 2014 AM 1B8AM14.DAT                     RUN: Site 1 Opt 8 2014 AM
      DATE: 05/10/2009   TIME: 21:34:45.84


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt1 aprch *     58.0    1109.0     581.0    1136.0 *     524.    87. AG   2235.  11.4    .0 56.0
       2. NB        Rt1 thru  *    582.0    1136.0    1083.0    1166.0 *     502.    87. AG   1685.  11.4    .0 56.0
       3. NB        Rt1 thru  *    984.0    1160.0     806.4    1149.7 *     178.   267. AG    397. 100.0    .0 36.0  .69   9.0
       4. NB        Rt1 left  *    572.0    1167.0    1065.0    1195.0 *     494.    87. AG    550.  11.4    .0 44.0
       5. NB        Rt1 left  *    983.0    1190.0    -751.0    1093.9 *    1737.   267. AG    489. 100.0    .0 24.0 2.17  88.2
       6. NB        Rt1 depart*   1085.0    1167.0    1470.0    1188.0 *     386.    87. AG   1925.  11.4    .0 56.0
       7. NB        Rt1 depart*   1470.0    1188.0    1784.0    1227.0 *     316.    83. AG   1925.  11.4    .0 44.0
       8. NB        Rt1 depart*   1784.0    1227.0    2072.0    1272.0 *     291.    81. AG   1925.  11.4    .0 44.0
       9. SB        Rt1 aprch *   2069.0    1311.0    1694.0    1264.0 *     378.   263. AG   3760.  11.4    .0 44.0
      10. SB        Rt1 aprch *   1694.0    1264.0    1395.0    1248.0 *     299.   267. AG   3760.  11.4    .0 44.0
      11. SB        Rt1 th+rt *   1395.0    1248.0    1057.0    1231.0 *     338.   267. AG   3740.  11.4    .0 56.0
      12. SB        Rt1th+rt  *   1144.0    1236.0    7259.3    1536.8 *    6123.    87. AG    452. 100.0    .0 36.0 1.80 311.0
      13. SB        Rt1 left  *   1378.0    1236.0    1241.0    1217.0 *     138.   262. AG     20.  11.4    .0 32.0
      14. SB        Rt1 left  *   1240.0    1217.0    1058.0    1208.0 *     182.   267. AG     20.  11.4    .0 32.0
      15. SB        Rt1 left  *   1147.0    1212.0    1244.8    1216.3 *      98.    87. AG    263. 100.0    .0 12.0 1.43   5.0
      16. SB        Rt1 depart*   1056.0    1231.0     921.0    1221.0 *     135.   266. AG   4330.  11.4    .0 56.0
      17. SB        Rt1 depart*    921.0    1221.0      58.0    1172.0 *     864.   267. AG   4330.  11.4    .0 56.0
      18. EB        Rt28 aprch*   1226.0    2185.0    1087.0    1547.0 *     653.   192. AG   1000.  11.4    .0 32.0
      19. EB        Rt28 aprch*   1088.0    1547.0    1072.0    1425.0 *     123.   187. AG   1000.  11.4    .0 56.0
      20. EB        Rt28 aprch*   1072.0    1425.0    1025.0    1202.0 *     228.   192. AG   1000.  11.4    .0 56.0
      21. EB        Rt28 aprch*   1043.0    1287.0    1179.1    1950.9 *     678.    12. AG    637. 100.0    .0 36.0 1.14  34.4
      22. EB        Rt28 depar*   1039.0    1194.0    1043.0    1015.0 *     179.   179. AG     45.  11.4    .0 32.0
      23. WB        Rt28 aprch*   1052.0    1015.0    1049.0    1190.0 *     175.   359. AG     85.  11.4    .0 44.0
      24. WB        Rt28 aprch*   1050.0    1141.0    1050.2    1116.0 *      25.   180. AG    498. 100.0    .0 24.0  .43   1.3
      25. WB        Rt28 depar*   1069.0    1197.0    1121.0    1424.0 *     233.    13. AG    780.  11.4    .0 44.0
      26. WB        Rt28 depar*   1121.0    1424.0    1126.0    1570.0 *     146.     2. AG    780.  11.4    .0 32.0
      27. WB        Rt28 depar*   1126.0    1570.0    1257.0    2180.0 *     624.    12. AG    780.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 1 Opt 8 2014 AM 1B8AM14.DAT                     RUN: Site 1 Opt 8 2014 AM
      DATE: 05/10/2009   TIME: 21:34:45.84

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL    FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 thru  *     120       58       2.0      1685       1679     102.20      1        3
       5. NB        Rt1 left  *     120      107       2.0       550       1700     102.20      1        3
      12. SB        Rt1th+rt  *     120       66       2.0      3740       1665     102.20      1        3
      15. SB        Rt1 left  *     120      115       2.0        20       1752     102.20      1        3
      21. EB        Rt28 aprch*     120       93       2.0      1000       1523     102.20      1        3
      24. WB        Rt28 aprch*     120      109       2.0        85       1694     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       743.0     1116.0        5.0   *
      2. SE 164 S             *       857.0     1123.0        5.0   *
      3. SE 82 S              *       939.0     1128.0        5.0   *
      4. SE CNR               *      1020.0     1134.0        5.0   *
      5. SE 82 E              *      1022.0     1053.0        5.0   *
      6. NE 82 E              *      1075.0     1056.0        5.0   *
      7. NE CNR               *      1076.0     1137.0        5.0   *
      8. NE 82 N              *      1156.0     1142.0        5.0   *
      9. NE 164 N             *      1238.0     1146.0        5.0   *
     10. NE MID N             *      1341.0     1153.0        5.0   *
     11. NW MID N             *      1453.0     1280.0        5.0   *
     12. NW 164 N             *      1316.0     1272.0        5.0   *
     13. NW 82 N              *      1234.0     1269.0        5.0   *
     14. NW CNR               *      1138.0     1288.0        5.0   *
     15. NW 82 W              *      1137.0     1385.0        5.0   *
     16. NW 164 W             *      1145.0     1466.0        5.0   *
     17. NW MID W             *      1156.0     1626.0        5.0   *
     18. SW MID W             *      1072.0     1597.0        5.0   *
     19. SW 164 W             *      1043.0     1434.0        5.0   *
     20. SW 82 W              *      1026.0     1354.0        5.0   *
     21. SW CNR               *       995.0     1273.0        5.0   *
     22. SW 82 S              *       900.0     1248.0        5.0   *
     23. SW 164 S             *       819.0     1243.0        5.0   *
     24. SW MID S             *       692.0     1235.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 1 Opt 8 2014 AM 1B8AM14.DAT                     RUN: Site 1 Opt 8 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

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(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *    2.3   3.4   3.6   2.7   2.0   2.0   2.8   2.9   2.6   2.1    .0    .1    .5   1.3   1.6   1.7   2.2    .7   1.0   1.0
  5.  *    2.3   3.4   3.7   2.8   2.0   1.9   2.6   2.6   2.3   1.9    .0    .0    .2   1.1   1.3   1.4   1.9   1.1   1.6   1.5
 10.  *    2.3   3.6   4.0   3.0   1.9   1.9   2.7   2.4   2.2   2.0    .0    .0    .1    .9   1.0   1.1   1.6   1.5   2.1   2.1
 15.  *    2.3   3.7   4.1   2.8   1.9   1.3   2.3   2.4   2.1   2.0    .0    .0    .0    .5    .8    .7   1.1   2.0   2.6   2.5
 20.  *    2.5   3.9   4.3   2.7   1.8   1.3   2.0   2.4   2.1   2.0    .0    .1    .1    .2    .5    .5    .8   2.5   3.0   3.1
 25.  *    2.6   4.2   4.2   2.4   1.7   1.1   1.8   2.3   2.0   2.0    .0    .1    .1    .1    .1    .2    .4   2.7   3.3   3.3
 30.  *    2.7   4.3   4.1   2.2   1.5   1.2   2.0   2.3   2.0   2.0    .0    .1    .1    .0    .0    .1    .2   2.9   3.3   3.4
 35.  *    2.9   4.2   3.9   2.0   1.3   1.1   1.8   2.3   1.9   2.2    .0    .1    .1    .0    .0    .0    .1   2.9   3.2   3.0
 40.  *    3.0   4.4   3.6   2.0   1.3   1.2   2.0   2.4   2.2   2.2    .0    .1    .1    .0    .0    .0    .1   2.9   3.1   3.0
 45.  *    3.1   4.3   3.5   2.2   1.2   1.3   2.2   2.4   2.2   2.3    .1    .2    .1    .0    .0    .0    .0   2.7   2.8   3.0
 50.  *    3.5   4.5   3.2   2.1   1.4   1.4   2.3   2.6   2.3   2.3    .1    .2    .2    .0    .0    .0    .0   2.6   2.7   2.9
 55.  *    3.5   4.1   3.0   2.4   1.3   1.3   2.6   2.4   2.4   2.6    .1    .2    .2    .0    .0    .0    .0   2.5   2.6   2.7
 60.  *    3.5   4.2   3.1   2.7   1.4   1.5   2.6   2.7   2.7   2.6    .2    .4    .3    .0    .0    .0    .0   2.5   2.5   2.5
 65.  *    3.8   4.0   3.2   2.9   1.4   1.4   2.9   2.9   2.6   2.6    .5    .6    .6    .1    .0    .0    .0   2.4   2.3   2.4
 70.  *    3.7   3.8   3.2   3.4   1.5   1.3   2.8   2.8   2.8   2.8    .8   1.1   1.0    .4    .0    .0    .0   2.4   2.3   2.3
 75.  *    3.7   3.9   3.3   3.3   1.3   1.3   2.8   2.7   2.8   2.7   1.4   1.8   1.6    .7    .1    .1    .0   2.2   2.3   2.3
 80.  *    3.3   3.3   2.9   3.2   1.0    .9   2.6   2.5   2.5   2.4   2.2   2.6   2.4   1.1    .2    .1    .1   2.3   2.4   2.6
 85.  *    2.8   2.8   2.4   3.1    .8    .8   2.1   2.1   2.1   2.1   3.1   3.5   3.5   1.6    .6    .2    .1   2.3   2.7   2.8
 90.  *    2.2   2.2   1.9   2.5    .4    .3   1.5   1.5   1.5   1.5   3.8   4.1   4.2   2.3    .7    .5    .2   2.4   3.0   3.1
 95.  *    1.3   1.4   1.2   2.1    .2    .2   1.1   1.1   1.1   1.0   4.2   4.6   4.7   2.7   1.0    .5    .3   2.4   3.1   3.6
100.  *     .7    .9    .6   1.5    .1    .1    .5    .7    .6    .6   4.4   4.9   4.7   2.7   1.2    .7    .4   2.5   3.1   3.8
105.  *     .4    .5    .5   1.2    .0    .0    .3    .4    .3    .4   4.4   4.6   4.6   2.9   1.2    .8    .4   2.5   3.3   3.8
110.  *     .2    .1    .2   1.0    .0    .0    .1    .2    .2    .2   4.1   4.4   4.2   2.9   1.4    .8    .4   2.7   3.3   3.8
115.  *     .1    .1    .2    .8    .0    .0    .1    .1    .1    .1   3.9   4.1   4.1   2.9   1.4    .9    .5   2.7   3.4   3.8
120.  *     .1    .1    .1    .8    .0    .0    .0    .1    .1    .1   3.6   4.0   3.9   2.7   1.2    .9    .5   2.8   3.2   3.6
125.  *     .1    .1    .1    .7    .0    .0    .0    .1    .1    .1   3.5   3.9   3.6   2.7   1.2    .9    .6   2.9   3.2   3.5
130.  *     .1    .1    .1    .6    .0    .0    .0    .1    .1    .1   3.3   3.7   3.5   2.6   1.2   1.0    .7   2.7   3.4   3.5
135.  *     .1    .1    .1    .5    .0    .0    .0    .1    .1    .1   3.3   3.3   3.4   2.6   1.3    .8    .6   2.9   3.5   3.5
140.  *     .0    .0    .0    .4    .0    .0    .0    .1    .1    .1   3.1   3.1   3.1   2.4   1.3    .9    .6   3.1   3.4   3.4
145.  *     .0    .0    .0    .2    .0    .0    .0    .1    .0    .1   3.0   3.0   3.1   2.5   1.3    .8    .5   3.1   3.6   3.3
150.  *     .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.9   3.0   3.0   2.3   1.2    .7    .5   3.1   3.7   3.2
155.  *     .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   3.0   3.0   3.0   2.3   1.2    .8    .6   3.2   3.5   3.1
160.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.9   3.0   3.0   2.2   1.2    .8    .5   3.3   3.3   2.8
165.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.9   3.0   3.0   2.1   1.1    .8    .5   3.3   3.2   2.7
170.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   3.0   3.0   3.2   2.0   1.2   1.0    .7   3.2   3.3   2.6
175.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.9   3.0   3.2   1.8   1.2    .8    .9   3.3   3.1   2.4
180.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   3.0   3.0   3.3   1.7   1.1    .9   1.0   2.8   2.8   2.4
185.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   3.0   3.1   3.2   1.6    .9   1.0   1.4   2.6   2.4   2.2
190.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.9   3.0   3.2   1.4   1.1   1.3   2.1   2.3   2.1   1.9
195.  *     .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.8   3.0   3.2   1.5   1.1   1.2   2.3   1.7   1.8   1.7
200.  *     .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   2.8   3.0   3.2   1.6   1.3   1.6   2.7   1.4   1.6   1.8
205.  *     .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   3.0   3.0   3.2   1.4   1.5   1.8   2.9   1.2   1.6   1.7
1
                                                                                                                  PAGE  4
      JOB: Site 1 Opt 8 2014 AM 1B8AM14.DAT                     RUN: Site 1 Opt 8 2014 AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *     .0    .0    .0    .1    .0    .0    .3    .1    .0    .1   3.2   3.1   3.4   1.6   1.6   2.1   3.0    .9   1.2   1.8
215.  *     .1    .1    .1    .1    .0    .0    .5    .1    .1    .1   3.2   3.4   3.4   1.7   2.2   2.4   3.1    .8   1.3   1.8
220.  *     .1    .1    .1    .1    .0    .0    .6    .1    .1    .1   3.4   3.5   3.6   2.1   2.4   2.5   3.1    .6   1.0   1.6
225.  *     .1    .1    .1    .1    .0    .0    .7    .1    .1    .1   3.5   3.7   3.7   2.2   2.8   2.8   3.1    .7   1.1   1.7
230.  *     .1    .1    .1    .1    .0    .0    .8    .1    .1    .1   3.7   3.8   3.9   2.4   2.8   2.8   3.1    .7   1.2   1.7
235.  *     .1    .1    .1    .1    .0    .0    .9    .1    .1    .1   3.9   4.1   4.1   2.5   3.0   2.9   3.1    .7   1.1   1.7
240.  *     .1    .1    .1    .1    .0    .0   1.0    .2    .1    .2   4.1   4.6   4.1   2.8   2.9   2.7   2.8    .7   1.1   1.7
245.  *     .2    .2    .3    .4    .0    .0   1.4    .3    .2    .2   4.4   4.5   4.3   3.3   2.9   2.7   2.5    .5   1.0   1.4
250.  *     .4    .4    .5    .7    .0    .0   1.6    .7    .6    .5   4.7   5.1   4.8   3.3   2.8   2.5   2.4    .5    .9   1.4
255.  *     .8    .7   1.1   1.2    .1    .1   2.1   1.1    .9    .9   4.7   5.0   4.9   3.3   2.6   2.3   2.3    .3    .7   1.2
260.  *    1.3   1.4   1.5   1.9    .3    .4   2.7   1.7   1.5   1.5   4.6   5.0   4.5   3.1   2.4   2.0   2.2    .2    .6   1.0
265.  *    1.7   1.9   2.5   2.6    .6    .6   3.3   2.6   2.2   2.0   4.1   4.5   3.8   2.7   2.2   1.8   2.1    .1    .3    .7
270.  *    2.3   2.5   3.3   3.3    .8    .9   4.0   2.9   2.6   2.6   3.3   3.8   3.3   2.0   1.9   1.8   2.0    .0    .2    .4
275.  *    2.7   3.1   3.8   3.7   1.1   1.2   4.3   3.2   2.9   2.8   2.1   2.7   2.4   1.5   1.7   1.6   2.0    .0    .0    .2
280.  *    2.9   3.4   4.0   4.1   1.4   1.6   4.3   3.2   3.0   2.8   1.4   1.9   1.7   1.4   1.5   1.6   2.0    .0    .0    .0
285.  *    3.2   3.7   4.3   4.2   1.6   1.8   4.0   2.9   2.5   3.0   1.1   1.5   1.4   1.2   1.5   1.6   2.0    .0    .0    .0
290.  *    3.0   3.6   4.3   3.9   1.9   2.0   3.6   2.6   2.6   2.9    .7   1.1   1.0   1.2   1.6   1.6   2.0    .0    .0    .0
295.  *    2.9   3.6   4.1   3.8   1.9   1.9   3.2   2.5   2.5   2.8    .6   1.0    .9   1.2   1.5   1.6   2.0    .0    .0    .0
300.  *    2.7   3.6   4.0   3.5   1.9   1.9   2.7   2.5   2.4   2.9    .3    .7    .9   1.2   1.5   1.6   2.0    .0    .0    .0
305.  *    2.6   3.6   3.9   3.2   1.8   1.8   2.4   2.1   2.5   2.8    .3    .6    .9   1.3   1.5   1.6   2.0    .0    .0    .0
310.  *    2.6   3.6   3.8   2.8   2.0   1.8   2.1   2.0   2.5   2.6    .4    .6    .8   1.3   1.5   1.6   2.0    .0    .0    .0
315.  *    2.4   3.6   3.8   2.6   1.9   1.7   2.0   1.9   2.8   2.6    .3    .5   1.0   1.3   1.8   1.8   2.0    .0    .0    .0
320.  *    2.3   3.4   3.5   2.5   1.7   1.6   1.8   1.9   2.6   2.4    .3    .5    .9   1.3   1.7   1.8   2.0    .0    .0    .0
325.  *    2.3   3.4   3.5   2.2   1.7   1.6   1.8   2.1   2.9   2.4    .4    .6    .9   1.4   1.6   1.7   2.2    .0    .0    .0
330.  *    2.3   3.4   3.5   2.0   1.7   1.6   1.8   2.1   2.9   2.4    .4    .6    .9   1.4   1.7   1.8   2.4    .0    .0    .0
335.  *    2.3   3.4   3.4   2.0   1.5   1.6   2.0   2.2   2.9   2.4    .3    .6    .9   1.4   1.9   1.8   2.4    .0    .0    .0
340.  *    2.3   3.4   3.3   2.0   1.5   1.6   2.1   2.4   2.7   2.4    .2    .6    .7   1.4   1.9   2.0   2.5    .0    .0    .0
345.  *    2.3   3.4   3.4   1.9   1.6   1.6   2.3   2.6   2.9   2.4    .1    .5    .7   1.6   1.8   1.9   2.6    .1    .2    .1
350.  *    2.3   3.4   3.4   2.2   1.6   1.8   2.6   2.8   2.7   2.2    .1    .5    .7   1.5   1.9   1.9   2.5    .1    .3    .3
355.  *    2.3   3.4   3.5   2.2   1.7   1.7   2.7   2.8   2.7   2.1    .0    .2    .6   1.5   1.9   1.8   2.4    .4    .6    .5
360.  *    2.3   3.4   3.6   2.7   2.0   2.0   2.8   2.9   2.6   2.1    .0    .1    .5   1.3   1.6   1.7   2.2    .7   1.0   1.0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *    3.8   4.5   4.3   4.2   2.0   2.0   4.3   3.2   3.0   3.0   4.7   5.1   4.9   3.3   3.0   2.9   3.1   3.3   3.7   3.8
DEGR. *   65    50   285   285     0     0   275   275   280   285   255   250   255   245   235   235   225   160   150   115

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                                                                                                                  PAGE  5
      JOB: Site 1 Opt 8 2014 AM 1B8AM14.DAT                     RUN: Site 1 Opt 8 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *     .4    .0    .0    .0
```

```
    5.  *    .9    .1    .0    .0
   10.  *   1.4    .2    .1    .0
   15.  *   1.8    .4    .2    .1
   20.  *   2.1    .6    .3    .2
   25.  *   2.3    .8    .5    .2
   30.  *   2.4    .9    .6    .3
   35.  *   2.3   1.0    .8    .5
   40.  *   2.1   1.0    .8    .6
   45.  *   1.9    .9    .8    .6
   50.  *   1.8    .8    .8    .6
   55.  *   1.7   1.0    .8    .7
   60.  *   1.5    .9    .9    .8
   65.  *   1.5   1.2   1.2    .9
   70.  *   1.5   1.5   1.6   1.4
   75.  *   1.9   2.1   2.1   2.0
   80.  *   2.1   2.8   2.8   2.8
   85.  *   2.9   3.4   3.3   3.4
   90.  *   3.2   3.9   3.8   3.9
   95.  *   3.4   4.1   4.3   4.4
  100.  *   3.4   4.0   3.9   4.3
  105.  *   3.1   3.5   3.9   4.3
  110.  *   2.8   3.3   3.7   4.2
  115.  *   2.6   3.4   3.9   4.0
  120.  *   2.5   3.1   3.8   3.7
  125.  *   2.4   3.2   3.7   3.6
  130.  *   2.1   3.2   3.6   3.4
  135.  *   2.0   3.2   3.4   3.2
  140.  *   2.1   3.3   3.4   3.0
  145.  *   2.1   3.2   3.3   2.9
  150.  *   1.9   3.3   3.2   2.8
  155.  *   1.9   3.3   3.2   2.7
  160.  *   1.8   3.2   3.1   2.6
  165.  *   1.9   3.2   3.1   2.7
  170.  *   2.0   3.2   3.3   2.8
  175.  *   2.0   3.4   3.3   2.9
  180.  *   2.1   3.3   3.2   2.9
  185.  *   2.2   3.3   3.1   2.8
  190.  *   2.2   3.1   2.8   2.7
  195.  *   2.3   3.1   2.8   2.6
  200.  *   2.5   3.2   2.8   2.7
  205.  *   2.6   3.3   2.9   2.8
1
                                                                                                                     PAGE  6
      JOB: Site 1 Opt 8 2014 AM 1B8AM14.DAT                    RUN: Site 1 Opt 8 2014 AM

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21 REC22 REC23 REC24
  ------*------------------------
  210.  *   2.8   3.4   2.8   2.9
  215.  *   2.9   3.3   2.9   3.0
  220.  *   3.1   3.4   3.0   3.0
  225.  *   3.0   3.5   3.2   3.3
  230.  *   3.0   3.5   3.4   3.4
  235.  *   3.1   3.7   3.5   3.6
  240.  *   3.3   3.9   3.8   3.8
  245.  *   3.1   4.0   3.9   4.0
  250.  *   3.1   4.1   4.1   4.0
  255.  *   3.0   4.1   4.0   4.0
  260.  *   2.5   3.9   3.8   3.7
  265.  *   1.9   3.5   3.3   3.3
  270.  *   1.4   2.7   2.7   2.7
  275.  *    .9   2.0   2.0   2.0
  280.  *    .4   1.3   1.3   1.3
  285.  *    .3    .8    .8    .9
  290.  *    .1    .5    .5    .5
  295.  *    .0    .3    .3    .4
  300.  *    .0    .3    .3    .3
  305.  *    .0    .2    .2    .2
  310.  *    .0    .2    .2    .2
  315.  *    .0    .2    .2    .2
  320.  *    .0    .1    .2    .2
  325.  *    .0    .1    .1    .1
  330.  *    .0    .1    .1    .1
  335.  *    .0    .1    .1    .1
  340.  *    .0    .0    .0    .1
  345.  *    .0    .0    .0    .0
  350.  *    .1    .0    .0    .0
  355.  *    .2    .0    .0    .0
  360.  *    .4    .0    .0    .0
  ------*------------------------
  MAX   *   3.4   4.1   4.3   4.4
  DEGR. *   95    95    95    95

  THE HIGHEST CONCENTRATION IS    5.10 PPM AT  250 DEGREES FROM REC12.
  THE 2ND HIGHEST CONCENTRATION IS    4.90 PPM AT  255 DEGREES FROM REC13.
  THE 3RD HIGHEST CONCENTRATION IS    4.70 PPM AT  255 DEGREES FROM REC11.
```

```
Site 1 Opt 8 2030 AM 1B8AM30.DAT        60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 8 2030 AM                     27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    2295 9.2  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    1715 9.2  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       125        58       2.0 1715   84.1 1679 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.     580 9.2  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       125       111       2.0  580   84.1 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    1930 9.2  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    1930 9.2  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    1930 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    3435 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    3435 9.2  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    3415 9.2  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       125        67       2.0 3415   84.1 1666 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      20 9.2  0.  32   30.
```

```
  1
SB        Rt1 left  AG  1240.  1217.  1058.  1208.       20 9.2  0.  32   30.
  2
SB        Rt1 left  AG  1147.  1212.  1237.  1216.       0.  12   1
       125       120       2.0   20   84.1 1752 1 3
  1
SB        Rt1 departAG  1056.  1231.   921.  1221.     4030 9.2  0.  56   30.
  1
SB        Rt1 departAG   921.  1221.    58.  1172.     4030 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1226.  2185.  1087.  1547.      965 9.2  0.  32   30.
  1
EB        Rt28 aprchAG  1088.  1547.  1072.  1425.      965 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1072.  1425.  1025.  1202.      965 9.2  0.  56   30.
  2
EB        Rt28 aprchAG  1043.  1287.  1068.  1409.       0.  36   3
       125       100       2.0  965   84.1 1524 1 3
  1
EB        Rt28 deparAG  1039.  1194.  1043.  1015.       45 9.2  0.  32   30.
  1
WB        Rt28 aprchAG  1052.  1015.  1049.  1190.       85 9.2  0.  44   30.
  2
WB        Rt28 aprchAG  1050.  1141.  1051.  1019.       0.  24   2
       125       114       2.0   85   84.1 1694 1 3
  1
WB        Rt28 deparAG  1069.  1197.  1121.  1424.      775 9.2  0.  44   30.
  1
WB        Rt28 deparAG  1121.  1424.  1126.  1570.      775 9.2  0.  32   30.
  1
WB        Rt28 deparAG  1126.  1570.  1257.  2180.      775 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 1 Opt 8 2030 AM 1B8AM30.DAT                     RUN: Site 1 Opt 8 2030 AM
      DATE: 05/10/2009   TIME: 21:49:28.11


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*--------------------------------------*-------------------------------------------------------------
        1. NB        Rt1 aprch *    58.0    1109.0     581.0    1136.0 *     524.    87. AG  2295.   9.2    .0 56.0
        2. NB        Rt1 thru  *   582.0    1136.0    1083.0    1166.0 *     502.    87. AG  1715.   9.2    .0 56.0
        3. NB        Rt1 thru  *   984.0    1160.0     803.2    1149.6 *     181.   267. AG   314. 100.0    .0 36.0  .67   9.2
        4. NB        Rt1 left  *   572.0    1167.0    1065.0    1195.0 *     494.    87. AG   580.   9.2    .0 44.0
        5. NB        Rt1 left  *   983.0    1190.0    -827.3    1089.7 *    1813.   267. AG   401. 100.0    .0 24.0 2.13  92.1
        6. NB        Rt1 depart*  1085.0    1167.0    1470.0    1188.0 *     386.    87. AG  1930.   9.2    .0 56.0
        7. NB        Rt1 depart*  1470.0    1188.0    1784.0    1227.0 *     316.    83. AG  1930.   9.2    .0 44.0
        8. NB        Rt1 depart*  1784.0    1227.0    2072.0    1272.0 *     291.    81. AG  1930.   9.2    .0 44.0
        9. SB        Rt1 aprch *  2069.0    1311.0    1694.0    1264.0 *     378.   263. AG  3435.   9.2    .0 44.0
       10. SB        Rt1 aprch *  1694.0    1264.0    1395.0    1248.0 *     299.   267. AG  3435.   9.2    .0 44.0
       11. SB        Rt1 th+rt *  1395.0    1248.0    1057.0    1231.0 *     338.   267. AG  3415.   9.2    .0 56.0
       12. SB        Rt1th+rt  *  1144.0    1236.0    5885.5    1469.2 *    4747.    87. AG   363. 100.0    .0 36.0 1.58 241.2
       13. SB        Rt1 left  *  1378.0    1236.0    1241.0    1217.0 *     138.   262. AG    20.   9.2    .0 32.0
       14. SB        Rt1 left  *  1240.0    1217.0    1058.0    1208.0 *     182.   267. AG    20.   9.2    .0 32.0
       15. SB        Rt1 left  *  1147.0    1212.0    1245.3    1216.4 *      98.    87. AG   217. 100.0    .0 12.0 1.43   5.0
       16. SB        Rt1 depart*  1056.0    1231.0     921.0    1221.0 *     135.   266. AG  4030.   9.2    .0 56.0
       17. SB        Rt1 depart*   921.0    1221.0      58.0    1172.0 *     864.   267. AG  4030.   9.2    .0 56.0
       18. EB        Rt28 aprch*  1226.0    2185.0    1087.0    1547.0 *     653.   192. AG   965.   9.2    .0 32.0
       19. EB        Rt28 aprch*  1088.0    1547.0    1072.0    1425.0 *     123.   187. AG   965.   9.2    .0 56.0
       20. EB        Rt28 aprch*  1072.0    1425.0    1025.0    1202.0 *     228.   192. AG   965.   9.2    .0 56.0
       21. EB        Rt28 aprch*  1043.0    1287.0    1226.3    2181.3 *     913.    12. AG   541. 100.0    .0 36.0 1.25  46.4
       22. EB        Rt28 depar*  1039.0    1194.0    1043.0    1015.0 *     179.   179. AG    45.   9.2    .0 32.0
       23. WB        Rt28 aprch*  1052.0    1015.0    1049.0    1190.0 *     175.   359. AG    85.   9.2    .0 44.0
       24. WB        Rt28 aprch*  1050.0    1141.0    1050.2    1114.8 *      26.   180. AG   411. 100.0    .0 24.0  .45   1.3
       25. WB        Rt28 depar*  1069.0    1197.0    1121.0    1424.0 *     233.    13. AG   775.   9.2    .0 44.0
       26. WB        Rt28 depar*  1121.0    1424.0    1126.0    1570.0 *     146.     2. AG   775.   9.2    .0 32.0
       27. WB        Rt28 depar*  1126.0    1570.0    1257.0    2180.0 *     624.    12. AG   775.   9.2    .0 32.0
1
                                                                                                                   PAGE  2
      JOB: Site 1 Opt 8 2030 AM 1B8AM30.DAT                     RUN: Site 1 Opt 8 2030 AM
      DATE: 05/10/2009   TIME: 21:49:28.11

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
        3. NB        Rt1 thru  *     125       58       2.0      1715       1679      84.10      1        3
        5. NB        Rt1 left  *     125      111       2.0       580       1700      84.10      1        3
       12. SB        Rt1th+rt  *     125       67       2.0      3415       1666      84.10      1        3
       15. SB        Rt1 left  *     125      120       2.0        20       1752      84.10      1        3
       21. EB        Rt28 aprch*     125      100       2.0       965       1524      84.10      1        3
       24. WB        Rt28 aprch*     125      114       2.0        85       1694      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *         COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*----------------------------------*
      1. SE MID S             *       743.0     1116.0        5.0   *
      2. SE 164 S             *       857.0     1123.0        5.0   *
      3. SE 82 S              *       939.0     1128.0        5.0   *
      4. SE CNR               *      1020.0     1134.0        5.0   *
      5. SE 82 E              *      1022.0     1053.0        5.0   *
      6. NE 82 E              *      1075.0     1056.0        5.0   *
      7. NE CNR               *      1076.0     1137.0        5.0   *
      8. NE 82 N              *      1156.0     1142.0        5.0   *
      9. NE 164 N             *      1238.0     1146.0        5.0   *
     10. NE MID N             *      1341.0     1153.0        5.0   *
     11. NW MID N             *      1453.0     1280.0        5.0   *
     12. NW 164 N             *      1316.0     1272.0        5.0   *
     13. NW 82 N              *      1234.0     1269.0        5.0   *
     14. NW CNR               *      1138.0     1288.0        5.0   *
     15. NW 82 W              *      1137.0     1385.0        5.0   *
     16. NW 164 W             *      1145.0     1466.0        5.0   *
     17. NW MID W             *      1156.0     1626.0        5.0   *
     18. SW MID W             *      1072.0     1597.0        5.0   *
     19. SW 164 W             *      1043.0     1434.0        5.0   *
     20. SW 82 W              *      1026.0     1354.0        5.0   *
     21. SW CNR               *       995.0     1273.0        5.0   *
     22. SW 82 S              *       900.0     1248.0        5.0   *
     23. SW 164 S             *       819.0     1243.0        5.0   *
     24. SW MID S             *       692.0     1235.0        5.0   *
1
                                                                                                                   PAGE  3
      JOB: Site 1 Opt 8 2030 AM 1B8AM30.DAT                     RUN: Site 1 Opt 8 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

```
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*-------------------------------------------------------------------------------------------------------------------------
  0.  *   1.8   2.7   2.8   2.0   1.6   1.4   2.3   2.2   2.1   1.7    .0    .2    .3   1.2   1.5   1.4   2.1    .6    .9   1.0
  5.  *   1.8   2.8   3.1   2.4   1.5   1.4   2.3   2.1   1.9   1.7    .0    .1    .2   1.1   1.2   1.2   1.9   1.0   1.5   1.4
 10.  *   1.9   2.8   3.2   2.4   1.6   1.6   2.1   1.9   1.7   1.5    .0    .0    .1    .7   1.0   1.0   1.5   1.4   1.8   1.8
 15.  *   1.9   3.0   3.6   2.5   1.5   1.2   1.7   1.8   1.7   1.5    .0    .0    .1    .3    .8    .7   1.1   1.9   2.4   2.3
 20.  *   2.0   3.1   3.5   2.1   1.5   1.0   1.6   1.8   1.5   1.5    .0    .1    .0    .2    .4    .4    .8   2.2   2.7   2.6
 25.  *   2.1   3.2   3.4   1.8   1.3    .9   1.4   1.8   1.6   1.6    .0    .1    .1    .1    .1    .2    .5   2.4   2.7   2.8
 30.  *   2.2   3.4   3.4   1.6   1.1    .9   1.6   1.8   1.6   1.6    .0    .1    .1    .0    .1    .1    .2   2.6   2.9   2.8
 35.  *   2.4   3.5   3.2   1.6   1.2    .9   1.4   1.8   1.6   1.6    .0    .1    .1    .0    .0    .0    .2   2.5   2.8   2.6
 40.  *   2.6   3.5   3.0   1.5   1.0   1.0   1.5   1.8   1.7   1.7    .0    .1    .1    .0    .0    .0    .1   2.5   2.5   2.5
 45.  *   2.6   3.5   2.8   1.6   1.0   1.0   1.6   2.0   1.8   1.8    .0    .1    .1    .0    .0    .0    .0   2.3   2.4   2.4
 50.  *   2.6   3.4   2.5   1.8   1.1   1.2   1.8   2.0   1.9   1.8    .0    .1    .1    .0    .0    .0    .0   2.1   2.3   2.4
 55.  *   2.9   3.4   2.7   1.9   1.2   1.0   1.9   2.0   1.8   1.9    .1    .1    .1    .0    .0    .0    .0   2.1   2.2   2.2
 60.  *   3.1   3.3   2.5   2.1   1.0   1.0   2.1   2.0   2.0   2.0    .2    .3    .3    .0    .0    .0    .0   2.0   2.1   2.1
 65.  *   2.8   3.4   2.4   2.2   1.0   1.0   2.0   2.2   2.1   2.1    .3    .5    .5    .1    .0    .0    .0   1.9   2.1   2.0
 70.  *   3.1   3.1   2.6   2.5   1.0   1.0   2.4   2.2   2.1   2.2    .6    .9    .7    .1    .0    .0    .0   1.9   2.0   2.0
 75.  *   3.0   3.1   2.3   2.7   1.0    .8   2.3   2.1   2.0   2.1   1.1   1.3   1.3    .5    .1    .0    .0   1.9   1.9   2.0
 80.  *   2.8   2.6   2.4   2.5    .8    .8   2.2   2.0   1.9   2.1   1.7   1.9   1.8    .9    .2    .1    .0   1.8   1.9   2.1
 85.  *   2.2   2.3   1.8   2.4    .7    .7   1.6   1.7   1.6   1.6   2.4   2.8   2.5   1.2    .4    .2    .1   1.9   2.0   2.4
 90.  *   1.7   1.5   1.5   2.0    .2    .2   1.3   1.3   1.2   1.3   2.9   3.2   3.2   1.7    .6    .4    .1   2.0   2.3   2.7
 95.  *   1.2   1.0    .9   1.7    .1    .1    .9    .9    .9    .8   3.2   3.6   3.5   2.0    .7    .4    .2   2.0   2.6   2.8
100.  *    .6    .5    .5   1.2    .1    .1    .4    .4    .5    .4   3.4   3.6   3.5   2.1    .9    .6    .2   2.2   2.6   3.0
105.  *    .3    .3    .3    .9    .0    .0    .2    .2    .2    .3   3.4   3.6   3.5   2.2   1.0    .6    .3   2.2   2.7   3.2
110.  *    .1    .1    .2    .9    .0    .0    .1    .1    .1    .1   3.2   3.4   3.2   2.3   1.0    .6    .3   2.3   2.6   3.0
115.  *    .1    .1    .1    .8    .0    .0    .1    .1    .1    .1   3.1   3.3   3.0   2.2   1.0    .7    .3   2.3   2.7   3.0
120.  *    .1    .1    .1    .7    .0    .0    .0    .1    .1    .1   2.9   3.1   3.1   2.0    .9    .7    .4   2.3   2.7   3.1
125.  *    .1    .1    .1    .6    .0    .0    .0    .1    .1    .1   2.8   2.9   2.8   1.9   1.0    .7    .4   2.2   2.6   2.9
130.  *    .1    .1    .1    .5    .0    .0    .0    .1    .1    .1   2.6   2.8   2.6   2.1    .9    .7    .4   2.4   2.7   2.9
135.  *    .0    .0    .0    .4    .0    .0    .0    .1    .1    .1   2.6   2.7   2.6   2.1    .8    .7    .4   2.3   2.7   2.9
140.  *    .0    .0    .0    .3    .0    .0    .0    .0    .0    .1   2.4   2.5   2.5   1.9   1.0    .7    .4   2.5   2.9   2.9
145.  *    .0    .0    .0    .2    .0    .0    .0    .0    .0    .0   2.3   2.4   2.4   1.9   1.1    .6    .4   2.5   2.8   2.8
150.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.3   2.4   2.4   1.8   1.1    .6    .5   2.6   2.9   2.5
155.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   2.2   2.3   2.3   1.7   1.0    .7    .4   2.6   2.7   2.3
160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.2   2.3   2.4   1.7    .8    .8    .5   2.6   2.6   2.4
165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.2   2.4   2.4   1.6   1.0    .7    .5   2.8   2.7   2.2
170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.2   2.4   2.6   1.4    .9    .8    .6   2.9   2.7   2.1
175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.4   2.5   2.6   1.3    .9    .8    .7   2.7   2.7   1.7
180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.4   2.4   2.6   1.3    .8    .5    .9   2.3   2.2   1.8
185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.2   2.4   2.5   1.2    .7    .7   1.0   2.1   2.0   1.5
190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0   2.2   2.4   2.5   1.0    .9   1.0   1.5   1.9   1.7   1.2
195.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   2.2   2.4   2.5   1.1    .8   1.0   1.9   1.5   1.5   1.3
200.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   2.2   2.4   2.5   1.0   1.1   1.3   2.1   1.2   1.3   1.4
205.  *    .0    .0    .0    .0    .0    .0    .2    .0    .0    .0   2.3   2.4   2.7   1.1   1.2   1.6   2.3   1.0   1.0   1.5
1
                                                                                                                   PAGE  4
      JOB: Site 1 Opt 8 2030 AM 1B8AM30.DAT                    RUN: Site 1 Opt 8 2030 AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*-------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0    .0    .3    .0    .0    .0   2.5   2.4   2.7   1.2   1.3   2.0   2.7    .9   1.0   1.5
215.  *    .0    .0    .0    .0    .0    .0    .4    .1    .0    .1   2.5   2.7   2.8   1.4   1.4   2.0   2.7    .7   1.0   1.4
220.  *    .0    .0    .0    .1    .0    .0    .6    .1    .1    .1   2.7   2.7   2.8   1.5   1.9   2.1   2.7    .5    .9   1.4
225.  *    .1    .1    .1    .1    .0    .0    .7    .1    .1    .1   2.7   2.9   2.9   1.6   2.1   2.1   2.5    .5    .9   1.4
230.  *    .1    .1    .1    .1    .0    .0    .7    .1    .1    .1   2.8   3.0   2.8   2.0   2.2   2.3   2.5    .5    .8   1.2
235.  *    .1    .1    .1    .1    .0    .0    .8    .1    .1    .1   2.9   3.2   3.2   2.1   2.4   2.4   2.4    .5    .9   1.3
240.  *    .1    .1    .1    .1    .0    .0    .9    .2    .1    .1   3.0   3.4   3.3   2.3   2.5   2.2   2.4    .5    .9   1.2
245.  *    .1    .1    .1    .3    .0    .0   1.1    .3    .1    .2   3.3   3.7   3.4   2.5   2.5   2.1   2.3    .5    .8   1.1
250.  *    .4    .4    .4    .4    .0    .0   1.3    .5    .4    .3   3.8   3.8   3.7   2.7   2.3   2.1   2.1    .3    .7   1.1
255.  *    .7    .7    .9    .9    .1    .1   1.8    .9    .8    .8   3.7   3.8   3.6   2.6   2.2   1.8   1.9    .2    .6   1.0
260.  *    .9   1.2   1.4   1.6    .1    .2   2.3   1.4   1.3   1.2   3.6   3.8   3.7   2.4   2.0   1.8   1.8    .1    .4    .8
265.  *   1.4   1.6   1.8   2.2    .4    .5   2.8   1.9   1.7   1.6   3.2   3.4   3.2   2.2   1.7   1.6   1.7    .1    .2    .6
270.  *   1.9   2.1   2.5   2.6    .7    .7   3.1   2.4   2.1   2.0   2.3   2.9   2.7   1.7   1.5   1.5   1.7    .0    .2    .4
275.  *   2.1   2.6   2.9   3.1    .8   1.0   3.5   2.4   2.5   2.3   1.9   2.1   1.9   1.4   1.5   1.4   1.7    .0    .0    .2
280.  *   2.5   2.9   3.2   3.3   1.2   1.2   3.4   2.5   2.1   2.2   1.1   1.5   1.4   1.2   1.3   1.4   1.7    .0    .0    .0
285.  *   2.4   3.0   3.4   3.4   1.3   1.4   3.2   2.5   2.1   2.2    .8   1.2   1.2   1.0   1.2   1.4   1.7    .0    .0    .0
290.  *   2.4   3.0   3.3   3.1   1.5   1.6   2.7   2.0   1.8   2.1    .6    .9    .8   1.0   1.2   1.4   1.8    .0    .0    .0
295.  *   2.3   2.9   3.3   3.0   1.5   1.5   2.4   1.9   1.9   2.3    .4    .5    .8   1.0   1.3   1.4   1.7    .0    .0    .0
300.  *   2.3   2.9   3.3   2.8   1.4   1.5   2.3   1.7   2.1   2.0    .3    .6    .7   1.0   1.3   1.4   1.7    .0    .0    .0
305.  *   2.1   2.9   3.1   2.5   1.4   1.4   1.8   1.7   1.9   2.1    .3    .5    .8   1.0   1.3   1.4   1.7    .0    .0    .0
310.  *   2.0   2.8   3.0   2.3   1.5   1.5   1.7   1.6   2.1   2.1    .3    .5    .8   1.1   1.3   1.4   1.7    .0    .0    .0
315.  *   1.9   2.9   3.0   2.2   1.5   1.3   1.6   1.5   2.2   2.0    .3    .5    .7   1.1   1.2   1.4   1.8    .0    .0    .0
320.  *   1.9   2.8   2.9   1.8   1.5   1.2   1.4   1.7   2.2   1.9    .3    .5    .7   1.1   1.3   1.5   1.8    .0    .0    .0
325.  *   1.9   2.8   2.7   1.8   1.3   1.2   1.3   1.6   2.3   1.9    .3    .5    .6   1.1   1.4   1.5   1.9    .0    .0    .0
330.  *   1.8   2.7   2.8   1.6   1.3   1.2   1.5   1.7   2.1   2.0    .3    .5    .6   1.2   1.4   1.6   1.9    .0    .0    .0
335.  *   1.8   2.7   2.7   1.5   1.2   1.2   1.5   1.8   2.2   1.9    .3    .5    .5   1.3   1.4   1.6   2.0    .0    .0    .0
340.  *   1.8   2.7   2.7   1.6   1.2   1.2   1.9   2.0   2.2   1.8    .2    .5    .6   1.3   1.7   1.7   2.0    .0    .0    .0
345.  *   1.8   2.7   2.7   1.6   1.1   1.2   1.9   2.1   2.2   1.8    .2    .5    .6   1.2   1.7   1.6   2.2    .1    .2    .1
350.  *   1.8   2.7   2.7   1.7   1.3   1.3   2.1   2.2   2.2   1.9    .1    .3    .7   1.3   1.7   1.7   2.2    .2    .3    .2
355.  *   1.8   2.7   2.8   1.9   1.4   1.7   2.2   2.3   2.2   1.8    .1    .2    .6   1.4   1.7   1.7   2.2    .4    .6    .5
360.  *   1.8   2.7   2.8   2.0   1.6   1.4   2.3   2.2   2.1   1.7    .0    .2    .3   1.2   1.5   1.4   2.1    .6    .9   1.0
------*-------------------------------------------------------------------------------------------------------------------------
MAX   *   3.1   3.5   3.6   3.4   1.6   1.7   3.5   2.5   2.5   2.3   3.8   3.8   3.7   2.7   2.5   2.4   2.7   2.9   2.9   3.2
DEGR. *   60    40    15   285     0   355   275   280   275   275   250   250   250   250   240   235   210   170   140   105

1
                                                                                                                   PAGE  5
      JOB: Site 1 Opt 8 2030 AM 1B8AM30.DAT                    RUN: Site 1 Opt 8 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *    .4    .1    .0    .0
```

```
   5.  *    .8    .1    .0    .0
  10.  *   1.2    .2    .1    .0
  15.  *   1.7    .4    .2    .0
  20.  *   2.0    .6    .3    .2
  25.  *   2.0    .7    .4    .3
  30.  *   1.9    .8    .6    .3
  35.  *   1.8    .7    .7    .4
  40.  *   1.8    .8    .6    .4
  45.  *   1.7    .8    .6    .5
  50.  *   1.6    .7    .6    .5
  55.  *   1.5    .8    .7    .5
  60.  *   1.4    .8    .7    .6
  65.  *   1.2   1.0   1.0    .7
  70.  *   1.2   1.3   1.1   1.1
  75.  *   1.5   1.7   1.5   1.3
  80.  *   1.8   2.3   2.1   1.9
  85.  *   2.1   2.8   2.7   2.8
  90.  *   2.5   2.9   2.8   3.2
  95.  *   2.7   3.2   3.2   3.4
 100.  *   2.6   2.9   3.0   3.3
 105.  *   2.3   2.7   3.0   3.3
 110.  *   2.2   2.5   2.9   3.5
 115.  *   1.9   2.3   2.9   3.1
 120.  *   1.9   2.5   2.8   3.0
 125.  *   1.6   2.4   2.9   2.8
 130.  *   1.6   2.4   2.9   2.7
 135.  *   1.6   2.5   2.8   2.5
 140.  *   1.5   2.5   2.6   2.5
 145.  *   1.5   2.5   2.6   2.4
 150.  *   1.6   2.6   2.5   2.2
 155.  *   1.5   2.7   2.5   2.1
 160.  *   1.5   2.7   2.5   2.1
 165.  *   1.4   2.7   2.5   2.2
 170.  *   1.6   2.6   2.6   2.2
 175.  *   1.6   2.5   2.6   2.3
 180.  *   1.6   2.6   2.5   2.2
 185.  *   1.6   2.6   2.5   2.2
 190.  *   1.7   2.5   2.3   2.1
 195.  *   1.8   2.5   2.3   2.1
 200.  *   1.9   2.6   2.2   2.0
 205.  *   1.9   2.6   2.3   2.1
1
                                                                                                                             PAGE  6
      JOB: Site 1 Opt 8 2030 AM 1B8AM30.DAT                     RUN: Site 1 Opt 8 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   2.2   2.7   2.2   2.2
 215.  *   2.2   2.7   2.4   2.4
 220.  *   2.4   2.8   2.4   2.5
 225.  *   2.3   2.7   2.5   2.6
 230.  *   2.4   2.8   2.7   2.6
 235.  *   2.4   2.9   2.8   2.8
 240.  *   2.6   3.0   2.9   3.0
 245.  *   2.5   3.1   3.1   3.0
 250.  *   2.5   3.2   3.2   3.1
 255.  *   2.3   3.2   3.2   3.1
 260.  *   2.0   3.1   3.1   2.9
 265.  *   1.6   2.6   2.6   2.6
 270.  *   1.2   2.1   2.1   2.1
 275.  *    .6   1.5   1.5   1.5
 280.  *    .3   1.0   1.0   1.0
 285.  *    .1    .6    .6    .7
 290.  *    .1    .4    .4    .4
 295.  *    .0    .3    .3    .3
 300.  *    .0    .2    .2    .2
 305.  *    .0    .2    .2    .2
 310.  *    .0    .1    .1    .2
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .1    .1    .1
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .1    .0    .0    .0
 355.  *    .2    .0    .0    .0
 360.  *    .4    .1    .0    .0
 ------*------------------------
 MAX   *   2.7   3.2   3.2   3.5
 DEGR. *   95   255   255   110

 THE HIGHEST CONCENTRATION IS    3.80 PPM AT  250 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS    3.80 PPM AT  250 DEGREES FROM REC11.
 THE 3RD HIGHEST CONCENTRATION IS    3.70 PPM AT  250 DEGREES FROM REC13.
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```
Site 1 Opt 8 2014 PM 1B8PM14.DAT        60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 8 2014 PM                     27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    398511.4  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    296511.4  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       120        59       2.0 2965  102.2 1678 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.    101511.4  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       120        96       2.0 1015  102.2 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    320011.4  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    320011.4  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    320011.4  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    256511.4  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    256511.4  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    256011.4  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       120        80       2.0 2560  102.2 1660 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      1011.4  0.  32   30.
```

```
  1
SB        Rt1 left  AG  1240.  1217.  1058.  1208.      1011.4  0.  32   30.
  2
SB        Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       120       115       2.0   10  102.2 1752 1 3
  1
SB        Rt1 departAG  1056.  1231.   921.  1221.    298011.4  0.  56   30.
  1
SB        Rt1 departAG   921.  1221.    58.  1172.    298011.4  0.  56   30.
  1
EB        Rt28 aprchAG  1226.  2185.  1087.  1547.     78511.4  0.  32   30.
  1
EB        Rt28 aprchAG  1088.  1547.  1072.  1425.     78511.4  0.  56   30.
  1
EB        Rt28 aprchAG  1072.  1425.  1025.  1202.     78511.4  0.  56   30.
  2
EB        Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       120        95       2.0  785  102.2 1523 1 3
  1
EB        Rt28 deparAG  1039.  1194.  1043.  1015.      3011.4  0.  32   30.
  1
WB        Rt28 aprchAG  1052.  1015.  1049.  1190.     16011.4  0.  44   30.
  2
WB        Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       120       104       2.0  160  102.2 1706 1 3
  1
WB        Rt28 deparAG  1069.  1197.  1121.  1424.    128511.4  0.  44   30.
  1
WB        Rt28 deparAG  1121.  1424.  1126.  1570.    128511.4  0.  32   30.
  1
WB        Rt28 deparAG  1126.  1570.  1257.  2180.    128511.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 1 Opt 8 2014 PM 1B8PM14.DAT                     RUN: Site 1 Opt 8 2014 PM
      DATE: 05/10/2009   TIME: 21:41:43.00


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt1 aprch *     58.0    1109.0     581.0    1136.0 *     524.    87. AG   3985.  11.4    .0 56.0
       2. NB        Rt1 thru  *    582.0    1136.0    1083.0    1166.0 *     502.    87. AG   2965.  11.4    .0 56.0
       3. NB        Rt1 thru  *    984.0    1160.0   -1381.0    1023.4 *    2369.   267. AG    404. 100.0    .0 36.0 1.24 120.3
       4. NB        Rt1 left  *    572.0    1167.0    1065.0    1195.0 *     494.    87. AG   1015.  11.4    .0 44.0
       5. NB        Rt1 left  *    983.0    1190.0   -1630.5    1045.2 *    2618.   267. AG    439. 100.0    .0 24.0 1.79 133.0
       6. NB        Rt1 depart*   1085.0    1167.0    1470.0    1188.0 *     386.    87. AG   3200.  11.4    .0 56.0
       7. NB        Rt1 depart*   1470.0    1188.0    1784.0    1227.0 *     316.    83. AG   3200.  11.4    .0 44.0
       8. NB        Rt1 depart*   1784.0    1227.0    2072.0    1272.0 *     291.    81. AG   3200.  11.4    .0 44.0
       9. SB        Rt1 aprch *   2069.0    1311.0    1694.0    1264.0 *     378.   263. AG   2565.  11.4    .0 44.0
      10. SB        Rt1 aprch *   1694.0    1264.0    1395.0    1248.0 *     299.   267. AG   2565.  11.4    .0 44.0
      11. SB        Rt1 th+rt *   1395.0    1248.0    1057.0    1231.0 *     338.   267. AG   2560.  11.4    .0 56.0
      12. SB        Rt1th+rt  *   1144.0    1236.0    5202.1    1435.6 *    4063.    87. AG    548. 100.0    .0 36.0 1.72 206.4
      13. SB        Rt1 left  *   1378.0    1236.0    1241.0    1217.0 *     138.   262. AG     10.  11.4    .0 32.0
      14. SB        Rt1 left  *   1240.0    1217.0    1058.0    1208.0 *     182.   267. AG     10.  11.4    .0 32.0
      15. SB        Rt1 left  *   1147.0    1212.0    1157.4    1212.5 *      10.    87. AG    263. 100.0    .0 12.0  .71    .5
      16. SB        Rt1 depart*   1056.0    1231.0     921.0    1221.0 *     135.   266. AG   2980.  11.4    .0 56.0
      17. SB        Rt1 depart*    921.0    1221.0      58.0    1172.0 *     864.   267. AG   2980.  11.4    .0 56.0
      18. EB        Rt28 aprch*   1226.0    2185.0    1087.0    1547.0 *     653.   192. AG    785.  11.4    .0 32.0
      19. EB        Rt28 aprch*   1088.0    1547.0    1072.0    1425.0 *     123.   187. AG    785.  11.4    .0 56.0
      20. EB        Rt28 aprch*   1072.0    1425.0    1025.0    1202.0 *     228.   192. AG    785.  11.4    .0 56.0
      21. EB        Rt28 aprch*   1043.0    1287.0    1083.9    1486.8 *     204.    12. AG    651. 100.0    .0 36.0  .98  10.4
      22. EB        Rt28 depar*   1039.0    1194.0    1043.0    1015.0 *     179.   179. AG     30.  11.4    .0 32.0
      23. WB        Rt28 aprch*   1052.0    1015.0    1049.0    1190.0 *     175.   359. AG    160.  11.4    .0 44.0
      24. WB        Rt28 aprch*   1050.0    1141.0    1050.4    1095.5 *      45.   180. AG    475. 100.0    .0 24.0  .47   2.3
      25. WB        Rt28 depar*   1069.0    1197.0    1121.0    1424.0 *     233.    13. AG   1285.  11.4    .0 44.0
      26. WB        Rt28 depar*   1121.0    1424.0    1126.0    1570.0 *     146.     2. AG   1285.  11.4    .0 32.0
      27. WB        Rt28 depar*   1126.0    1570.0    1257.0    2180.0 *     624.    12. AG   1285.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 1 Opt 8 2014 PM 1B8PM14.DAT                     RUN: Site 1 Opt 8 2014 PM
      DATE: 05/10/2009   TIME: 21:41:43.00

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 thru  *     120       59       2.0      2965       1678      102.20      1         3
       5. NB        Rt1 left  *     120       96       2.0      1015       1700      102.20      1         3
      12. SB        Rt1th+rt  *     120       80       2.0      2560       1660      102.20      1         3
      15. SB        Rt1 left  *     120      115       2.0        10       1752      102.20      1         3
      21. EB        Rt28 aprch*     120       95       2.0       785       1523      102.20      1         3
      24. WB        Rt28 aprch*     120      104       2.0       160       1706      102.20      1         3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       743.0     1116.0        5.0   *
      2. SE 164 S             *       857.0     1123.0        5.0   *
      3. SE 82 S              *       939.0     1128.0        5.0   *
      4. SE CNR               *      1020.0     1134.0        5.0   *
      5. SE 82 E              *      1022.0     1053.0        5.0   *
      6. NE 82 E              *      1075.0     1056.0        5.0   *
      7. NE CNR               *      1076.0     1137.0        5.0   *
      8. NE 82 N              *      1156.0     1142.0        5.0   *
      9. NE 164 N             *      1238.0     1146.0        5.0   *
     10. NE MID N             *      1341.0     1153.0        5.0   *
     11. NW MID N             *      1453.0     1280.0        5.0   *
     12. NW 164 N             *      1316.0     1272.0        5.0   *
     13. NW 82 N              *      1234.0     1269.0        5.0   *
     14. NW CNR               *      1138.0     1288.0        5.0   *
     15. NW 82 W              *      1137.0     1385.0        5.0   *
     16. NW 164 W             *      1145.0     1466.0        5.0   *
     17. NW MID W             *      1156.0     1626.0        5.0   *
     18. SW MID W             *      1072.0     1597.0        5.0   *
     19. SW 164 W             *      1043.0     1434.0        5.0   *
     20. SW 82 W              *      1026.0     1354.0        5.0   *
     21. SW CNR               *       995.0     1273.0        5.0   *
     22. SW 82 S              *       900.0     1248.0        5.0   *
     23. SW 164 S             *       819.0     1243.0        5.0   *
     24. SW MID S             *       692.0     1235.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 1 Opt 8 2014 PM 1B8PM14.DAT                     RUN: Site 1 Opt 8 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

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(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   3.6   3.7   3.8   2.6   2.0   2.1   2.8   2.9   2.5   2.5    .0    .1    .1    .7    .9    .7   1.0    .1    .4    .7
  5.  *   3.6   3.6   3.8   2.9   1.8   1.8   2.8   2.6   2.4   2.4    .0    .0    .1    .5    .8    .6   1.0    .3    .6    .9
 10.  *   3.5   3.5   4.0   2.9   2.1   1.6   2.5   2.3   2.3   2.3    .0    .0    .0    .5    .7    .6    .9    .3    .7   1.2
 15.  *   3.5   3.7   4.1   2.9   2.3   1.5   2.2   2.3   2.3   2.3    .0    .0    .0    .3    .5    .4    .7    .5   1.2   1.7
 20.  *   3.5   3.8   4.3   2.8   2.2   1.2   2.0   2.3   2.4   2.3    .0    .0    .0    .1    .3    .2    .6    .7   1.5   2.0
 25.  *   3.7   4.0   4.1   2.6   1.8   1.3   2.1   2.3   2.4   2.4    .0    .1    .1    .0    .3    .1    .4    .7   1.6   2.3
 30.  *   3.9   4.1   4.3   2.6   1.8   1.2   2.0   2.5   2.4   2.5    .0    .1    .1    .0    .1    .0    .2    .7   1.8   2.6
 35.  *   3.9   4.4   4.0   2.3   1.8   1.2   2.2   2.5   2.4   2.5    .0    .1    .1    .0    .0    .0    .2    .7   2.0   2.7
 40.  *   4.3   4.5   4.0   2.5   1.7   1.3   2.3   2.6   2.6   2.6    .0    .1    .1    .0    .0    .0    .1    .7   2.1   2.7
 45.  *   4.5   4.7   3.8   2.5   1.7   1.4   2.5   2.7   2.7   2.7    .0    .1    .1    .0    .0    .0    .1    .6   2.3   2.8
 50.  *   4.8   4.6   3.7   2.7   1.7   1.6   2.7   3.0   2.9   2.9    .0    .1    .1    .0    .0    .0    .1    .6   2.3   2.6
 55.  *   5.0   4.8   3.6   2.9   1.7   1.6   2.9   2.9   3.0   2.9    .1    .2    .1    .0    .0    .0    .0    .6   2.4   2.7
 60.  *   5.1   4.5   3.5   3.3   1.7   1.5   3.1   3.1   3.0   3.0    .2    .2    .3    .0    .0    .0    .0    .6   2.4   2.6
 65.  *   5.0   4.6   3.7   3.4   1.8   1.5   3.1   3.3   3.4   3.4    .3    .6    .5    .1    .0    .0    .0    .6   2.4   2.4
 70.  *   5.1   4.6   3.9   3.9   1.7   1.7   3.3   3.5   3.4   3.4    .8    .9    .9    .2    .0    .0    .0    .6   2.4   2.5
 75.  *   5.0   4.5   3.7   4.0   1.6   1.5   3.4   3.5   3.4   3.4   1.4   1.5   1.6    .6    .1    .1    .0    .6   2.3   2.5
 80.  *   4.5   4.2   3.5   3.9   1.3   1.2   3.2   3.3   3.1   3.2   2.2   2.5   2.5   1.1    .2    .1    .1    .7   2.4   2.6
 85.  *   3.7   3.6   3.2   3.7   1.2    .9   2.8   2.8   2.6   2.7   3.0   3.5   3.2   1.8    .5    .2    .1    .7   2.6   3.0
 90.  *   2.8   2.5   2.6   3.3    .6    .5   2.2   2.2   2.1   2.2   3.8   4.1   3.9   2.3    .9    .4    .2    .7   2.8   3.5
 95.  *   2.1   1.8   1.8   2.4    .3    .2   1.3   1.6   1.5   1.6   4.1   4.4   4.4   2.7   1.1    .7    .3    .8   3.2   3.7
100.  *   1.1   1.2   1.1   2.1    .2    .1    .9    .9    .8    .9   4.4   4.7   4.6   3.0   1.1    .9    .3   1.0   3.4   3.9
105.  *    .7    .7    .7   1.7    .1    .0    .5    .5    .6    .6   4.4   4.8   4.8   3.0   1.4    .9    .5   1.2   3.6   3.9
110.  *    .4    .3    .5   1.5    .1    .0    .2    .3    .3    .4   4.2   4.4   4.3   2.8   1.5    .9    .6   1.3   3.5   3.8
115.  *    .2    .2    .3   1.5    .1    .0    .1    .2    .2    .2   4.2   4.1   4.2   2.8   1.4   1.0    .6   1.3   3.2   3.9
120.  *    .1    .1    .2   1.3    .0    .0    .1    .2    .2    .2   3.7   4.1   3.9   2.7   1.3   1.1    .7   1.4   3.4   3.7
125.  *    .1    .1    .2   1.2    .0    .0    .0    .1    .1    .1   3.6   3.8   3.8   2.6   1.3    .9    .7   1.1   3.5   3.5
130.  *    .1    .1    .1   1.2    .0    .0    .0    .1    .1    .1   3.5   3.6   3.6   2.5   1.4    .9    .5   1.3   3.4   3.5
135.  *    .1    .1    .1   1.1    .0    .0    .0    .1    .1    .1   3.3   3.5   3.4   2.4   1.2   1.0    .5   1.2   3.4   3.5
140.  *    .1    .1    .1   1.0    .0    .0    .0    .1    .1    .1   3.2   3.4   3.3   2.3   1.2   1.0    .6   1.4   3.6   3.3
145.  *    .1    .1    .1    .9    .0    .0    .0    .1    .1    .1   3.1   3.2   3.2   2.3   1.2    .8    .7   1.4   3.6   3.2
150.  *    .1    .1    .1    .7    .0    .0    .0    .1    .1    .1   3.1   3.1   3.1   2.2   1.1    .8    .7   1.5   3.6   3.2
155.  *    .0    .0    .0    .5    .0    .0    .0    .0    .0    .1   3.0   3.1   3.1   2.1   1.1    .9    .6   1.6   3.4   3.0
160.  *    .0    .0    .0    .4    .0    .0    .0    .0    .0    .0   3.1   3.1   3.1   2.1   1.2    .8    .7   1.6   3.3   2.9
165.  *    .0    .0    .0    .3    .0    .0    .0    .0    .0    .0   3.0   3.1   3.1   2.0   1.1    .8    .8   1.8   3.4   2.8
170.  *    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0   3.1   3.1   3.1   1.8   1.1    .8    .9   1.7   3.4   2.7
175.  *    .0    .0    .0    .1    .0    .0    .1    .0    .0    .0   3.1   3.2   3.2   1.7   1.1   1.0   1.0   1.9   3.1   2.4
180.  *    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0   3.0   3.2   3.2   1.6   1.0    .9   1.1   2.0   3.1   2.4
185.  *    .0    .0    .0    .0    .0    .0    .3    .0    .0    .0   3.1   3.1   3.1   1.5   1.1   1.2   1.2   1.9   2.7   2.0
190.  *    .0    .0    .0    .0    .0    .0    .4    .0    .0    .0   3.1   3.1   3.1   1.5   1.2   1.5   1.7   1.5   2.0   1.7
195.  *    .0    .0    .0    .0    .0    .0    .5    .0    .0    .0   2.9   3.1   3.1   1.5   1.3   1.6   2.1   1.5   1.7   1.6
200.  *    .0    .0    .0    .1    .0    .0    .7    .1    .0    .1   3.0   3.1   3.1   1.5   1.7   2.0   2.1   1.3   1.8   1.5
205.  *    .1    .1    .1    .1    .0    .0    .9    .1    .1    .1   3.1   3.1   3.1   1.3   2.0   2.2   2.3   1.3   1.5   1.7
1
                                                                                                                     PAGE  4
     JOB: Site 1 Opt 8 2014 PM 1B8PM14.DAT                     RUN: Site 1 Opt 8 2014 PM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .1    .1    .1    .1    .0    .0   1.0    .1    .1    .1   3.3   3.3   3.2   1.7   2.2   2.7   2.2   1.1   1.6   1.5
215.  *    .1    .1    .1    .1    .0    .1   1.1    .1    .1    .1   3.3   3.3   3.4   1.7   2.1   2.9   2.3   1.0   1.5   1.7
220.  *    .1    .1    .1    .1    .0    .1   1.2    .1    .1    .1   3.4   3.5   3.4   2.0   2.7   2.9   2.1    .9   1.4   1.6
225.  *    .1    .1    .1    .1    .0    .1   1.3    .1    .1    .1   3.6   3.6   3.5   2.2   2.9   3.2   1.9    .8   1.4   1.7
230.  *    .1    .1    .1    .1    .0    .1   1.4    .2    .1    .2   3.7   3.9   3.6   2.4   3.0   3.3   1.8    .8   1.3   1.8
235.  *    .1    .2    .2    .2    .0    .1   1.5    .2    .2    .2   3.9   4.0   4.1   2.8   3.4   3.4   1.7    .9   1.3   1.8
240.  *    .3    .3    .3    .3    .0    .1   1.6    .5    .2    .3   4.2   4.3   4.4   3.0   3.4   3.2   1.5    .8   1.4   1.9
245.  *    .5    .6    .5    .5    .0    .1   1.8    .6    .6    .5   4.4   4.9   4.5   3.4   3.4   3.0   1.3    .7   1.3   1.9
250.  *    .9    .9   1.0   1.1    .0    .1   2.3   1.3   1.0    .8   4.8   4.9   4.6   3.5   3.4   3.0   1.3    .6   1.2   1.8
255.  *   1.7   1.7   1.8   1.8    .3    .4   2.9   1.8   1.6   1.6   5.0   4.9   4.7   3.6   3.1   2.5   1.3    .6   1.0   1.6
260.  *   2.5   2.5   2.8   3.0    .5    .7   3.9   2.9   2.4   2.2   4.7   4.9   4.4   3.2   2.9   2.5    .9    .2    .8   1.2
265.  *   3.4   3.7   3.8   4.0   1.1   1.2   4.6   3.5   3.2   3.0   4.2   4.3   4.0   3.0   2.6   2.3    .9    .2    .6    .9
270.  *   4.4   4.5   4.6   4.8   1.5   1.6   5.1   4.0   3.6   3.5   3.5   3.7   3.2   2.4   2.3   1.9    .7    .0    .2    .6
275.  *   5.0   5.0   5.1   5.1   1.8   2.0   5.3   4.2   3.6   3.5   2.3   2.7   2.6   1.8   2.1   1.6    .7    .0    .1    .3
280.  *   5.2   5.4   5.4   5.2   2.1   2.3   5.3   4.0   3.6   3.6   1.5   1.8   1.8   1.5   1.8   1.5    .7    .0    .0    .0
285.  *   5.2   5.3   5.4   5.1   2.4   2.5   4.9   3.8   3.5   3.5   1.0   1.3   1.4   1.2   1.7   1.4    .7    .0    .0    .0
290.  *   4.9   4.9   5.0   4.8   2.2   2.3   4.4   3.4   3.1   3.1    .6   1.0   1.1   1.2   1.7   1.2    .7    .0    .0    .0
295.  *   4.7   4.9   4.9   4.3   2.2   2.4   3.9   3.1   2.9   3.2    .4    .8   1.0   1.2   1.8   1.1    .7    .0    .0    .0
300.  *   4.5   4.6   4.7   4.0   2.1   2.2   3.3   2.6   2.9   3.0    .2    .6    .9   1.2   1.7   1.0    .7    .0    .0    .0
305.  *   4.4   4.4   4.4   3.6   2.1   2.2   2.9   2.5   2.7   3.0    .1    .5    .8   1.3   1.7    .9    .7    .0    .0    .0
310.  *   4.1   4.2   4.3   3.4   1.8   2.1   2.5   2.3   2.7   3.0    .1    .6    .8   1.3   1.7    .8    .7    .0    .0    .0
315.  *   4.1   4.1   4.1   3.1   1.9   2.0   2.4   2.4   2.7   3.0    .0    .4    .6   1.3   1.5    .7    .7    .0    .0    .0
320.  *   3.7   3.7   3.7   2.7   1.9   1.9   2.2   2.4   2.7   2.8    .1    .3    .7   1.3   1.5    .7    .8    .0    .0    .0
325.  *   3.7   3.7   3.7   2.5   1.7   1.9   2.1   2.3   2.9   2.7    .1    .3    .6   1.4   1.5    .7    .8    .0    .0    .0
330.  *   3.6   3.6   3.7   2.3   1.7   2.1   2.2   2.5   2.7   2.5    .1    .3    .5   1.5   1.4    .7    .8    .0    .0    .0
335.  *   3.5   3.5   3.5   2.0   1.5   2.0   2.2   2.4   2.7   2.6    .1    .2    .4   1.5   1.4    .8    .9    .0    .0    .0
340.  *   3.5   3.5   3.7   2.2   1.5   2.1   2.5   2.5   2.6   2.4    .1    .2    .4   1.3   1.2    .8    .9    .0    .0    .0
345.  *   3.5   3.5   3.6   2.1   1.4   2.1   2.6   2.6   2.5   2.4    .1    .2    .4   1.2   1.3    .8    .9    .0    .1    .0
350.  *   3.6   3.7   3.8   2.3   1.5   2.0   2.7   2.9   2.6   2.6    .0    .1    .2   1.1   1.2    .8   1.0    .0    .1    .1
355.  *   3.6   3.7   3.7   2.4   1.8   2.1   2.8   2.9   2.5   2.6    .0    .1    .2    .9   1.2    .9   1.0    .1    .2    .3
360.  *   3.6   3.7   3.8   2.6   2.0   2.1   2.8   2.9   2.5   2.5    .0    .1    .1    .7    .9    .7   1.0    .1    .4    .7
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   5.2   5.4   5.4   5.2   2.4   2.5   5.3   4.2   3.6   3.6   5.0   4.9   4.8   3.6   3.4   3.4   2.3   2.0   3.6   3.9
DEGR. *  280   280   280   280   285   285   275   275   280   280   255   260   105   255   235   235   205   180   105   105

1
                                                                                                                     PAGE  5
     JOB: Site 1 Opt 8 2014 PM 1B8PM14.DAT                     RUN: Site 1 Opt 8 2014 PM

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *    .2    .0    .0    .0
```

```
   5.  *    .5    .0    .0    .0
  10.  *    .8    .0    .0    .0
  15.  *   1.2    .1    .0    .0
  20.  *   1.6    .3    .1    .1
  25.  *   1.9    .4    .2    .1
  30.  *   2.0    .5    .4    .1
  35.  *   2.0    .5    .4    .2
  40.  *   2.0    .8    .4    .2
  45.  *   2.1    .9    .5    .3
  50.  *   1.9    .9    .4    .3
  55.  *   1.8    .9    .6    .4
  60.  *   1.6    .9    .8    .5
  65.  *   1.5   1.1   1.0    .7
  70.  *   1.5   1.2   1.3   1.3
  75.  *   1.8   1.9   1.7   1.6
  80.  *   2.4   2.7   2.4   2.3
  85.  *   2.7   3.1   3.2   3.1
  90.  *   3.1   3.4   3.5   3.6
  95.  *   3.2   3.6   3.7   3.9
 100.  *   3.2   3.3   3.7   4.0
 105.  *   2.8   3.2   3.7   4.0
 110.  *   2.6   3.0   3.4   3.8
 115.  *   2.2   2.9   3.6   3.9
 120.  *   2.2   2.9   3.5   3.7
 125.  *   2.0   2.8   3.6   3.7
 130.  *   1.9   2.9   3.4   3.6
 135.  *   1.8   2.9   3.2   3.4
 140.  *   1.9   3.0   3.1   3.3
 145.  *   1.9   3.0   3.1   3.1
 150.  *   1.9   3.0   3.0   3.1
 155.  *   1.9   3.0   3.0   3.0
 160.  *   1.9   3.0   2.9   2.9
 165.  *   1.7   3.1   3.0   3.1
 170.  *   1.9   3.1   3.1   3.1
 175.  *   2.0   3.1   3.1   3.1
 180.  *   2.1   3.1   3.1   3.1
 185.  *   1.9   3.1   3.1   3.1
 190.  *   2.1   3.1   2.9   3.1
 195.  *   2.2   3.0   2.9   2.9
 200.  *   2.3   3.1   3.0   3.0
 205.  *   2.4   3.1   3.1   3.2
1
                                                                                                                PAGE  6
      JOB: Site 1 Opt 8 2014 PM 1B8PM14.DAT                    RUN: Site 1 Opt 8 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   2.6   3.1   3.1   3.2
 215.  *   2.7   3.2   3.2   3.4
 220.  *   2.8   3.3   3.4   3.4
 225.  *   2.9   3.5   3.6   3.6
 230.  *   3.1   3.8   3.6   3.8
 235.  *   3.2   4.0   3.9   3.9
 240.  *   3.2   4.2   4.1   4.2
 245.  *   3.4   4.1   4.2   4.2
 250.  *   3.5   4.4   4.4   4.5
 255.  *   3.3   4.3   4.3   4.2
 260.  *   2.9   4.0   4.0   3.8
 265.  *   2.3   3.4   3.4   3.3
 270.  *   1.6   2.7   2.6   2.6
 275.  *   1.0   1.7   1.7   1.8
 280.  *    .4   1.1   1.1   1.2
 285.  *    .2    .6    .6    .6
 290.  *    .1    .3    .3    .4
 295.  *    .0    .2    .2    .3
 300.  *    .0    .2    .2    .2
 305.  *    .0    .1    .1    .2
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .0    .1    .1
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .0    .0    .0    .0
 355.  *    .1    .0    .0    .0
 360.  *    .2    .0    .0    .0
 ------*------------------------
 MAX   *   3.5   4.4   4.4   4.5
 DEGR. *  250   250   250   250

 THE HIGHEST CONCENTRATION IS    5.40 PPM AT  280 DEGREES FROM REC2 .
 THE 2ND HIGHEST CONCENTRATION IS    5.40 PPM AT  280 DEGREES FROM REC3 .
 THE 3RD HIGHEST CONCENTRATION IS    5.30 PPM AT  275 DEGREES FROM REC7 .
```

```
Site 1 Opt 8 2030 PM 1B8PM30.DAT        60.0321.0.0000.000240.30480000    1
1
SE MID S                  743.     1116.       5.0
SE 164 S                  857.     1123.       5.0
SE 82 S                   939.     1128.       5.0
SE CNR                   1020.     1134.       5.0
SE 82 E                  1022.     1053.       5.0
NE 82 E                  1075.     1056.       5.0
NE CNR                   1076.     1137.       5.0
NE 82 N                  1156.     1142.       5.0
NE 164 N                 1238.     1146.       5.0
NE MID N                 1341.     1153.       5.0
NW MID N                 1453.     1280.       5.0
NW 164 N                 1316.     1272.       5.0
NW 82 N                  1234.     1269.       5.0
NW CNR                   1138.     1288.       5.0
NW 82 W                  1137.     1385.       5.0
NW 164 W                 1145.     1466.       5.0
NW MID W                 1156.     1626.       5.0
SW MID W                 1072.     1597.       5.0
SW 164 W                 1043.     1434.       5.0
SW 82 W                  1026.     1354.       5.0
SW CNR                    995.     1273.       5.0
SW 82 S                   900.     1248.       5.0
SW 164 S                  819.     1243.       5.0
SW MID S                  692.     1235.       5.0
Site 1 Opt 8 2030 PM                     27  1   0
  1
NB        Rt1 aprch AG    58.  1109.   581.  1136.    3665 9.2  0.  56   30.
  1
NB        Rt1 thru  AG   582.  1136.  1083.  1166.    2720 9.2  0.  56   30.
  2
NB        Rt1 thru  AG   984.  1160.   603.  1138.      0.  36   3
       125        44       2.0 2720   84.1 1678 1 3
  1
NB        Rt1 left  AG   572.  1167.  1065.  1195.     940 9.2  0.  44   30.
  2
NB        Rt1 left  AG   983.  1190.   604.  1169.      0.  24   2
       125        98       2.0  940   84.1 1700 1 3
  1
NB        Rt1 departAG  1085.  1167.  1470.  1188.    2995 9.2  0.  56   30.
  1
NB        Rt1 departAG  1470.  1188.  1784.  1227.    2995 9.2  0.  44   30.
  1
NB        Rt1 departAG  1784.  1227.  2072.  1272.    2995 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  2069.  1311.  1694.  1264.    2490 9.2  0.  44   30.
  1
SB        Rt1 aprch AG  1694.  1264.  1395.  1248.    2490 9.2  0.  44   30.
  1
SB        Rt1 th+rt AG  1395.  1248.  1057.  1231.    2485 9.2  0.  56   30.
  2
SB        Rt1th+rt  AG  1144.  1236.  1388.  1248.      0.  36   3
       125        68       2.0 2485   84.1 1654 1 3
  1
SB        Rt1 left  AG  1378.  1236.  1241.  1217.      10 9.2  0.  32   30.
```

```
  1
SB        Rt1 left  AG  1240.  1217.  1058.  1208.      10 9.2  0.  32   30.
  2
SB        Rt1 left  AG  1147.  1212.  1237.  1216.      0.  12   1
       125       122       2.0   10   84.1 1752 1 3
  1
SB        Rt1 departAG  1056.  1231.   921.  1221.    2780 9.2  0.  56   30.
  1
SB        Rt1 departAG   921.  1221.    58.  1172.    2780 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1226.  2185.  1087.  1547.     755 9.2  0.  32   30.
  1
EB        Rt28 aprchAG  1088.  1547.  1072.  1425.     755 9.2  0.  56   30.
  1
EB        Rt28 aprchAG  1072.  1425.  1025.  1202.     755 9.2  0.  56   30.
  2
EB        Rt28 aprchAG  1043.  1287.  1068.  1409.      0.  36   3
       125       109       2.0  755   84.1 1523 1 3
  1
EB        Rt28 deparAG  1039.  1194.  1043.  1015.      30 9.2  0.  32   30.
  1
WB        Rt28 aprchAG  1052.  1015.  1049.  1190.     160 9.2  0.  44   30.
  2
WB        Rt28 aprchAG  1050.  1141.  1051.  1019.      0.  24   2
       125       116       2.0  160   84.1 1706 1 3
  1
WB        Rt28 deparAG  1069.  1197.  1121.  1424.    1265 9.2  0.  44   30.
  1
WB        Rt28 deparAG  1121.  1424.  1126.  1570.    1265 9.2  0.  32   30.
  1
WB        Rt28 deparAG  1126.  1570.  1257.  2180.    1265 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 1 Opt 8 2030 PM 1B8PM30.DAT                     RUN: Site 1 Opt 8 2030 PM
      DATE: 05/10/2009   TIME: 21:56:11.10


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH     EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt1 aprch *     58.0    1109.0     581.0    1136.0 *      524.    87. AG    3665.    9.2    .0 56.0
       2. NB        Rt1 thru  *    582.0    1136.0    1083.0    1166.0 *      502.    87. AG    2720.    9.2    .0 56.0
       3. NB        Rt1 thru  *    984.0    1160.0     747.8    1146.4 *      237.   267. AG     238.  100.0    .0 36.0  .88  12.0
       4. NB        Rt1 left  *    572.0    1167.0    1065.0    1195.0 *      494.    87. AG     940.    9.2    .0 44.0
       5. NB        Rt1 left  *    983.0    1190.0    -950.4    1082.9 *     1936.   267. AG     354.  100.0    .0 24.0 1.51  98.4
       6. NB        Rt1 depart*   1085.0    1167.0    1470.0    1188.0 *      386.    87. AG    2995.    9.2    .0 56.0
       7. NB        Rt1 depart*   1470.0    1188.0    1784.0    1227.0 *      316.    83. AG    2995.    9.2    .0 44.0
       8. NB        Rt1 depart*   1784.0    1227.0    2072.0    1272.0 *      291.    81. AG    2995.    9.2    .0 44.0
       9. SB        Rt1 aprch *   2069.0    1311.0    1694.0    1264.0 *      378.   263. AG    2490.    9.2    .0 44.0
      10. SB        Rt1 aprch *   1694.0    1264.0    1395.0    1248.0 *      299.   267. AG    2490.    9.2    .0 44.0
      11. SB        Rt1 th+rt *   1395.0    1248.0    1057.0    1231.0 *      338.   267. AG    2485.    9.2    .0 56.0
      12. SB        Rt1th+rt  *   1144.0    1236.0    2851.8    1320.0 *     1710.    87. AG     368.  100.0    .0 36.0 1.18  86.9
      13. SB        Rt1 left  *   1378.0    1236.0    1241.0    1217.0 *      138.   262. AG      10.    9.2    .0 32.0
      14. SB        Rt1 left  *   1240.0    1217.0    1058.0    1208.0 *      182.   267. AG      10.    9.2    .0 32.0
      15. SB        Rt1 left  *   1147.0    1212.0    1154.9    1212.4 *        8.    87. AG     220.  100.0    .0 12.0 -.71    .4
      16. SB        Rt1 depart*   1056.0    1231.0     921.0    1221.0 *      135.   266. AG    2780.    9.2    .0 56.0
      17. SB        Rt1 depart*    921.0    1221.0      58.0    1172.0 *      864.   267. AG    2780.    9.2    .0 56.0
      18. EB        Rt28 aprch*   1226.0    2185.0    1087.0    1547.0 *      653.   192. AG     755.    9.2    .0 32.0
      19. EB        Rt28 aprch*   1088.0    1547.0    1072.0    1425.0 *      123.   187. AG     755.    9.2    .0 56.0
      20. EB        Rt28 aprch*   1072.0    1425.0    1025.0    1202.0 *      228.   192. AG     755.    9.2    .0 56.0
      21. EB        Rt28 aprch*   1043.0    1287.0    1300.8    2545.2 *     1284.    12. AG     590.  100.0    .0 36.0 1.72  65.2
      22. EB        Rt28 depar*   1039.0    1194.0    1043.0    1015.0 *      179.   179. AG      30.    9.2    .0 32.0
      23. WB        Rt28 aprch*   1052.0    1015.0    1049.0    1190.0 *      175.   359. AG     160.    9.2    .0 44.0
      24. WB        Rt28 aprch*   1050.0    1141.0    1051.8     924.7 *      216.   180. AG     419.  100.0    .0 24.0 1.18  11.0
      25. WB        Rt28 depar*   1069.0    1197.0    1121.0    1424.0 *      233.    13. AG    1265.    9.2    .0 44.0
      26. WB        Rt28 depar*   1121.0    1424.0    1126.0    1570.0 *      146.     2. AG    1265.    9.2    .0 32.0
      27. WB        Rt28 depar*   1126.0    1570.0    1257.0    2180.0 *      624.    12. AG    1265.    9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 1 Opt 8 2030 PM 1B8PM30.DAT                     RUN: Site 1 Opt 8 2030 PM
      DATE: 05/10/2009   TIME: 21:56:11.10

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt1 thru  *     125      44       2.0      2720       1678      84.10      1        3
       5. NB        Rt1 left  *     125      98       2.0       940       1700      84.10      1        3
      12. SB        Rt1th+rt  *     125      68       2.0      2485       1654      84.10      1        3
      15. SB        Rt1 left  *     125     122       2.0        10       1752      84.10      1        3
      21. EB        Rt28 aprch*     125     109       2.0       755       1523      84.10      1        3
      24. WB        Rt28 aprch*     125     116       2.0       160       1706      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*-------------------------------------*
      1. SE MID S             *       743.0     1116.0        5.0   *
      2. SE 164 S             *       857.0     1123.0        5.0   *
      3. SE 82 S              *       939.0     1128.0        5.0   *
      4. SE CNR               *      1020.0     1134.0        5.0   *
      5. SE 82 E              *      1022.0     1053.0        5.0   *
      6. NE 82 E              *      1075.0     1056.0        5.0   *
      7. NE CNR               *      1076.0     1137.0        5.0   *
      8. NE 82 N              *      1156.0     1142.0        5.0   *
      9. NE 164 N             *      1238.0     1146.0        5.0   *
     10. NE MID N             *      1341.0     1153.0        5.0   *
     11. NW MID N             *      1453.0     1280.0        5.0   *
     12. NW 164 N             *      1316.0     1272.0        5.0   *
     13. NW 82 N              *      1234.0     1269.0        5.0   *
     14. NW CNR               *      1138.0     1288.0        5.0   *
     15. NW 82 W              *      1137.0     1385.0        5.0   *
     16. NW 164 W             *      1145.0     1466.0        5.0   *
     17. NW MID W             *      1156.0     1626.0        5.0   *
     18. SW MID W             *      1072.0     1597.0        5.0   *
     19. SW 164 W             *      1043.0     1434.0        5.0   *
     20. SW 82 W              *      1026.0     1354.0        5.0   *
     21. SW CNR               *       995.0     1273.0        5.0   *
     22. SW 82 S              *       900.0     1248.0        5.0   *
     23. SW 164 S             *       819.0     1243.0        5.0   *
     24. SW MID S             *       692.0     1235.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 1 Opt 8 2030 PM 1B8PM30.DAT                     RUN: Site 1 Opt 8 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
```

```
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   2.2   2.8   3.0   2.4   1.8   2.0   2.7   2.5   2.3   2.0    .1    .3    .6   1.4   1.9   1.8   2.6    .8   1.0    .9
  5.  *   2.3   2.9   3.0   2.8   2.1   2.0   2.7   2.4   2.1   1.8    .1    .2    .4   1.2   1.6   1.6   2.4   1.2   1.6   1.6
 10.  *   2.4   3.0   3.2   2.9   2.2   1.6   2.5   2.1   1.9   1.7    .0    .1    .2    .9   1.4   1.3   2.0   1.7   2.1   2.1
 15.  *   2.4   3.0   3.5   2.7   2.4   1.4   2.2   1.9   1.8   1.7    .0    .0    .1    .5    .9   1.0   1.6   2.2   2.5   2.6
 20.  *   2.7   3.3   3.6   2.5   2.4   1.2   1.9   1.8   1.7   1.7    .0    .0    .1    .2    .6    .5   1.1   2.5   3.0   2.9
 25.  *   2.9   3.4   3.7   2.2   2.3    .9   1.6   1.9   1.8   1.7    .0    .0    .0    .1    .3    .3    .7   2.7   3.1   3.1
 30.  *   3.0   3.6   3.4   1.9   2.1    .9   1.7   1.8   1.8   1.8    .0    .1    .1    .0    .1    .1    .4   2.8   3.0   3.0
 35.  *   3.1   3.3   3.2   2.0   2.2    .9   1.7   1.8   1.7   1.8    .0    .1    .1    .0    .0    .0    .2   2.7   3.0   2.8
 40.  *   3.2   3.7   2.9   1.8   2.0    .9   1.6   1.9   1.8   2.0    .0    .1    .1    .0    .0    .0    .1   2.6   2.8   2.7
 45.  *   3.3   3.6   2.9   1.9   2.0    .9   1.8   2.0   2.0   2.0    .0    .1    .1    .0    .0    .0    .1   2.5   2.6   2.6
 50.  *   3.4   3.6   2.7   2.1   2.0   1.1   2.0   2.1   2.1   2.2    .0    .1    .1    .0    .0    .0    .0   2.4   2.5   2.4
 55.  *   3.3   3.4   2.7   2.1   2.2   1.1   2.0   2.2   2.1   2.1    .0    .1    .1    .0    .0    .0    .0   2.2   2.4   2.3
 60.  *   3.6   3.4   2.5   2.1   2.2   1.1   2.3   2.2   2.3   2.3    .2    .2    .2    .0    .0    .0    .0   2.1   2.3   2.3
 65.  *   3.7   3.2   2.7   2.4   2.2   1.2   2.2   2.3   2.3   2.4    .3    .4    .4    .1    .0    .0    .0   2.1   2.2   2.2
 70.  *   3.4   3.2   2.7   2.7   2.2   1.1   2.5   2.6   2.6   2.5    .6    .6    .6    .1    .0    .0    .0   2.0   2.2   2.1
 75.  *   3.2   3.1   2.6   2.9   2.3   1.0   2.4   2.5   2.5   2.4    .9   1.2   1.0    .4    .0    .0    .0   2.0   2.1   2.2
 80.  *   3.2   3.0   2.6   3.0   2.0    .9   2.3   2.4   2.3   2.3   1.6   1.8   1.7    .7    .1    .0    .0   2.0   2.1   2.2
 85.  *   2.6   2.4   2.1   2.7   1.5    .4   2.1   2.2   1.8   1.9   2.0   2.3   2.2   1.2    .2    .1    .0   2.0   2.1   2.3
 90.  *   2.1   1.8   1.9   2.3   1.4    .3   1.3   1.6   1.6   1.6   2.6   2.7   2.9   1.7    .5    .2    .0   2.1   2.3   2.9
 95.  *   1.4   1.3   1.2   1.8   1.2    .1    .9   1.0    .9   1.0   2.8   3.1   3.2   1.9    .8    .3    .1   2.1   2.7   3.1
100.  *   1.0   1.0   1.0   1.5   1.1    .0    .6    .7    .6    .6   3.1   3.4   3.3   2.2    .8    .5    .1   2.2   2.8   3.2
105.  *    .6    .6    .7   1.4   1.1    .0    .3    .3    .3    .4   3.1   3.4   3.1   1.9   1.0    .7    .2   2.4   2.9   3.1
110.  *    .4    .5    .6   1.2   1.1    .0    .2    .2    .2    .2   3.0   3.1   3.0   2.1    .9    .7    .3   2.3   2.8   3.1
115.  *    .3    .4    .5   1.1   1.1    .0    .1    .2    .1    .2   2.7   3.0   3.0   2.0    .9    .6    .4   2.5   2.9   3.2
120.  *    .2    .4    .5   1.2   1.1    .0    .1    .1    .1    .1   2.7   2.9   2.9   2.0    .9    .5    .6   2.4   2.9   3.0
125.  *    .2    .4    .5   1.2   1.1    .0    .0    .1    .1    .1   2.6   2.6   2.7   1.9   1.0    .7    .5   2.4   3.1   3.0
130.  *    .2    .3    .5   1.2   1.1    .0    .0    .1    .1    .1   2.5   2.7   2.6   1.8   1.0    .7    .4   2.5   2.8   3.0
135.  *    .1    .3    .5   1.3   1.2    .0    .0    .1    .1    .1   2.4   2.5   2.5   1.8    .9    .7    .4   2.6   2.9   2.9
140.  *    .1    .2    .5   1.4   1.2    .0    .0    .1    .1    .1   2.2   2.3   2.4   1.7    .9    .7    .5   2.5   2.9   2.9
145.  *    .1    .2    .4   1.4   1.2    .0    .0    .1    .1    .1   2.2   2.2   2.2   1.6    .9    .7    .6   2.7   2.9   2.7
150.  *    .0    .1    .3   1.3   1.2    .0    .0    .0    .0    .1   2.3   2.2   2.2   1.6    .9    .7    .5   2.7   2.9   2.8
155.  *    .0    .0    .2   1.2   1.1    .0    .1    .0    .0    .0   2.2   2.2   2.2   1.5    .8    .7    .4   2.9   2.9   2.8
160.  *    .0    .0    .2   1.2   1.0    .1    .1    .0    .0    .0   2.2   2.2   2.2   1.5    .8    .7    .4   2.8   3.1   2.5
165.  *    .0    .0    .1   1.1    .9    .2    .2    .0    .0    .0   2.2   2.2   2.2   1.4    .9    .7    .5   2.8   3.2   2.5
170.  *    .0    .0    .1    .9    .7    .3    .4    .0    .0    .0   2.2   2.2   2.2   1.3    .8    .7    .7   2.8   3.0   2.4
175.  *    .0    .0    .0    .7    .6    .4    .5    .0    .0    .0   2.2   2.3   2.3   1.3    .9    .9    .7   2.9   2.8   2.3
180.  *    .0    .0    .0    .6    .4    .6    .7    .0    .0    .0   2.2   2.3   2.3   1.2   1.0    .9   1.0   2.7   2.5   1.8
185.  *    .0    .0    .0    .4    .3    .8    .9    .0    .0    .0   2.3   2.2   2.2   1.2   1.0   1.0   1.4   2.3   2.4   1.7
190.  *    .0    .0    .0    .2    .2   1.0   1.1    .1    .0    .0   2.2   2.2   2.1   1.3   1.0   1.3   1.7   2.0   1.9   1.5
195.  *    .0    .0    .0    .1    .1   1.2   1.4    .1    .0    .0   2.2   2.2   2.2   1.3   1.1   1.5   2.2   1.5   1.6   1.3
200.  *    .0    .0    .0    .1    .0   1.3   1.4    .2    .0    .0   2.2   2.2   2.3   1.2   1.3   1.5   2.5   1.2   1.5   1.2
205.  *    .0    .0    .0    .1    .0   1.3   1.6    .4    .1    .1   2.2   2.3   2.4   1.3   1.6   1.9   2.9    .8   1.2   1.3
1
                                                                                                                        PAGE  4
     JOB: Site 1 Opt 8 2030 PM 1B8PM30.DAT                    RUN: Site 1 Opt 8 2030 PM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .1    .1    .1    .1    .0   1.4   1.6    .4    .2    .1   2.3   2.3   2.4   1.2   1.7   2.2   2.8    .7   1.0   1.2
215.  *    .1    .1    .1    .1    .0   1.4   1.6    .5    .2    .1   2.5   2.5   2.5   1.5   1.9   2.2   2.7    .6    .9   1.1
220.  *    .1    .1    .1    .1    .0   1.3   1.5    .5    .3    .1   2.6   2.7   2.7   1.7   2.1   2.4   2.9    .6    .9   1.3
225.  *    .1    .1    .1    .1    .0   1.3   1.5    .6    .3    .2   2.8   2.9   2.7   1.6   2.1   2.5   2.9    .6    .9   1.1
230.  *    .1    .1    .1    .1    .0   1.2   1.4    .6    .4    .2   2.8   2.9   2.8   1.9   2.2   2.8   2.7    .6   1.0   1.1
235.  *    .1    .1    .1    .1    .0   1.2   1.3    .6    .4    .2   2.9   3.0   2.9   2.1   2.5   2.6   2.5    .5    .9   1.3
240.  *    .1    .2    .2    .2    .0   1.2   1.3    .7    .4    .4   3.1   3.2   3.0   2.1   2.5   2.4   2.4    .4    .8   1.3
245.  *    .3    .2    .3    .4    .0   1.2   1.5    .6    .6    .5   3.1   3.3   3.3   2.4   2.6   2.4   2.3    .4    .7   1.1
250.  *    .4    .5    .6    .7    .0   1.2   1.8   1.0    .8    .8   3.6   3.5   3.2   2.5   2.2   2.2   2.3    .4    .6   1.2
255.  *    .7   1.0   1.1   1.1    .1   1.3   2.1   1.5   1.4   1.2   3.5   3.7   3.3   2.3   2.2   2.0   2.1    .2    .5   1.0
260.  *   1.3   1.3   1.6   1.7    .2   1.4   2.4   1.9   1.7   1.6   3.4   3.5   3.1   2.2   2.1   1.9   2.0    .1    .4    .7
265.  *   1.8   2.1   2.2   2.3    .5   1.8   3.1   2.3   2.1   1.9   2.8   3.1   2.8   2.0   1.9   1.7   1.9    .0    .2    .5
270.  *   2.1   2.5   2.7   2.9    .7   2.1   3.4   2.7   2.3   2.4   2.2   2.6   2.3   1.7   1.7   1.7   1.9    .0    .1    .2
275.  *   2.5   2.9   3.1   3.4   1.1   2.3   3.7   3.0   2.4   2.6   1.6   1.9   1.7   1.5   1.6   1.5   1.9    .0    .0    .2
280.  *   2.6   3.1   3.5   3.4   1.2   2.5   3.6   2.8   2.5   2.7   1.1   1.3   1.2   1.2   1.5   1.5   1.9    .0    .0    .0
285.  *   2.7   3.4   3.6   3.5   1.5   2.6   3.4   2.8   2.4   2.6    .7    .8   1.1   1.2   1.5   1.5   1.9    .0    .0    .0
290.  *   2.5   3.3   3.4   3.1   1.4   2.7   3.0   2.1   2.4   2.4    .5    .7    .8   1.1   1.5   1.5   1.9    .0    .0    .0
295.  *   2.6   3.3   3.3   3.0   1.5   2.8   2.6   2.1   2.1   2.5    .3    .6    .7   1.2   1.5   1.6   1.9    .0    .0    .0
300.  *   2.5   3.2   3.2   2.8   1.5   2.7   2.3   2.0   2.2   2.2    .3    .6    .8   1.2   1.5   1.5   1.9    .0    .0    .0
305.  *   2.3   3.2   3.2   2.7   1.5   2.6   2.2   2.0   2.0   2.4    .3    .6    .7   1.2   1.6   1.5   1.9    .0    .0    .0
310.  *   2.1   2.9   2.9   2.3   1.5   2.7   1.9   1.8   2.1   2.3    .3    .5    .7   1.2   1.5   1.6   1.9    .0    .0    .0
315.  *   2.1   2.8   2.9   2.3   1.3   2.7   1.8   1.8   2.2   2.3    .3    .6    .7   1.2   1.5   1.6   1.9    .0    .0    .0
320.  *   2.0   2.7   2.7   2.0   1.4   2.5   1.6   1.8   2.1   2.2    .3    .6    .7   1.3   1.5   1.6   1.9    .0    .0    .0
325.  *   2.0   2.7   2.7   1.8   1.3   2.5   1.5   2.0   2.3   2.2    .4    .5    .8   1.3   1.6   1.7   2.2    .0    .0    .0
330.  *   2.0   2.7   2.7   1.9   1.2   2.4   1.6   2.0   2.2   2.2    .4    .4    .7   1.3   1.7   1.8   2.3    .0    .0    .0
335.  *   1.9   2.6   2.6   1.7   1.2   2.0   1.7   2.1   2.3   2.1    .4    .5    .7   1.3   1.7   1.9   2.3    .0    .0    .0
340.  *   1.8   2.5   2.6   1.6   1.2   2.1   1.8   2.2   2.3   2.2    .4    .6    .8   1.5   1.8   1.9   2.5    .0    .0    .0
345.  *   2.0   2.7   2.7   1.8   1.2   2.3   2.1   2.2   2.2   2.2    .3    .5    .8   1.4   2.1   1.9   2.5    .1    .1    .1
350.  *   2.1   2.7   2.7   2.0   1.3   2.3   2.4   2.3   2.4   2.3    .2    .5    .8   1.6   2.0   2.0   2.6    .2    .4    .2
355.  *   2.2   2.7   2.8   2.1   1.7   2.1   2.5   2.5   2.4   2.1    .2    .5    .6   1.5   1.9   2.0   2.7    .5    .6    .5
360.  *   2.2   2.8   3.0   2.4   1.8   2.0   2.7   2.5   2.3   2.0    .1    .3    .6   1.4   1.9   1.8   2.6    .8   1.0    .9
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   3.7   3.7   3.7   3.5   2.4   2.8   3.7   3.0   2.6   2.7   3.6   3.7   3.3   2.5   2.6   2.8   2.9   2.9   3.2   3.2
DEGR. *   65    40    25   285    20   295   275   275    70   280   250   255   100   250   245   230   205   155   165   100

1
                                                                                                                        PAGE  5
     JOB: Site 1 Opt 8 2030 PM 1B8PM30.DAT                    RUN: Site 1 Opt 8 2030 PM

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24
------*------------------------
  0.  *    .5    .1    .0    .0
```

```
   5.  *    .8    .2    .1    .0
  10.  *   1.5    .3    .1    .0
  15.  *   1.8    .5    .2    .1
  20.  *   2.1    .7    .4    .2
  25.  *   2.1    .8    .7    .3
  30.  *   2.3    .9    .7    .4
  35.  *   2.1    .9    .8    .5
  40.  *   2.0    .8    .8    .5
  45.  *   1.7    .8    .6    .5
  50.  *   1.7    .9    .6    .5
  55.  *   1.6    .8    .6    .5
  60.  *   1.4    .9    .6    .5
  65.  *   1.4   1.0   1.0    .6
  70.  *   1.4   1.0   1.0    .8
  75.  *   1.4   1.4   1.2   1.1
  80.  *   1.6   1.7   1.6   1.5
  85.  *   2.1   2.2   2.3   2.0
  90.  *   2.4   2.4   2.5   2.3
  95.  *   2.4   2.7   2.7   2.6
 100.  *   2.3   2.6   2.5   2.8
 105.  *   2.1   2.5   2.6   3.0
 110.  *   2.1   2.0   2.6   3.0
 115.  *   1.7   2.1   2.7   2.8
 120.  *   1.7   2.3   2.7   2.7
 125.  *   1.5   2.3   2.8   2.6
 130.  *   1.5   2.4   2.6   2.6
 135.  *   1.5   2.4   2.6   2.5
 140.  *   1.6   2.6   2.6   2.4
 145.  *   1.6   2.5   2.4   2.2
 150.  *   1.5   2.6   2.4   2.2
 155.  *   1.5   2.4   2.4   2.1
 160.  *   1.5   2.5   2.2   2.0
 165.  *   1.5   2.3   2.2   1.9
 170.  *   1.6   2.4   2.2   2.0
 175.  *   1.6   2.2   2.3   2.1
 180.  *   1.5   2.2   2.3   2.1
 185.  *   1.6   2.2   2.2   2.0
 190.  *   1.6   2.2   2.2   1.9
 195.  *   1.5   2.2   2.2   1.9
 200.  *   1.6   2.3   2.3   2.0
 205.  *   1.7   2.3   2.3   2.0
1
                                                                                                                 PAGE  6
      JOB: Site 1 Opt 8 2030 PM 1B8PM30.DAT                     RUN: Site 1 Opt 8 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24
 ------*------------------------
 210.  *   1.9   2.4   2.2   2.2
 215.  *   2.0   2.4   2.3   2.1
 220.  *   2.1   2.4   2.3   2.2
 225.  *   2.2   2.5   2.3   2.3
 230.  *   2.2   2.5   2.4   2.4
 235.  *   2.3   2.7   2.5   2.5
 240.  *   2.3   2.8   2.6   2.6
 245.  *   2.1   2.7   2.7   2.7
 250.  *   2.2   2.9   2.7   2.7
 255.  *   2.0   2.7   2.7   2.6
 260.  *   1.7   2.5   2.5   2.4
 265.  *   1.5   2.2   2.2   2.1
 270.  *    .8   1.7   1.6   1.6
 275.  *    .6   1.2   1.2   1.2
 280.  *    .3    .6    .7    .7
 285.  *    .1    .5    .5    .5
 290.  *    .0    .2    .3    .3
 295.  *    .0    .2    .2    .2
 300.  *    .0    .1    .1    .1
 305.  *    .0    .1    .1    .1
 310.  *    .0    .1    .1    .1
 315.  *    .0    .1    .1    .1
 320.  *    .0    .1    .1    .1
 325.  *    .0    .1    .1    .1
 330.  *    .0    .1    .1    .1
 335.  *    .0    .0    .0    .0
 340.  *    .0    .0    .0    .0
 345.  *    .0    .0    .0    .0
 350.  *    .1    .0    .0    .0
 355.  *    .3    .0    .0    .0
 360.  *    .5    .1    .0    .0
 ------*------------------------
 MAX   *   2.4   2.9   2.8   3.0
 DEGR. *   90   250   125   105

 THE HIGHEST CONCENTRATION IS    3.70 PPM AT  275 DEGREES FROM REC7 .
 THE 2ND HIGHEST CONCENTRATION IS    3.70 PPM AT   65 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    3.70 PPM AT   40 DEGREES FROM REC2 .
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Site 2

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Site 2 Existing AM - 2EXAM.DAT          60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Existing AM                       25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     18515.5   0  32   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     18515.5   0  32   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     18515.5   0  32   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     18515.5   0  32   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     18515.5   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     18515.5   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     18515.5   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     18515.5   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.     37015.5   0  32   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     37015.5   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     37015.5   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      1015.5   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      1015.5   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      1015.5   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.     37015.5   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.     37015.5   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.     37015.5   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.     37015.5   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.      1015.5   0  32   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.      1015.5   0  32   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.      1015.5   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.      1015.5   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.      1015.5   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.      1015.5   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.      1015.5   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 2 Existing AM - 2EXAM.DAT                       RUN: Site 2 Existing AM
      DATE: 05/06/2009   TIME: 10:18:55.62


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.   171. AG    185.  15.5    .0 32.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.   175. AG    185.  15.5    .0 32.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.   182. AG    185.  15.5    .0 32.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.   186. AG    185.  15.5    .0 32.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.   197. AG    185.  15.5    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.   203. AG    185.  15.5    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.   210. AG    185.  15.5    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.   211. AG    185.  15.5    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.    32. AG    370.  15.5    .0 32.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.    22. AG    370.  15.5    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.    15. AG    370.  15.5    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.    29. AG     10.  15.5    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.    40. AG     10.  15.5    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.    56. AG     10.  15.5    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.     8. AG    370.  15.5    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.     1. AG    370.  15.5    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.   350. AG    370.  15.5    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.   351. AG    370.  15.5    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.   250. AG     10.  15.5    .0 32.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.   235. AG     10.  15.5    .0 32.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.   276. AG     10.  15.5    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.   100. AG     10.  15.5    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.    67. AG     10.  15.5    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.    55. AG     10.  15.5    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.    71. AG     10.  15.5    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 2 Existing AM - 2EXAM.DAT                       RUN: Site 2 Existing AM
      DATE: 05/06/2009   TIME: 10:18:55.62

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0        5.0   *
      2. SE 164 S             *       873.0     1060.0        5.0   *
      3. SE 82 S              *       920.0     1129.0        5.0   *
      4. SE CNR               *       987.0     1178.0        5.0   *
      5. SE 82 E              *      1056.0     1224.0        5.0   *
      6. SE 164 E             *      1127.0     1270.0        5.0   *
      7. SE MID E             *      1295.0     1374.0        5.0   *
      8. NE MID E             *      1218.0     1483.0        5.0   *
      9. NE 164 E             *      1112.0     1375.0        5.0   *
     10. NE 82 E              *      1046.0     1328.0        5.0   *
     11. NE CNR               *       951.0     1290.0        5.0   *
     12. NE 82 N              *       947.0     1396.0        5.0   *
     13. NE 164 N             *       950.0     1478.0        5.0   *
     14. NE MID N             *       927.0     1639.0        5.0   *
     15. NW MID N             *       855.0     1602.0        5.0   *
     16. NW 164 N             *       867.0     1442.0        5.0   *
     17. NW 82 N              *       859.0     1362.0        5.0   *
     18. W CNR                *       842.0     1280.0        5.0   *
     19. SW 82 S              *       824.0     1202.0        5.0   *
     20. SW 164 S             *       797.0     1123.0        5.0   *
     21. SW MID S             *       722.0      975.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 2 Existing AM - 2EXAM.DAT                       RUN: Site 2 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .2    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .1    .2    .3    .0    .0    .0    .0
   5.  *    .2    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .0    .0    .0    .0
  10.  *    .2    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .2    .1    .0    .0    .0
  15.  *    .2    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .2    .1    .0    .0    .0
  20.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .2    .1    .0    .0    .0
  25.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .1    .2    .1    .0
  30.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .1    .2    .1    .2
  35.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
  40.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .2    .2    .2    .2
```

```
  45.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .3    .2    .3    .2
  50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .3    .2    .2    .2
  55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
  60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .1
  65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
  70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
  75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .3
  80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
  85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
  90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .1    .2    .2
  95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .1    .2    .2
 100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .1    .2    .2
 105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .1    .2    .2
 110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .1    .2    .2
 115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
 120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
 125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .2    .2    .2    .2
 130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
 135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
 140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
 145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .2
 150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .3    .2
 155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .3    .2
 160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .2    .2    .2
 165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .2    .2    .2
 170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .2    .2    .2    .1    .2
 175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .2    .1    .2    .1    .2
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .1    .1    .2    .1    .3
 185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .1    .1    .2
 190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .0    .0    .0    .0    .2    .1
 195.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .0    .0    .0    .0    .1    .1
 200.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .0    .0    .0    .0    .1    .1
 205.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .3    .0    .0    .0    .0    .1    .1
1
                                                                                                                PAGE  4
      JOB: Site 2 Existing AM - 2EXAM.DAT                      RUN: Site 2 Existing AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .2    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .1
 215.  *    .2    .2    .2    .1    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0
 220.  *    .3    .2    .2    .1    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0
 225.  *    .3    .2    .2    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0
 230.  *    .3    .2    .1    .1    .0    .0    .0    .0    .0    .0    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0
 235.  *    .2    .2    .1    .1    .0    .0    .0    .0    .0    .0    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0
 240.  *    .2    .1    .1    .1    .0    .0    .0    .0    .0    .0    .1    .3    .3    .3    .0    .0    .0    .0    .0    .0
 245.  *    .2    .1    .1    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 250.  *    .2    .1    .1    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 255.  *    .2    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .3    .0    .0    .0    .0    .0    .0
 260.  *    .2    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0
 265.  *    .2    .1    .1    .1    .0    .0    .0    .0    .0    .1    .1    .1    .2    .3    .0    .0    .0    .0    .0    .0
 270.  *    .2    .1    .1    .1    .0    .0    .0    .0    .0    .1    .1    .1    .2    .3    .0    .0    .0    .0    .0    .0
 275.  *    .2    .1    .1    .1    .0    .0    .0    .0    .0    .1    .1    .1    .1    .3    .0    .0    .0    .0    .0    .0
 280.  *    .3    .1    .1    .1    .0    .0    .0    .0    .0    .1    .1    .1    .1    .3    .0    .0    .0    .0    .0    .0
 285.  *    .3    .1    .1    .1    .0    .0    .0    .0    .0    .1    .1    .1    .1    .3    .0    .0    .0    .0    .0    .0
 290.  *    .3    .1    .1    .1    .0    .0    .0    .0    .0    .0    .1    .2    .1    .3    .0    .0    .0    .0    .0    .0
 295.  *    .3    .1    .1    .1    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0
 300.  *    .3    .1    .1    .1    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0
 305.  *    .3    .1    .1    .1    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0
 310.  *    .3    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .3    .3    .0    .0    .0    .0    .0    .0
 315.  *    .3    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .3    .2    .0    .0    .0    .0    .0    .0
 320.  *    .3    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .3    .2    .0    .0    .0    .0    .0    .0
 325.  *    .3    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .3    .2    .0    .0    .0    .0    .0    .0
 330.  *    .3    .1    .1    .1    .0    .0    .0    .0    .0    .0    .1    .1    .3    .3    .0    .0    .0    .0    .0    .0
 335.  *    .2    .1    .1    .1    .0    .0    .0    .0    .0    .0    .1    .2    .3    .3    .0    .0    .0    .0    .0    .0
 340.  *    .3    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0
 345.  *    .2    .2    .1    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .0    .0    .0
 350.  *    .2    .2    .1    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .0    .0    .0
 355.  *    .2    .2    .1    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .1    .2    .0    .0    .0    .0    .0
 360.  *    .2    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .1    .2    .3    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .3    .2    .2    .1    .0    .0    .0    .0    .0    .1    .2    .3    .3    .3    .3    .3    .3    .2    .3    .3
 DEGR. *  220     0   215   215     0     0     0     0     0   265   245   225   240   195    10     0    45    25    45    75

1
                                                                                                                PAGE  5
      JOB: Site 2 Existing AM - 2EXAM.DAT                      RUN: Site 2 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .1
  45.  *    .2
  50.  *    .2
  55.  *    .2
```

```
  60.  *    .2
  65.  *    .2
  70.  *    .2
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .2
 100.  *    .2
 105.  *    .2
 110.  *    .2
 115.  *    .2
 120.  *    .2
 125.  *    .2
 130.  *    .2
 135.  *    .2
 140.  *    .2
 145.  *    .2
 150.  *    .2
 155.  *    .2
 160.  *    .2
 165.  *    .2
 170.  *    .2
 175.  *    .2
 180.  *    .2
 185.  *    .2
 190.  *    .2
 195.  *    .2
 200.  *    .2
 205.  *    .2
1
                                                                                                                               PAGE  6
      JOB: Site 2 Existing AM - 2EXAM.DAT                        RUN: Site 2 Existing AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .2
 215.  *    .1
 220.  *    .0
 225.  *    .0
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .2
 DEGR. *   45

 THE HIGHEST CONCENTRATION IS     .30 PPM AT  220 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS     .30 PPM AT  225 DEGREES FROM REC12.
 THE 3RD HIGHEST CONCENTRATION IS     .30 PPM AT  240 DEGREES FROM REC13.
```

```
Site 2 Existing PM - 2EXPM.DAT          60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Existing PM                       25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     16015.5   0  32   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     16015.5   0  32   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     16015.5   0  32   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     16015.5   0  32   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     16015.5   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     16015.5   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     16015.5   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     16015.5   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.     21015.5   0  32   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     21015.5   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     21015.5   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      1015.5   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      1015.5   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      1015.5   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.     21015.5   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.     21015.5   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.     21015.5   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.     21015.5   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.      1015.5   0  32   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.      1015.5   0  32   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.      1015.5   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.      1015.5   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.      1015.5   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.      1015.5   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.      1015.5   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 2 Existing PM - 2EXPM.DAT                       RUN: Site 2 Existing PM
      DATE: 05/06/2009   TIME: 10:21:10.62


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)        (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.   171. AG    160.  15.5    .0 32.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.   175. AG    160.  15.5    .0 32.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.   182. AG    160.  15.5    .0 32.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.   186. AG    160.  15.5    .0 32.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.   197. AG    160.  15.5    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.   203. AG    160.  15.5    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.   210. AG    160.  15.5    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.   211. AG    160.  15.5    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.    32. AG    210.  15.5    .0 32.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.    22. AG    210.  15.5    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.    15. AG    210.  15.5    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.    29. AG     10.  15.5    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.    40. AG     10.  15.5    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.    56. AG     10.  15.5    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.     8. AG    210.  15.5    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.     1. AG    210.  15.5    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.   350. AG    210.  15.5    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.   351. AG    210.  15.5    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.   250. AG     10.  15.5    .0 32.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.   235. AG     10.  15.5    .0 32.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.   276. AG     10.  15.5    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.   100. AG     10.  15.5    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.    67. AG     10.  15.5    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.    55. AG     10.  15.5    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.    71. AG     10.  15.5    .0 32.0
1
                                                                                                                PAGE  2
      JOB: Site 2 Existing PM - 2EXPM.DAT                       RUN: Site 2 Existing PM
      DATE: 05/06/2009   TIME: 10:21:10.62

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z       *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0       5.0    *
      2. SE 164 S             *       873.0     1060.0       5.0    *
      3. SE 82 S              *       920.0     1129.0       5.0    *
      4. SE CNR               *       987.0     1178.0       5.0    *
      5. SE 82 E              *      1056.0     1224.0       5.0    *
      6. SE 164 E             *      1127.0     1270.0       5.0    *
      7. SE MID E             *      1295.0     1374.0       5.0    *
      8. NE MID E             *      1218.0     1483.0       5.0    *
      9. NE 164 E             *      1112.0     1375.0       5.0    *
     10. NE 82 E              *      1046.0     1328.0       5.0    *
     11. NE CNR               *       951.0     1290.0       5.0    *
     12. NE 82 N              *       947.0     1396.0       5.0    *
     13. NE 164 N             *       950.0     1478.0       5.0    *
     14. NE MID N             *       927.0     1639.0       5.0    *
     15. NW MID N             *       855.0     1602.0       5.0    *
     16. NW 164 N             *       867.0     1442.0       5.0    *
     17. NW 82 N              *       859.0     1362.0       5.0    *
     18. W CNR                *       842.0     1280.0       5.0    *
     19. SW 82 S              *       824.0     1202.0       5.0    *
     20. SW 164 S             *       797.0     1123.0       5.0    *
     21. SW MID S             *       722.0      975.0       5.0    *
1
                                                                                                                PAGE  3
      JOB: Site 2 Existing PM - 2EXPM.DAT                       RUN: Site 2 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
   5.  *    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .0
  10.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .0
  15.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .0    .0    .0    .0
  20.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .0    .0    .0    .0
  25.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .0    .0    .0    .0
  30.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .0    .1    .0    .0
  35.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .0    .1    .0    .1
  40.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .1    .2    .1    .1
```

```
  45.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .1    .2    .1    .2
  50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .1    .2    .1    .1
  55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .1    .2    .1    .1
  60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .1    .2    .2    .1
  65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .0
  70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .0
  75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .1
  80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .2    .1
  85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .0    .2    .1
  90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .0    .2    .1
  95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .0    .2    .2
 100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .0    .2    .2
 105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .0    .2    .2
 110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .0    .2    .2
 115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .0    .2    .2
 120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .1    .2    .2
 125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .2    .2    .2
 130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .2    .2    .2
 135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .2    .2    .2
 140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .1    .2
 145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .2    .1    .2
 150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .2    .1    .2
 155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .1    .2    .1    .2
 160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .1    .2    .1    .2
 165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .0    .2
 170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .1    .2
 175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .0    .1    .1    .2
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .1    .0
 185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 195.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .0    .0    .0    .0    .0    .0
 200.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .0    .0    .0    .0    .0    .0
 205.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .0    .0    .0    .0    .0    .0
1
                                                                                                                 PAGE  4
      JOB: Site 2 Existing PM - 2EXPM.DAT                       RUN: Site 2 Existing PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .0    .0    .0    .0    .0    .0
 215.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 220.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 225.  *    .1    .2    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 230.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 235.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 240.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .0    .0    .0    .0    .0    .0
 245.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .0    .0    .0    .0    .0    .0
 250.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .0    .0    .0    .0    .0    .0
 255.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .0    .0    .0    .0    .0    .0
 260.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .0    .0    .0    .0    .0    .0
 265.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 270.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 275.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 280.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 285.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 290.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 295.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .2    .0    .0    .0    .0    .0    .0
 300.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 305.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .2    .0    .0    .0    .0    .0    .0
 310.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .1    .0    .0    .0    .0    .0    .0
 315.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .1    .0    .0    .0    .0    .0    .0
 320.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .1    .0    .0    .0    .0    .0    .0
 325.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .1    .0    .0    .0    .0    .0    .0
 330.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .2    .0    .0    .0    .0    .0    .0
 335.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .3    .0    .0    .0    .0    .0    .0
 340.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .2    .0    .0    .0    .0    .0    .0
 345.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .0    .0    .0    .0    .0    .0
 350.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 355.  *    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0
 360.  *    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .2    .2    .1    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .3    .2    .2    .2    .2    .2    .2
 DEGR. *    0   225   225     0     0     0     0     0     0     0   215   195   200   335    20    15    65    40    60    45

1
                                                                                                                 PAGE  5
      JOB: Site 2 Existing PM - 2EXPM.DAT                       RUN: Site 2 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .1
  50.  *    .1
  55.  *    .2
```

```
  60.  *    .2
  65.  *    .2
  70.  *    .1
  75.  *    .1
  80.  *    .1
  85.  *    .1
  90.  *    .1
  95.  *    .1
 100.  *    .1
 105.  *    .1
 110.  *    .2
 115.  *    .2
 120.  *    .2
 125.  *    .2
 130.  *    .2
 135.  *    .2
 140.  *    .2
 145.  *    .2
 150.  *    .2
 155.  *    .2
 160.  *    .2
 165.  *    .2
 170.  *    .2
 175.  *    .2
 180.  *    .2
 185.  *    .2
 190.  *    .1
 195.  *    .2
 200.  *    .2
 205.  *    .2
1
                                                                                                       PAGE  6
      JOB: Site 2 Existing PM - 2EXPM.DAT                       RUN: Site 2 Existing PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .1
 215.  *    .0
 220.  *    .0
 225.  *    .0
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .2
 DEGR. *   55

 THE HIGHEST CONCENTRATION IS     .30 PPM AT  335 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS     .20 PPM AT    0 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS     .20 PPM AT  225 DEGREES FROM REC2 .
```

```
Site 2 No Build - 2014 AM - 2NBAM14.DAT 60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 No Build 2014 AM                  25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     19911.4   0  32   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     19911.4   0  32   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     19911.4   0  32   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     19911.4   0  32   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     19911.4   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     19911.4   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     19911.4   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     19911.4   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.      9611.4   0  32   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.      9611.4   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.      9611.4   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      1011.4   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      1011.4   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      1011.4   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.      9611.4   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.      9611.4   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.      9611.4   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.      9611.4   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.      1011.4   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.      1011.4   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.      1011.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 2 No Build - 2014 AM - 2NBAM14.DAT              RUN: Site 2 No Build 2014 AM
      DATE: 05/06/2009   TIME: 10:28:50.84


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. EB        Rt9 aprch *   792.0    2248.0     878.0    1704.0 *    551.   171. AG    199.  11.4    .0 32.0
       2. EB        Rt9 aprch *   878.0    1704.0     896.0    1490.0 *    215.   175. AG    199.  11.4    .0 32.0
       3. EB        Rt9 aprch *   896.0    1490.0     893.0    1407.0 *     83.   182. AG    199.  11.4    .0 32.0
       4. EB        Rt9 aprch *   893.0    1407.0     879.0    1273.0 *    135.   186. AG    199.  11.4    .0 32.0
       5. EB        Rt9 depart*   879.0    1272.0     839.0    1143.0 *    135.   197. AG    199.  11.4    .0 32.0
       6. EB        Rt9 depart*   839.0    1143.0     799.0    1049.0 *    102.   203. AG    199.  11.4    .0 32.0
       7. EB        Rt9 depart*   799.0    1049.0     710.0     894.0 *    179.   210. AG    199.  11.4    .0 32.0
       8. EB        Rt9 depart*   710.0     894.0     403.0     384.0 *    595.   211. AG    199.  11.4    .0 32.0
       9. WB        Rt9 aprch *   422.0     375.0     796.0     977.0 *    709.    32. AG     96.  11.4    .0 32.0
      10. WB        Rt9 thru  *   796.0     977.0     861.0    1137.0 *    173.    22. AG     96.  11.4    .0 32.0
      11. WB        Rt9 thru  *   861.0    1137.0     897.0    1268.0 *    136.    15. AG     96.  11.4    .0 32.0
      12. WB        Rt9 right *   804.0     985.0     868.0    1102.0 *    133.    29. AG     10.  11.4    .0 32.0
      13. WB        Rt9 right *   869.0    1102.0     912.0    1154.0 *     67.    40. AG     10.  11.4    .0 32.0
      14. WB        Rt9 right *   912.0    1154.0    1059.0    1254.0 *    178.    56. AG     10.  11.4    .0 32.0
      15. WB        Rt9 depart*   897.0    1269.0     918.0    1410.0 *    143.     8. AG     96.  11.4    .0 32.0
      16. WB        Rt9 depart*   918.0    1410.0     920.0    1500.0 *     90.     1. AG     96.  11.4    .0 32.0
      17. WB        Rt9 depart*   920.0    1500.0     885.0    1706.0 *    209.   350. AG     96.  11.4    .0 32.0
      18. WB        Rt9 depart*   885.0    1706.0     802.0    2250.0 *    550.   351. AG     96.  11.4    .0 32.0
      19. SB        AAFB aprch*  1824.0    1620.0    1193.0    1391.0 *    671.   250. AG     10.  11.4    .0 32.0
      20. SB        AAFB aprch*  1193.0    1391.0    1000.0    1255.0 *    236.   235. AG     10.  11.4    .0 32.0
      21. SB        AAFB aprch*  1000.0    1255.0     900.0    1266.0 *    101.   276. AG     10.  11.4    .0 44.0
      22. NB        AAFB depar*   893.0    1239.0     968.0    1226.0 *     76.   100. AG     10.  11.4    .0 32.0
      23. NB        AAFB depar*   968.0    1226.0    1056.0    1264.0 *     96.    67. AG     10.  11.4    .0 32.0
      24. NB        AAFB depar*  1056.0    1264.0    1222.0    1382.0 *    204.    55. AG     10.  11.4    .0 32.0
      25. NB        AAFB depar*  1222.0    1382.0    1831.0    1596.0 *    646.    71. AG     10.  11.4    .0 32.0
1
                                                                                                                      PAGE  2
      JOB: Site 2 No Build - 2014 AM - 2NBAM14.DAT              RUN: Site 2 No Build 2014 AM
      DATE: 05/06/2009   TIME: 10:28:50.84

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
       1. SE MID S            *       798.0      929.0       5.0   *
       2. SE 164 S            *       873.0     1060.0       5.0   *
       3. SE 82 S             *       920.0     1129.0       5.0   *
       4. SE CNR              *       987.0     1178.0       5.0   *
       5. SE 82 E             *      1056.0     1224.0       5.0   *
       6. SE 164 E            *      1127.0     1270.0       5.0   *
       7. SE MID E            *      1295.0     1374.0       5.0   *
       8. NE MID E            *      1218.0     1483.0       5.0   *
       9. NE 164 E            *      1112.0     1375.0       5.0   *
      10. NE 82 E             *      1046.0     1328.0       5.0   *
      11. NE CNR              *       951.0     1290.0       5.0   *
      12. NE 82 N             *       947.0     1396.0       5.0   *
      13. NE 164 N            *       950.0     1478.0       5.0   *
      14. NE MID N            *       927.0     1639.0       5.0   *
      15. NW MID N            *       855.0     1602.0       5.0   *
      16. NW 164 N            *       867.0     1442.0       5.0   *
      17. NW 82 N             *       859.0     1362.0       5.0   *
      18. W CNR               *       842.0     1280.0       5.0   *
      19. SW 82 S             *       824.0     1202.0       5.0   *
      20. SW 164 S            *       797.0     1123.0       5.0   *
      21. SW MID S            *       722.0      975.0       5.0   *
1
                                                                                                                      PAGE  3
      JOB: Site 2 No Build - 2014 AM - 2NBAM14.DAT              RUN: Site 2 No Build 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   5.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  10.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0
  15.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .0
  20.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
  25.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0
  30.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .1    .0    .0
  35.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .1    .0    .0
  40.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .1    .0    .1
```

```
   45. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .1    .1    .0
   50. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .1    .1    .0
   55. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .1    .1    .0
   60. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .1    .1    .0
   65. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .1    .1    .0
   70. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .1    .1    .0
   75. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .0
   80. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .1
   85. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .1
   90. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .1
   95. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .1
  100. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .1
  105. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .1
  110. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .1
  115. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .1
  120. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .1
  125. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1    .1
  130. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .1    .1    .1
  135. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .1    .1    .1
  140. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .1    .1    .1
  145. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .1    .1    .1
  150. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .1    .1    .1
  155. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .1    .1    .1
  160. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1
  165. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .1
  170. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .0    .1
  175. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  180. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  185. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  190. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  195. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  200. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  205. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
1
                                                                                                                             PAGE  4
       JOB: Site 2 No Build - 2014 AM - 2NBAM14.DAT              RUN: Site 2 No Build 2014 AM

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
  ------*------------------------------------------------------------------------------------------------------------------------
  210. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  215. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  220. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  225. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  230. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  235. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  240. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  245. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  250. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  255. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  260. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  265. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  270. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  275. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  280. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  285. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  290. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  295. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  300. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  305. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  310. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  315. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  320. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  325. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  330. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  335. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  340. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
  345. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  350. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  355. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  360. *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  ------*------------------------------------------------------------------------------------------------------------------------
  MAX   *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .1    .1    .1    .1
  DEGR. *    0     0     0     0     0     0     0     0     0     0     0     0     0   210    15    10    45    30    45    40

1
                                                                                                                             PAGE  5
       JOB: Site 2 No Build - 2014 AM - 2NBAM14.DAT              RUN: Site 2 No Build 2014 AM

        MODEL RESULTS
        -------------

        REMARKS : In search of the angle corresponding to
                  the maximum concentration, only the first
                  angle, of the angles with same maximum
                  concentrations, is indicated as maximum.

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21
  ------*------
    0.  *    .0
    5.  *    .0
   10.  *    .0
   15.  *    .0
   20.  *    .0
   25.  *    .0
   30.  *    .0
   35.  *    .0
   40.  *    .0
   45.  *    .0
   50.  *    .1
   55.  *    .1
```

```
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .1
  80.  *    .1
  85.  *    .1
  90.  *    .1
  95.  *    .1
 100.  *    .1
 105.  *    .1
 110.  *    .1
 115.  *    .1
 120.  *    .1
 125.  *    .1
 130.  *    .1
 135.  *    .1
 140.  *    .1
 145.  *    .1
 150.  *    .1
 155.  *    .1
 160.  *    .1
 165.  *    .1
 170.  *    .1
 175.  *    .1
 180.  *    .1
 185.  *    .1
 190.  *    .0
 195.  *    .0
 200.  *    .1
 205.  *    .1
1
                                                                                                                               PAGE  6
      JOB: Site 2 No Build - 2014 AM - 2NBAM14.DAT              RUN: Site 2 No Build 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .0
 215.  *    .0
 220.  *    .0
 225.  *    .0
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .1
 DEGR. *   50

 THE HIGHEST CONCENTRATION IS     .10 PPM AT  210 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS     .10 PPM AT   15 DEGREES FROM REC15.
 THE 3RD HIGHEST CONCENTRATION IS     .10 PPM AT   10 DEGREES FROM REC16.
```

```
Site 2 No Build - 2030 AM - 2NBAM30.DAT 60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 No Build 2030 AM                  25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     735 9.2   0  32   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     735 9.2   0  32   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     735 9.2   0  32   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     735 9.2   0  32   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     735 9.2   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     735 9.2   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     735 9.2   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     735 9.2   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.     745 9.2   0  32   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     745 9.2   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     745 9.2   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      10 9.2   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      10 9.2   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      10 9.2   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.     745 9.2   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.     745 9.2   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.     745 9.2   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.     745 9.2   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.      10 9.2   0  32   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.      10 9.2   0  32   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.      10 9.2   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.      10 9.2   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.      10 9.2   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.      10 9.2   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.      10 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 2 No Build - 2030 AM - 2NBAM30.DAT             RUN: Site 2 No Build 2030 AM
      DATE: 05/06/2009   TIME: 11:33:52.97


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.  171. AG     735.   9.2    .0 32.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.  175. AG     735.   9.2    .0 32.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.  182. AG     735.   9.2    .0 32.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.  186. AG     735.   9.2    .0 32.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.  197. AG     735.   9.2    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.  203. AG     735.   9.2    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.  210. AG     735.   9.2    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.  211. AG     735.   9.2    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.   32. AG     745.   9.2    .0 32.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.   22. AG     745.   9.2    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.   15. AG     745.   9.2    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.   29. AG      10.   9.2    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.   40. AG      10.   9.2    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.   56. AG      10.   9.2    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.    8. AG     745.   9.2    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.    1. AG     745.   9.2    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.  350. AG     745.   9.2    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.  351. AG     745.   9.2    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.  250. AG      10.   9.2    .0 32.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.  235. AG      10.   9.2    .0 32.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.  276. AG      10.   9.2    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.  100. AG      10.   9.2    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.   67. AG      10.   9.2    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.   55. AG      10.   9.2    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.   71. AG      10.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 2 No Build - 2030 AM - 2NBAM30.DAT             RUN: Site 2 No Build 2030 AM
      DATE: 05/06/2009   TIME: 11:33:52.97

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0        5.0   *
      2. SE 164 S             *       873.0     1060.0        5.0   *
      3. SE 82 S              *       920.0     1129.0        5.0   *
      4. SE CNR               *       987.0     1178.0        5.0   *
      5. SE 82 E              *      1056.0     1224.0        5.0   *
      6. SE 164 E             *      1127.0     1270.0        5.0   *
      7. SE MID E             *      1295.0     1374.0        5.0   *
      8. NE MID E             *      1218.0     1483.0        5.0   *
      9. NE 164 E             *      1112.0     1375.0        5.0   *
     10. NE 82 E              *      1046.0     1328.0        5.0   *
     11. NE CNR               *       951.0     1290.0        5.0   *
     12. NE 82 N              *       947.0     1396.0        5.0   *
     13. NE 164 N             *       950.0     1478.0        5.0   *
     14. NE MID N             *       927.0     1639.0        5.0   *
     15. NW MID N             *       855.0     1602.0        5.0   *
     16. NW 164 N             *       867.0     1442.0        5.0   *
     17. NW 82 N              *       859.0     1362.0        5.0   *
     18. W CNR                *       842.0     1280.0        5.0   *
     19. SW 82 S              *       824.0     1202.0        5.0   *
     20. SW 164 S             *       797.0     1123.0        5.0   *
     21. SW MID S             *       722.0      975.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 2 No Build - 2030 AM - 2NBAM30.DAT             RUN: Site 2 No Build 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .4    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .3    .4    .1    .0    .0    .0
   5.  *    .5    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .0    .0    .0
  10.  *    .4    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .1    .1    .0
  15.  *    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .4    .3    .1    .1    .1
  20.  *    .2    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .3    .5    .1    .2    .1
  25.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .3    .3    .2    .3    .1
  30.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .2
  35.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .5    .3    .3    .3    .2
  40.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .5    .3    .3    .4    .2
```

```
  45.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .5    .3    .4    .3
  50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .4    .3    .4    .3
  55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .4    .3    .3    .3
  60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .3
  65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .3
  70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .4
  75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
  80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .4
  85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
  90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
  95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .3
 100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .4    .3    .3
 105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .4    .3    .3
 110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .3
 115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
 120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .2    .3    .3
 125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .2    .3    .3
 130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .3    .3    .3
 135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .3    .3    .3
 140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .3
 145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .3
 150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .4    .3
 155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .3    .4    .3    .4    .3
 160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .4    .4    .3    .3    .3
 165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .4    .5    .3    .3    .3
 170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .3    .3    .3    .3    .4
 175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .3    .3    .3    .3
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .0    .2    .3    .3    .3    .4
 185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .3    .0    .1    .3    .2    .2    .4
 190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .0    .1    .1    .2    .4    .4
 195.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .0    .0    .1    .2    .4    .4
 200.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .4    .3    .3    .0    .0    .0    .1    .3    .3
 205.  *    .2    .1    .1    .0    .0    .0    .0    .0    .0    .0    .2    .5    .3    .3    .0    .0    .0    .1    .2    .3
1
                                                                                                                PAGE  4
      JOB: Site 2 No Build - 2030 AM - 2NBAM30.DAT              RUN: Site 2 No Build 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .3    .3    .2    .1    .0    .0    .0    .0    .0    .0    .3    .4    .5    .4    .0    .0    .0    .0    .1    .3
 215.  *    .3    .4    .3    .1    .0    .0    .0    .0    .0    .0    .2    .3    .5    .4    .0    .0    .0    .0    .0    .2
 220.  *    .4    .4    .4    .1    .1    .0    .0    .0    .0    .0    .2    .3    .4    .4    .0    .0    .0    .0    .0    .0
 225.  *    .4    .4    .3    .2    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .0    .0    .0    .0    .0    .0
 230.  *    .4    .4    .3    .1    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .0    .0    .0    .0    .0    .0
 235.  *    .4    .4    .3    .1    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 240.  *    .4    .3    .2    .1    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 245.  *    .5    .3    .2    .1    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 250.  *    .4    .3    .2    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 255.  *    .3    .3    .2    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 260.  *    .3    .4    .2    .1    .1    .0    .0    .0    .0    .1    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 265.  *    .3    .4    .2    .2    .1    .0    .0    .0    .0    .1    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 270.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .2    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 275.  *    .3    .3    .3    .2    .0    .0    .0    .0    .0    .2    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 280.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .2    .2    .3    .4    .3    .0    .0    .0    .0    .0    .0
 285.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .1    .2    .4    .4    .3    .0    .0    .0    .0    .0    .0
 290.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .1    .2    .3    .2    .3    .0    .0    .0    .0    .0    .0
 295.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 300.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 305.  *    .3    .3    .2    .1    .1    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 310.  *    .3    .3    .2    .1    .1    .0    .0    .0    .0    .0    .2    .2    .3    .3    .0    .0    .0    .0    .0    .0
 315.  *    .3    .3    .2    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .5    .0    .0    .0    .0    .0    .0
 320.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .0    .2    .3    .4    .5    .0    .0    .0    .0    .0    .0
 325.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .0    .2    .4    .4    .5    .0    .0    .0    .0    .0    .0
 330.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .0    .2    .4    .3    .4    .0    .0    .0    .0    .0    .0
 335.  *    .3    .3    .2    .1    .0    .0    .0    .0    .0    .0    .2    .5    .3    .4    .0    .0    .0    .0    .0    .0
 340.  *    .4    .4    .2    .1    .0    .0    .0    .0    .0    .0    .1    .5    .5    .5    .0    .0    .0    .0    .0    .0
 345.  *    .4    .3    .2    .0    .0    .0    .0    .0    .0    .0    .1    .3    .5    .4    .2    .0    .0    .0    .0    .0
 350.  *    .4    .3    .3    .0    .0    .0    .0    .0    .0    .0    .1    .5    .4    .2    .2    .2    .0    .0    .0    .0
 355.  *    .3    .3    .2    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .2    .2    .4    .1    .0    .0    .0
 360.  *    .4    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .3    .4    .1    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .5    .4    .4    .2    .1    .0    .0    .0    .0    .2    .3    .5    .5    .5    .5    .5    .5    .4    .4    .4
 DEGR. *    5   215   220   225   220     0     0     0     0   270   210   205   210   315    15    35    20   100    40    70

1
                                                                                                                PAGE  5
      JOB: Site 2 No Build - 2030 AM - 2NBAM30.DAT              RUN: Site 2 No Build 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .2
  35.  *    .3
  40.  *    .3
  45.  *    .3
  50.  *    .4
  55.  *    .3
```

```
  60.  *    .3
  65.  *    .3
  70.  *    .3
  75.  *    .3
  80.  *    .3
  85.  *    .4
  90.  *    .4
  95.  *    .3
 100.  *    .3
 105.  *    .3
 110.  *    .3
 115.  *    .3
 120.  *    .3
 125.  *    .3
 130.  *    .3
 135.  *    .3
 140.  *    .3
 145.  *    .3
 150.  *    .3
 155.  *    .3
 160.  *    .3
 165.  *    .3
 170.  *    .3
 175.  *    .3
 180.  *    .4
 185.  *    .4
 190.  *    .3
 195.  *    .3
 200.  *    .4
 205.  *    .4
1
                                                                                                                             PAGE  6
      JOB: Site 2 No Build - 2030 AM - 2NBAM30.DAT              RUN: Site 2 No Build 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .2
 215.  *    .2
 220.  *    .1
 225.  *    .0
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .4
 DEGR. *   50

 THE HIGHEST CONCENTRATION IS     .50 PPM AT    5 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS     .50 PPM AT  205 DEGREES FROM REC12.
 THE 3RD HIGHEST CONCENTRATION IS     .50 PPM AT  210 DEGREES FROM REC13.
```

```
Site 2 No Build - 2014 PM - 2NBPM14.DAT 60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 No Build 2014 PM                  25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     11711.4   0  32   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     11711.4   0  32   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     11711.4   0  32   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     11711.4   0  32   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     11711.4   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     11711.4   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     11711.4   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     11711.4   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.     18911.4   0  32   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     18911.4   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     18911.4   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      1011.4   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      1011.4   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      1011.4   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.     18911.4   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.     18911.4   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.     18911.4   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.     18911.4   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.      1011.4   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.      1011.4   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.      1011.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                       CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 2 No Build - 2014 PM - 2NBPM14.DAT              RUN: Site 2 No Build 2014 PM
      DATE: 05/06/2009   TIME: 10:32:13.13


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. EB        Rt9 aprch *   792.0    2248.0     878.0    1704.0 *     551.   171. AG    117.  11.4    .0 32.0
       2. EB        Rt9 aprch *   878.0    1704.0     896.0    1490.0 *     215.   175. AG    117.  11.4    .0 32.0
       3. EB        Rt9 aprch *   896.0    1490.0     893.0    1407.0 *      83.   182. AG    117.  11.4    .0 32.0
       4. EB        Rt9 aprch *   893.0    1407.0     879.0    1273.0 *     135.   186. AG    117.  11.4    .0 32.0
       5. EB        Rt9 depart*   879.0    1272.0     839.0    1143.0 *     135.   197. AG    117.  11.4    .0 32.0
       6. EB        Rt9 depart*   839.0    1143.0     799.0    1049.0 *     102.   203. AG    117.  11.4    .0 32.0
       7. EB        Rt9 depart*   799.0    1049.0     710.0     894.0 *     179.   210. AG    117.  11.4    .0 32.0
       8. EB        Rt9 depart*   710.0     894.0     403.0     384.0 *     595.   211. AG    117.  11.4    .0 32.0
       9. WB        Rt9 aprch *   422.0     375.0     796.0     977.0 *     709.    32. AG    189.  11.4    .0 32.0
      10. WB        Rt9 thru  *   796.0     977.0     861.0    1137.0 *     173.    22. AG    189.  11.4    .0 32.0
      11. WB        Rt9 thru  *   861.0    1137.0     897.0    1268.0 *     136.    15. AG    189.  11.4    .0 32.0
      12. WB        Rt9 right *   804.0     985.0     868.0    1102.0 *     133.    29. AG     10.  11.4    .0 32.0
      13. WB        Rt9 right *   869.0    1102.0     912.0    1154.0 *      67.    40. AG     10.  11.4    .0 32.0
      14. WB        Rt9 right *   912.0    1154.0    1059.0    1254.0 *     178.    56. AG     10.  11.4    .0 32.0
      15. WB        Rt9 depart*   897.0    1269.0     918.0    1410.0 *     143.     8. AG    189.  11.4    .0 32.0
      16. WB        Rt9 depart*   918.0    1410.0     920.0    1500.0 *      90.     1. AG    189.  11.4    .0 32.0
      17. WB        Rt9 depart*   920.0    1500.0     885.0    1706.0 *     209.   350. AG    189.  11.4    .0 32.0
      18. WB        Rt9 depart*   885.0    1706.0     802.0    2250.0 *     550.   351. AG    189.  11.4    .0 32.0
      19. SB        AAFB aprch*  1824.0    1620.0    1193.0    1391.0 *     671.   250. AG     10.  11.4    .0 32.0
      20. SB        AAFB aprch*  1193.0    1391.0    1000.0    1255.0 *     236.   235. AG     10.  11.4    .0 32.0
      21. SB        AAFB aprch*  1000.0    1255.0     900.0    1266.0 *     101.   276. AG     10.  11.4    .0 44.0
      22. NB        AAFB depar*   893.0    1239.0     968.0    1226.0 *      76.   100. AG     10.  11.4    .0 32.0
      23. NB        AAFB depar*   968.0    1226.0    1056.0    1264.0 *      96.    67. AG     10.  11.4    .0 32.0
      24. NB        AAFB depar*  1056.0    1264.0    1222.0    1382.0 *     204.    55. AG     10.  11.4    .0 32.0
      25. NB        AAFB depar*  1222.0    1382.0    1831.0    1596.0 *     646.    71. AG     10.  11.4    .0 32.0
1
                                                                                                            PAGE  2
      JOB: Site 2 No Build - 2014 PM - 2NBPM14.DAT              RUN: Site 2 No Build 2014 PM
      DATE: 05/06/2009   TIME: 10:32:13.13

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X           Y           Z        *
     -------------------------*--------------------------------------*
      1. SE MID S             *       798.0       929.0        5.0    *
      2. SE 164 S             *       873.0      1060.0        5.0    *
      3. SE 82 S              *       920.0      1129.0        5.0    *
      4. SE CNR               *       987.0      1178.0        5.0    *
      5. SE 82 E              *      1056.0      1224.0        5.0    *
      6. SE 164 E             *      1127.0      1270.0        5.0    *
      7. SE MID E             *      1295.0      1374.0        5.0    *
      8. NE MID E             *      1218.0      1483.0        5.0    *
      9. NE 164 E             *      1112.0      1375.0        5.0    *
     10. NE 82 E              *      1046.0      1328.0        5.0    *
     11. NE CNR               *       951.0      1290.0        5.0    *
     12. NE 82 N              *       947.0      1396.0        5.0    *
     13. NE 164 N             *       950.0      1478.0        5.0    *
     14. NE MID N             *       927.0      1639.0        5.0    *
     15. NW MID N             *       855.0      1602.0        5.0    *
     16. NW 164 N             *       867.0      1442.0        5.0    *
     17. NW 82 N              *       859.0      1362.0        5.0    *
     18. W CNR                *       842.0      1280.0        5.0    *
     19. SW 82 S              *       824.0      1202.0        5.0    *
     20. SW 164 S             *       797.0      1123.0        5.0    *
     21. SW MID S             *       722.0       975.0        5.0    *
1
                                                                                                            PAGE  3
      JOB: Site 2 No Build - 2014 PM - 2NBPM14.DAT              RUN: Site 2 No Build 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*--------------------------------------------------------------------------------------------------------------------------
   0.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
   5.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  10.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  15.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  20.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  25.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  30.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  35.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  40.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
```

```
  45.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
  95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 195.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 200.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 205.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .0    .0    .0    .0    .0    .0
1
                                                                                                                     PAGE  4
      JOB: Site 2 No Build - 2014 PM - 2NBPM14.DAT              RUN: Site 2 No Build 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .0    .0    .0    .0    .0    .0
 215.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 220.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 225.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 230.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 235.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 240.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 245.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 250.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 255.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 260.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 265.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 270.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 275.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .0    .0    .0
 280.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .0    .0    .0
 285.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .0    .0    .0
 290.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 295.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 300.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 305.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 310.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 315.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0
 320.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 325.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .0    .0    .0    .0
 330.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .0    .0    .0    .0
 335.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .0    .0    .0    .0
 340.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .0    .0    .0    .0    .0    .0
 345.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .0    .0    .0    .0    .0
 350.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 355.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 360.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0
 ------*-----------------------------------------------------------------------------------------------------------------------
 MAX   *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .1    .0    .0    .0    .0    .0    .0
 DEGR. *     5   240     0     0     0     0     0     0     0     0     0   205   215   185     0     0     0     0     0     0

1
                                                                                                                     PAGE  5
      JOB: Site 2 No Build - 2014 PM - 2NBPM14.DAT              RUN: Site 2 No Build 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
```

```
  60.  *    .0
  65.  *    .0
  70.  *    .0
  75.  *    .0
  80.  *    .0
  85.  *    .0
  90.  *    .0
  95.  *    .0
 100.  *    .0
 105.  *    .0
 110.  *    .0
 115.  *    .0
 120.  *    .0
 125.  *    .0
 130.  *    .0
 135.  *    .0
 140.  *    .0
 145.  *    .0
 150.  *    .0
 155.  *    .0
 160.  *    .0
 165.  *    .0
 170.  *    .0
 175.  *    .0
 180.  *    .0
 185.  *    .0
 190.  *    .0
 195.  *    .0
 200.  *    .0
 205.  *    .0
1
                                                                                                                             PAGE  6
      JOB: Site 2 No Build - 2014 PM - 2NBPM14.DAT              RUN: Site 2 No Build 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .0
 215.  *    .0
 220.  *    .0
 225.  *    .0
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .0
 DEGR. *    0

 THE HIGHEST CONCENTRATION IS     .10 PPM AT    5 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS     .10 PPM AT  240 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS     .10 PPM AT  205 DEGREES FROM REC12.
```

```
Site 2 No Build - 2030 PM - 2NBPM30.DAT 60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 No Build 2030 PM                  25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     640 9.2   0  32   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     640 9.2   0  32   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     640 9.2   0  32   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     640 9.2   0  32   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     640 9.2   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     640 9.2   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     640 9.2   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     640 9.2   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.     745 9.2   0  32   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     745 9.2   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     745 9.2   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      10 9.2   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      10 9.2   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      10 9.2   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.     745 9.2   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.     745 9.2   0  32   30.
```

```
    1
WB         Rt9 departAG   920.  1500.   885.  1706.     745 9.2   0  32   30.
    1
WB         Rt9 departAG   885.  1706.   802.  2250.     745 9.2   0  32   30.
    1
SB         AAFB aprchAG  1824.  1620.  1193.  1391.      10 9.2   0  32   30.
    1
SB         AAFB aprchAG  1193.  1391.  1000.  1255.      10 9.2   0  32   30.
    1
SB         AAFB aprchAG  1000.  1255.   900.  1266.      10 9.2   0  44   30.
    1
NB         AAFB deparAG   893.  1239.   968.  1226.      10 9.2   0  32   30.
    1
NB         AAFB deparAG   968.  1226.  1056.  1264.      10 9.2   0  32   30.
    1
NB         AAFB deparAG  1056.  1264.  1222.  1382.      10 9.2   0  32   30.
    1
NB         AAFB deparAG  1222.  1382.  1831.  1596.      10 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 2 No Build - 2030 PM - 2NBPM30.DAT              RUN: Site 2 No Build 2030 PM
      DATE: 05/06/2009   TIME: 11:34:23.89


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.   171. AG     640.  9.2    .0 32.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.   175. AG     640.  9.2    .0 32.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.   182. AG     640.  9.2    .0 32.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.   186. AG     640.  9.2    .0 32.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.   197. AG     640.  9.2    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.   203. AG     640.  9.2    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.   210. AG     640.  9.2    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.   211. AG     640.  9.2    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.    32. AG     745.  9.2    .0 32.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.    22. AG     745.  9.2    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.    15. AG     745.  9.2    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.    29. AG      10.  9.2    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.    40. AG      10.  9.2    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.    56. AG      10.  9.2    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.     8. AG     745.  9.2    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.     1. AG     745.  9.2    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.   350. AG     745.  9.2    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.   351. AG     745.  9.2    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.   250. AG      10.  9.2    .0 32.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.   235. AG      10.  9.2    .0 32.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.   276. AG      10.  9.2    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.   100. AG      10.  9.2    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.    67. AG      10.  9.2    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.    55. AG      10.  9.2    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.    71. AG      10.  9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 2 No Build - 2030 PM - 2NBPM30.DAT              RUN: Site 2 No Build 2030 PM
      DATE: 05/06/2009   TIME: 11:34:23.89

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0        5.0   *
      2. SE 164 S             *       873.0     1060.0        5.0   *
      3. SE 82 S              *       920.0     1129.0        5.0   *
      4. SE CNR               *       987.0     1178.0        5.0   *
      5. SE 82 E              *      1056.0     1224.0        5.0   *
      6. SE 164 E             *      1127.0     1270.0        5.0   *
      7. SE MID E             *      1295.0     1374.0        5.0   *
      8. NE MID E             *      1218.0     1483.0        5.0   *
      9. NE 164 E             *      1112.0     1375.0        5.0   *
     10. NE 82 E              *      1046.0     1328.0        5.0   *
     11. NE CNR               *       951.0     1290.0        5.0   *
     12. NE 82 N              *       947.0     1396.0        5.0   *
     13. NE 164 N             *       950.0     1478.0        5.0   *
     14. NE MID N             *       927.0     1639.0        5.0   *
     15. NW MID N             *       855.0     1602.0        5.0   *
     16. NW 164 N             *       867.0     1442.0        5.0   *
     17. NW 82 N              *       859.0     1362.0        5.0   *
     18. W CNR                *       842.0     1280.0        5.0   *
     19. SW 82 S              *       824.0     1202.0        5.0   *
     20. SW 164 S             *       797.0     1123.0        5.0   *
     21. SW MID S             *       722.0      975.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 2 No Build - 2030 PM - 2NBPM30.DAT              RUN: Site 2 No Build 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
   0.  *    .3    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .3    .4    .1    .0    .0    .0
   5.  *    .4    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .3    .3    .0    .0    .0
  10.  *    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .2    .3    .1    .0    .0
  15.  *    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .3    .3    .1    .1    .1
  20.  *    .2    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .3    .4    .1    .2    .1
  25.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .3    .3    .2    .3    .1
  30.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .2
  35.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .2    .3    .2
  40.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .3    .4    .2
```

```
  45.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .4    .3    .3    .2
  50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .3
  55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .4    .3    .3    .3
  60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
  65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
  70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .4
  75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
  80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
  85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .2
  90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .2
  95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .2
 100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .4    .3    .3
 105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .4    .3    .3
 110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
 115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
 120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .2    .3    .3
 125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
 130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
 135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
 140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
 145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .3    .3
 150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .3    .3
 155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .4    .3    .3    .3
 160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .3    .4    .3    .3    .3
 165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .3    .4    .2    .3    .3
 170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .3    .2    .3    .2
 175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .2    .3    .3    .3    .3
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .0    .2    .3    .3    .3    .4
 185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .1    .3    .0    .1    .2    .2    .2    .4
 190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .0    .1    .1    .2    .3    .4
 195.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .0    .0    .0    .1    .4    .3
 200.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .3    .0    .0    .0    .1    .2    .3
 205.  *    .1    .1    .1    .0    .0    .0    .0    .0    .0    .0    .2    .4    .3    .3    .0    .0    .0    .1    .1    .3
1
                                                                                                                 PAGE  4
      JOB: Site 2 No Build - 2030 PM - 2NBPM30.DAT              RUN: Site 2 No Build 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .3    .2    .2    .1    .0    .0    .0    .0    .0    .0    .2    .3    .4    .3    .0    .0    .0    .0    .1    .3
 215.  *    .3    .3    .2    .1    .0    .0    .0    .0    .0    .0    .2    .3    .5    .3    .0    .0    .0    .0    .0    .1
 220.  *    .4    .4    .2    .1    .1    .0    .0    .0    .0    .0    .2    .3    .4    .3    .0    .0    .0    .0    .0    .0
 225.  *    .4    .4    .3    .2    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 230.  *    .4    .3    .3    .1    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 235.  *    .4    .4    .1    .1    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 240.  *    .4    .3    .2    .1    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 245.  *    .5    .3    .2    .1    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 250.  *    .4    .3    .2    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 255.  *    .3    .3    .2    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 260.  *    .3    .4    .2    .1    .1    .0    .0    .0    .0    .1    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 265.  *    .3    .3    .2    .1    .1    .0    .0    .0    .0    .1    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 270.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .1    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 275.  *    .3    .3    .3    .2    .0    .0    .0    .0    .0    .1    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 280.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .1    .2    .3    .4    .3    .0    .0    .0    .0    .0    .0
 285.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .1    .2    .3    .4    .3    .0    .0    .0    .0    .0    .0
 290.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .1    .2    .3    .2    .3    .0    .0    .0    .0    .0    .0
 295.  *    .3    .3    .2    .2    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 300.  *    .3    .3    .2    .1    .0    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 305.  *    .3    .3    .2    .1    .1    .0    .0    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 310.  *    .3    .3    .2    .1    .1    .0    .0    .0    .0    .0    .2    .2    .3    .3    .0    .0    .0    .0    .0    .0
 315.  *    .3    .3    .2    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .5    .0    .0    .0    .0    .0    .0
 320.  *    .3    .3    .2    .1    .0    .0    .0    .0    .0    .0    .2    .3    .4    .5    .0    .0    .0    .0    .0    .0
 325.  *    .3    .3    .2    .1    .0    .0    .0    .0    .0    .0    .2    .3    .4    .5    .0    .0    .0    .0    .0    .0
 330.  *    .3    .3    .2    .1    .0    .0    .0    .0    .0    .0    .2    .4    .3    .4    .0    .0    .0    .0    .0    .0
 335.  *    .3    .2    .2    .1    .0    .0    .0    .0    .0    .0    .2    .5    .3    .3    .0    .0    .0    .0    .0    .0
 340.  *    .4    .4    .2    .1    .0    .0    .0    .0    .0    .0    .1    .4    .5    .4    .0    .0    .0    .0    .0    .0
 345.  *    .4    .3    .1    .0    .0    .0    .0    .0    .0    .0    .1    .3    .5    .4    .2    .0    .0    .0    .0    .0
 350.  *    .4    .3    .2    .0    .0    .0    .0    .0    .0    .0    .1    .4    .4    .2    .2    .1    .0    .0    .0    .0
 355.  *    .3    .3    .2    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .2    .2    .4    .0    .0    .0    .0
 360.  *    .3    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .2    .1    .2    .3    .4    .1    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .5    .4    .3    .2    .1    .0    .0    .0    .0    .1    .3    .5    .5    .5    .4    .4    .4    .4    .4    .4
 DEGR. *   245   220   225   225   220     0     0     0     0   260   245   335   215   315     5     0    20   100    40    70

1
                                                                                                                 PAGE  5
      JOB: Site 2 No Build - 2030 PM - 2NBPM30.DAT              RUN: Site 2 No Build 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .1
  35.  *    .3
  40.  *    .3
  45.  *    .3
  50.  *    .2
  55.  *    .3
```

```
  60.  *    .3
  65.  *    .3
  70.  *    .3
  75.  *    .3
  80.  *    .3
  85.  *    .4
  90.  *    .4
  95.  *    .3
 100.  *    .3
 105.  *    .3
 110.  *    .3
 115.  *    .3
 120.  *    .3
 125.  *    .3
 130.  *    .3
 135.  *    .3
 140.  *    .3
 145.  *    .3
 150.  *    .3
 155.  *    .3
 160.  *    .3
 165.  *    .3
 170.  *    .3
 175.  *    .3
 180.  *    .3
 185.  *    .3
 190.  *    .3
 195.  *    .3
 200.  *    .3
 205.  *    .3
1
                                                                                                                             PAGE  6
      JOB: Site 2 No Build - 2030 PM - 2NBPM30.DAT              RUN: Site 2 No Build 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .2
 215.  *    .2
 220.  *    .1
 225.  *    .0
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .4
 DEGR. *   85

 THE HIGHEST CONCENTRATION IS     .50 PPM AT  245 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS     .50 PPM AT  335 DEGREES FROM REC12.
 THE 3RD HIGHEST CONCENTRATION IS     .50 PPM AT  215 DEGREES FROM REC13.
```

```
Site 2 Opt 1/2 2014 2B1AM14.DAT         60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 1/2 2014 AM                   25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     98511.4   0  32   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     98511.4   0  32   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     98511.4   0  32   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     98511.4   0  32   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     98511.4   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     98511.4   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     98511.4   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     98511.4   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.     39911.4   0  32   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     39911.4   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     39911.4   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      1011.4   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      1011.4   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      1011.4   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.     39911.4   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.     39911.4   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.     39911.4   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.     39911.4   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.      1011.4   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.      1011.4   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.      1011.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 2 Opt 1/2 2014 2B1AM14.DAT                     RUN: Site 2 Opt 1/2 2014 AM
      DATE: 05/06/2009   TIME: 10:07:33.93


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.   171. AG    985.  11.4    .0 32.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.   175. AG    985.  11.4    .0 32.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.   182. AG    985.  11.4    .0 32.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.   186. AG    985.  11.4    .0 32.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.   197. AG    985.  11.4    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.   203. AG    985.  11.4    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.   210. AG    985.  11.4    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.   211. AG    985.  11.4    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.    32. AG    399.  11.4    .0 32.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.    22. AG    399.  11.4    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.    15. AG    399.  11.4    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.    29. AG     10.  11.4    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.    40. AG     10.  11.4    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.    56. AG     10.  11.4    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.     8. AG    399.  11.4    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.     1. AG    399.  11.4    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.   350. AG    399.  11.4    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.   351. AG    399.  11.4    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.   250. AG     10.  11.4    .0 32.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.   235. AG     10.  11.4    .0 32.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.   276. AG     10.  11.4    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.   100. AG     10.  11.4    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.    67. AG     10.  11.4    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.    55. AG     10.  11.4    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.    71. AG     10.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 2 Opt 1/2 2014 2B1AM14.DAT                     RUN: Site 2 Opt 1/2 2014 AM
      DATE: 05/06/2009   TIME: 10:07:33.93

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0        5.0   *
      2. SE 164 S             *       873.0     1060.0        5.0   *
      3. SE 82 S              *       920.0     1129.0        5.0   *
      4. SE CNR               *       987.0     1178.0        5.0   *
      5. SE 82 E              *      1056.0     1224.0        5.0   *
      6. SE 164 E             *      1127.0     1270.0        5.0   *
      7. SE MID E             *      1295.0     1374.0        5.0   *
      8. NE MID E             *      1218.0     1483.0        5.0   *
      9. NE 164 E             *      1112.0     1375.0        5.0   *
     10. NE 82 E              *      1046.0     1328.0        5.0   *
     11. NE CNR               *       951.0     1290.0        5.0   *
     12. NE 82 N              *       947.0     1396.0        5.0   *
     13. NE 164 N             *       950.0     1478.0        5.0   *
     14. NE MID N             *       927.0     1639.0        5.0   *
     15. NW MID N             *       855.0     1602.0        5.0   *
     16. NW 164 N             *       867.0     1442.0        5.0   *
     17. NW 82 N              *       859.0     1362.0        5.0   *
     18. W CNR                *       842.0     1280.0        5.0   *
     19. SW 82 S              *       824.0     1202.0        5.0   *
     20. SW 164 S             *       797.0     1123.0        5.0   *
     21. SW MID S             *       722.0      975.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 2 Opt 1/2 2014 2B1AM14.DAT                     RUN: Site 2 Opt 1/2 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
    0.  *     .4    .3    .1    .0    .0    .0    .0    .0    .0    .0    .1    .2    .1    .2    .4    .3    .3    .2    .1    .0
    5.  *     .4    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .5    .5    .3    .4    .1    .0
   10.  *     .5    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .3    .3    .2    .2
   15.  *     .5    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .4    .3    .2    .2
   20.  *     .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .4    .4    .2    .2
   25.  *     .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .4    .3    .2    .3
   30.  *     .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .5    .5    .4    .3
   35.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .5    .4    .4    .4
   40.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .3    .4
```

```
  45.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .4    .4    .4
  50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .5    .4    .5    .4
  55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .5    .4    .4    .4
  60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .5
  65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
  70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
  75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .3    .4    .3
  80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .3    .4    .5
  85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
  90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
  95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
 100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .2    .4    .4
 105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .2    .4    .4
 110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
 115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
 120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .3    .4    .4
 125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .3    .4    .4
 130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .4    .4    .4
 135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .4    .4    .4
 140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
 145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .4    .4    .4
 150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .4    .4    .5    .4
 155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .5    .4    .5    .4
 160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .5    .4    .4    .4
 165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .4    .4    .5
 170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .3    .6    .4    .4    .5    .5
 175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .4    .4    .4
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .2    .3    .5    .4
 185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .0    .3    .2    .3    .5    .5
 190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .4    .0    .2    .2    .3    .5    .5
 195.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .4    .0    .1    .1    .4    .3    .5
 200.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .0    .0    .2    .4    .3    .5
 205.  *    .2    .2    .1    .0    .0    .0    .0    .0    .0    .0    .3    .3    .5    .3    .0    .0    .1    .1    .3    .4
1
                                                                                                                 PAGE  4
      JOB: Site 2 Opt 1/2 2014 2B1AM14.DAT                     RUN: Site 2 Opt 1/2 2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
 210.  *    .2    .3    .3    .1    .0    .0    .0    .0    .0    .0    .4    .3    .4    .4    .0    .0    .0    .1    .2    .2
 215.  *    .3    .4    .3    .1    .0    .0    .0    .0    .0    .0    .4    .4    .3    .4    .0    .0    .0    .0    .1    .2
 220.  *    .4    .4    .4    .2    .1    .0    .0    .0    .0    .0    .3    .4    .3    .4    .0    .0    .0    .0    .0    .1
 225.  *    .4    .4    .3    .2    .1    .0    .0    .0    .0    .1    .3    .3    .4    .4    .0    .0    .0    .0    .0    .0
 230.  *    .4    .5    .4    .2    .0    .0    .0    .0    .0    .1    .3    .3    .4    .4    .0    .0    .0    .0    .0    .0
 235.  *    .5    .4    .3    .2    .0    .0    .0    .0    .0    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 240.  *    .5    .3    .3    .1    .0    .0    .0    .0    .0    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 245.  *    .4    .3    .3    .1    .0    .0    .0    .0    .0    .1    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 250.  *    .4    .4    .2    .1    .1    .0    .0    .0    .0    .1    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
 255.  *    .4    .3    .2    .2    .1    .0    .0    .0    .1    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 260.  *    .4    .3    .2    .1    .1    .0    .0    .0    .1    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 265.  *    .3    .3    .2    .1    .1    .0    .0    .0    .1    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 270.  *    .3    .3    .2    .1    .1    .0    .0    .0    .1    .1    .2    .4    .4    .3    .0    .0    .0    .0    .0    .0
 275.  *    .3    .3    .2    .2    .1    .0    .0    .0    .0    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 280.  *    .3    .3    .2    .2    .1    .1    .0    .0    .0    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 285.  *    .3    .3    .3    .2    .0    .1    .0    .1    .0    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
 290.  *    .3    .3    .2    .2    .1    .1    .0    .1    .0    .1    .3    .4    .3    .3    .0    .0    .0    .0    .0    .0
 295.  *    .3    .3    .2    .1    .1    .0    .0    .0    .0    .1    .3    .4    .4    .3    .0    .0    .0    .0    .0    .0
 300.  *    .3    .3    .2    .1    .1    .0    .0    .0    .0    .0    .3    .4    .4    .3    .0    .0    .0    .0    .0    .0
 305.  *    .3    .3    .2    .1    .1    .0    .0    .0    .1    .1    .3    .3    .4    .3    .0    .0    .0    .0    .0    .0
 310.  *    .3    .3    .3    .2    .1    .0    .0    .1    .1    .1    .3    .3    .4    .4    .0    .0    .0    .0    .0    .0
 315.  *    .3    .3    .3    .1    .1    .0    .0    .1    .1    .2    .3    .3    .4    .4    .0    .0    .0    .0    .0    .0
 320.  *    .3    .3    .3    .1    .0    .0    .0    .1    .1    .1    .3    .4    .3    .4    .0    .0    .0    .0    .0    .0
 325.  *    .3    .4    .3    .1    .0    .0    .0    .1    .1    .1    .2    .4    .3    .5    .0    .0    .0    .0    .0    .0
 330.  *    .3    .3    .2    .1    .0    .0    .0    .0    .1    .1    .3    .3    .4    .5    .0    .0    .0    .0    .0    .0
 335.  *    .3    .3    .3    .1    .0    .1    .0    .0    .1    .2    .4    .3    .4    .5    .0    .0    .0    .0    .0    .0
 340.  *    .3    .3    .3    .1    .0    .0    .0    .0    .1    .2    .4    .6    .4    .6    .1    .0    .0    .0    .0    .0
 345.  *    .3    .3    .3    .0    .0    .0    .0    .0    .0    .1    .5    .5    .3    .3    .1    .2    .0    .0    .0    .0
 350.  *    .5    .4    .3    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .3    .4    .2    .2    .0    .0    .0
 355.  *    .5    .3    .2    .0    .0    .0    .0    .0    .0    .0    .2    .4    .3    .3    .4    .3    .3    .1    .0    .0
 360.  *    .4    .3    .1    .0    .0    .0    .0    .0    .0    .0    .1    .2    .1    .2    .4    .3    .3    .2    .1    .0
 ------*-----------------------------------------------------------------------------------------------------------------------
 MAX   *    .5    .5    .4    .2    .1    .1    .0    .1    .1    .2    .5    .6    .5    .6    .6    .6    .5    .5    .5    .5
 DEGR. *   10   230   220   220   220   280     0   285   255   315   345   340   205   340    15    10    30    30    50    60

1
                                                                                                                 PAGE  5
      JOB: Site 2 Opt 1/2 2014 2B1AM14.DAT                     RUN: Site 2 Opt 1/2 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .3
  30.  *    .3
  35.  *    .3
  40.  *    .3
  45.  *    .4
  50.  *    .5
  55.  *    .5
```

```
  60.  *    .4
  65.  *    .4
  70.  *    .4
  75.  *    .4
  80.  *    .4
  85.  *    .3
  90.  *    .3
  95.  *    .4
 100.  *    .4
 105.  *    .4
 110.  *    .4
 115.  *    .4
 120.  *    .4
 125.  *    .4
 130.  *    .4
 135.  *    .4
 140.  *    .4
 145.  *    .4
 150.  *    .4
 155.  *    .4
 160.  *    .4
 165.  *    .4
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .6
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1                                                                                                                     PAGE  6
      JOB: Site 2 Opt 1/2 2014 2B1AM14.DAT                        RUN: Site 2 Opt 1/2 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .4
 215.  *    .2
 220.  *    .1
 225.  *    .1
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .6
 DEGR. *  185

 THE HIGHEST CONCENTRATION IS     .60 PPM AT  340 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS     .60 PPM AT  340 DEGREES FROM REC14.
 THE 3RD HIGHEST CONCENTRATION IS     .60 PPM AT   15 DEGREES FROM REC15.
```

```
Site 2 Opt 1/2 2030 2B1AM30.DAT         60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 1/2 2030 AM                   25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.    1535 9.2   0  56   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.    1535 9.2   0  56   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.    1535 9.2   0  56   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.    1535 9.2   0  56   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     860 9.2   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     860 9.2   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     860 9.2   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     860 9.2   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.     255 9.2   0  44   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     180 9.2   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     180 9.2   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      75 9.2   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      75 9.2   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      75 9.2   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.     400 9.2   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.     400 9.2   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.     400 9.2   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.     400 9.2   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.     245 9.2   0  44   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.     245 9.2   0  44   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.     245 9.2   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.     775 9.2   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.     775 9.2   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.     775 9.2   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.     775 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 2 Opt 1/2 2030 2B1AM30.DAT                      RUN: Site 2 Opt 1/2 2030 AM
      DATE: 05/06/2009   TIME: 11:38:42.43


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.  171. AG    1535.   9.2    .0 56.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.  175. AG    1535.   9.2    .0 56.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.  182. AG    1535.   9.2    .0 56.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.  186. AG    1535.   9.2    .0 56.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.  197. AG     860.   9.2    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.  203. AG     860.   9.2    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.  210. AG     860.   9.2    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.  211. AG     860.   9.2    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.   32. AG     255.   9.2    .0 44.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.   22. AG     180.   9.2    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.   15. AG     180.   9.2    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.   29. AG      75.   9.2    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.   40. AG      75.   9.2    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.   56. AG      75.   9.2    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.    8. AG     400.   9.2    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.    1. AG     400.   9.2    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.  350. AG     400.   9.2    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.  351. AG     400.   9.2    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.  250. AG     245.   9.2    .0 44.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.  235. AG     245.   9.2    .0 44.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.  276. AG     245.   9.2    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.  100. AG     775.   9.2    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.   67. AG     775.   9.2    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.   55. AG     775.   9.2    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.   71. AG     775.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 2 Opt 1/2 2030 2B1AM30.DAT                      RUN: Site 2 Opt 1/2 2030 AM
      DATE: 05/06/2009   TIME: 11:38:42.43

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*-------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0       5.0   *
      2. SE 164 S             *       873.0     1060.0       5.0   *
      3. SE 82 S              *       920.0     1129.0       5.0   *
      4. SE CNR               *       987.0     1178.0       5.0   *
      5. SE 82 E              *      1056.0     1224.0       5.0   *
      6. SE 164 E             *      1127.0     1270.0       5.0   *
      7. SE MID E             *      1295.0     1374.0       5.0   *
      8. NE MID E             *      1218.0     1483.0       5.0   *
      9. NE 164 E             *      1112.0     1375.0       5.0   *
     10. NE 82 E              *      1046.0     1328.0       5.0   *
     11. NE CNR               *       951.0     1290.0       5.0   *
     12. NE 82 N              *       947.0     1396.0       5.0   *
     13. NE 164 N             *       950.0     1478.0       5.0   *
     14. NE MID N             *       927.0     1639.0       5.0   *
     15. NW MID N             *       855.0     1602.0       5.0   *
     16. NW 164 N             *       867.0     1442.0       5.0   *
     17. NW 82 N              *       859.0     1362.0       5.0   *
     18. W CNR                *       842.0     1280.0       5.0   *
     19. SW 82 S              *       824.0     1202.0       5.0   *
     20. SW 164 S             *       797.0     1123.0       5.0   *
     21. SW MID S             *       722.0      975.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 2 Opt 1/2 2030 2B1AM30.DAT                      RUN: Site 2 Opt 1/2 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *     (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *     .3    .3    .4    .1    .2    .2    .3    .0    .0    .0    .3    .2    .2    .2    .7    .6    .5    .4    .3    .1
   5.  *     .2    .2    .2    .1    .2    .2    .3    .0    .0    .0    .1    .2    .1    .1    .8    .7    .7    .5    .3    .3
  10.  *     .2    .2    .2    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .1    .8    .9    .7    .5    .4    .3
  15.  *     .1    .1    .1    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .8    .8    .5    .4    .3
  20.  *     .0    .0    .1    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .8    .7    .6    .6    .5    .2
  25.  *     .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .7    .7    .6    .6    .3    .2
  30.  *     .0    .0    .1    .2    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .7    .7    .6    .5    .3    .3
  35.  *     .0    .0    .1    .2    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .6    .5    .6    .3    .3
  40.  *     .0    .0    .1    .2    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .4    .3
```

```
   45.  *    .0    .0    .2    .2    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .3    .3
   50.  *    .0    .0    .1    .1    .2    .2    .4    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .5    .3    .3
   55.  *    .0    .0    .0    .2    .2    .2    .4    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .5    .3    .2
   60.  *    .0    .0    .0    .2    .2    .1    .3    .0    .1    .1    .0    .0    .0    .0    .5    .5    .6    .5    .3    .2
   65.  *    .0    .0    .0    .0    .1    .1    .2    .0    .2    .3    .1    .0    .0    .0    .5    .5    .5    .5    .3    .2
   70.  *    .0    .0    .0    .0    .0    .1    .2    .0    .2    .3    .2    .0    .0    .0    .5    .5    .5    .5    .3    .3
   75.  *    .0    .0    .0    .0    .0    .0    .1    .1    .2    .3    .2    .1    .0    .0    .5    .5    .5    .4    .3    .3
   80.  *    .0    .0    .0    .0    .0    .0    .1    .1    .4    .3    .2    .1    .0    .0    .5    .5    .5    .4    .3    .2
   85.  *    .0    .0    .0    .0    .0    .0    .1    .1    .3    .3    .1    .1    .0    .0    .6    .6    .5    .4    .3    .2
   90.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .1    .1    .1    .0    .5    .6    .6    .5    .2    .2
   95.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .1    .0    .1    .0    .5    .6    .6    .3    .2    .2
  100.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .2    .0    .1    .0    .5    .6    .6    .4    .2    .2
  105.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .6    .5    .4    .2    .2
  110.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .5    .5    .3    .2    .2
  115.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .4    .5    .3    .2    .2
  120.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .5    .5    .4    .2    .2
  125.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .6    .5    .5    .4    .2    .2
  130.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .5    .6    .3    .2    .2
  135.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .7    .6    .3    .2    .2
  140.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .6    .6    .3    .2    .2
  145.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .7    .6    .6    .2    .2    .2
  150.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .7    .6    .2    .2    .2
  155.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .7    .6    .2    .3    .2
  160.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .6    .7    .6    .2    .3    .2
  165.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .6    .7    .5    .2    .2    .2
  170.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .2    .0    .0    .1    .5    .6    .5    .2    .2    .3
  175.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .2    .0    .0    .3    .5    .5    .5    .2    .2    .3
  180.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .1    .5    .4    .6    .4    .2    .2    .2
  185.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .1    .5    .4    .6    .4    .2    .3    .2
  190.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .2    .6    .1    .3    .3    .2    .2    .2
  195.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .3    .4    .7    .1    .3    .3    .1    .2    .3
  200.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .4    .5    .7    .1    .2    .1    .0    .3    .2
  205.  *    .2    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .4    .5    .6    .0    .2    .1    .0    .3    .2
1
                                                                                                                             PAGE  4
      JOB: Site 2 Opt 1/2 2030 2B1AM30.DAT                      RUN: Site 2 Opt 1/2 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
  210.  *    .2    .1    .1    .0    .0    .0    .0    .1    .2    .2    .3    .4    .5    .5    .0    .0    .1    .0    .1    .2
  215.  *    .2    .2    .2    .0    .0    .0    .0    .1    .3    .1    .3    .5    .5    .5    .0    .0    .1    .0    .0    .2
  220.  *    .2    .2    .2    .0    .0    .0    .0    .1    .2    .1    .3    .4    .5    .5    .0    .0    .1    .0    .0    .0
  225.  *    .3    .2    .2    .0    .0    .0    .0    .0    .1    .1    .3    .4    .5    .5    .0    .0    .0    .0    .0    .0
  230.  *    .3    .2    .1    .0    .0    .0    .0    .0    .0    .0    .3    .4    .5    .5    .0    .0    .0    .0    .0    .0
  235.  *    .2    .1    .2    .0    .0    .0    .1    .0    .0    .0    .3    .4    .5    .5    .0    .0    .0    .0    .0    .0
  240.  *    .3    .1    .2    .0    .0    .1    .1    .0    .0    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
  245.  *    .3    .1    .1    .1    .0    .1    .1    .0    .1    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
  250.  *    .3    .1    .1    .0    .0    .2    .1    .0    .1    .1    .2    .4    .4    .5    .0    .0    .0    .0    .0    .0
  255.  *    .3    .2    .1    .0    .0    .2    .1    .0    .1    .1    .2    .4    .4    .5    .0    .0    .0    .0    .0    .0
  260.  *    .2    .2    .1    .1    .2    .2    .2    .0    .1    .1    .4    .4    .4    .5    .0    .0    .0    .0    .0    .0
  265.  *    .2    .2    .1    .1    .3    .2    .2    .0    .1    .1    .3    .5    .5    .5    .0    .0    .0    .0    .0    .0
  270.  *    .2    .1    .1    .1    .3    .3    .2    .0    .1    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
  275.  *    .2    .1    .1    .1    .2    .3    .2    .1    .1    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
  280.  *    .2    .1    .2    .1    .2    .3    .3    .1    .2    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
  285.  *    .2    .1    .1    .1    .4    .3    .2    .1    .1    .1    .4    .4    .4    .4    .0    .0    .0    .0    .0    .0
  290.  *    .2    .1    .1    .2    .3    .3    .2    .1    .1    .1    .4    .4    .4    .5    .0    .0    .0    .0    .0    .0
  295.  *    .2    .1    .1    .2    .3    .3    .3    .1    .2    .2    .4    .5    .4    .5    .0    .0    .0    .0    .0    .0
  300.  *    .2    .1    .1    .2    .3    .3    .3    .1    .1    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
  305.  *    .2    .1    .1    .3    .3    .2    .3    .1    .1    .1    .4    .4    .5    .5    .0    .0    .0    .0    .0    .0
  310.  *    .2    .1    .1    .2    .3    .2    .3    .1    .1    .2    .4    .4    .4    .5    .0    .0    .0    .0    .0    .0
  315.  *    .2    .1    .1    .2    .3    .3    .3    .1    .1    .2    .4    .5    .4    .5    .0    .0    .0    .0    .0    .0
  320.  *    .2    .1    .1    .2    .3    .3    .3    .1    .2    .2    .4    .5    .4    .6    .0    .0    .0    .0    .0    .0
  325.  *    .2    .1    .1    .2    .4    .3    .3    .1    .2    .1    .4    .5    .4    .7    .0    .1    .0    .0    .0    .0
  330.  *    .2    .1    .2    .2    .3    .4    .3    .1    .2    .2    .5    .5    .5    .7    .1    .1    .0    .0    .0    .0
  335.  *    .2    .2    .2    .3    .4    .3    .2    .0    .1    .2    .5    .6    .5    .7    .2    .2    .0    .0    .0    .0
  340.  *    .2    .2    .2    .5    .3    .3    .2    .0    .1    .2    .5    .6    .5    .7    .2    .3    .1    .0    .0    .0
  345.  *    .2    .2    .2    .5    .3    .3    .2    .0    .1    .2    .4    .5    .5    .5    .3    .3    .3    .0    .0    .0
  350.  *    .2    .2    .5    .4    .3    .2    .2    .0    .0    .1    .4    .5    .5    .5    .4    .4    .4    .1    .0    .0
  355.  *    .3    .3    .4    .3    .2    .2    .3    .0    .0    .0    .3    .5    .3    .3    .7    .6    .4    .3    .1    .0
  360.  *    .3    .3    .4    .1    .2    .2    .3    .0    .0    .0    .3    .2    .2    .2    .7    .6    .5    .4    .3    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .3    .3    .5    .5    .4    .4    .4    .1    .4    .3    .5    .6    .5    .7    .8    .9    .8    .6    .5    .3
 DEGR. *    0     0   350   340   285   330    50    75    80    65   330   335   200   195     5    10    15    20    20     5

1
                                                                                                                             PAGE  5
      JOB: Site 2 Opt 1/2 2030 2B1AM30.DAT                      RUN: Site 2 Opt 1/2 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
    0.  *    .0
    5.  *    .0
   10.  *    .0
   15.  *    .0
   20.  *    .0
   25.  *    .0
   30.  *    .2
   35.  *    .2
   40.  *    .2
   45.  *    .3
   50.  *    .3
   55.  *    .2
```

```
  60.  *    .2
  65.  *    .2
  70.  *    .2
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .2
 100.  *    .2
 105.  *    .2
 110.  *    .2
 115.  *    .2
 120.  *    .2
 125.  *    .2
 130.  *    .2
 135.  *    .2
 140.  *    .2
 145.  *    .2
 150.  *    .2
 155.  *    .2
 160.  *    .2
 165.  *    .2
 170.  *    .3
 175.  *    .4
 180.  *    .4
 185.  *    .4
 190.  *    .4
 195.  *    .4
 200.  *    .4
 205.  *    .3
1
                                                                                                                           PAGE  6
      JOB: Site 2 Opt 1/2 2030 2B1AM30.DAT                       RUN: Site 2 Opt 1/2 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .2
 215.  *    .1
 220.  *    .1
 225.  *    .1
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .4
 DEGR. *  175

 THE HIGHEST CONCENTRATION IS     .90 PPM AT   10 DEGREES FROM REC16.
 THE 2ND HIGHEST CONCENTRATION IS     .80 PPM AT    5 DEGREES FROM REC15.
 THE 3RD HIGHEST CONCENTRATION IS     .80 PPM AT   15 DEGREES FROM REC17.
```

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Site 2 Opt 1/2 2014 2B1PM14.DAT         60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 1/2 2014 PM                   25  1   0
  1
EB         Rt9 aprch AG   792.  2248.   878.  1704.     31111.4   0  32   30.
  1
EB         Rt9 aprch AG   878.  1704.   896.  1490.     31111.4   0  32   30.
  1
EB         Rt9 aprch AG   896.  1490.   893.  1407.     31111.4   0  32   30.
  1
EB         Rt9 aprch AG   893.  1407.   879.  1273.     31111.4   0  32   30.
  1
EB         Rt9 departAG   879.  1272.   839.  1143.     31111.4   0  32   30.
  1
EB         Rt9 departAG   839.  1143.   799.  1049.     31111.4   0  32   30.
  1
EB         Rt9 departAG   799.  1049.   710.   894.     31111.4   0  32   30.
  1
EB         Rt9 departAG   710.   894.   403.   384.     31111.4   0  32   30.
  1
WB         Rt9 aprch AG   422.   375.   796.   977.    189811.4   0  32   30.
  1
WB         Rt9 thru  AG   796.   977.   861.  1137.    189811.4   0  32   30.
  1
WB         Rt9 thru  AG   861.  1137.   897.  1268.    189811.4   0  32   30.
  1
WB         Rt9 right AG   804.   985.   868.  1102.      1011.4   0  32   30.
  1
WB         Rt9 right AG   869.  1102.   912.  1154.      1011.4   0  32   30.
  1
WB         Rt9 right AG   912.  1154.  1059.  1254.      1011.4   0  32   30.
  1
WB         Rt9 departAG   897.  1269.   918.  1410.    189811.4   0  32   30.
  1
WB         Rt9 departAG   918.  1410.   920.  1500.    189811.4   0  32   30.
```

```
   1
WB         Rt9 departAG   920.  1500.   885.  1706.    189811.4   0  32   30.
   1
WB         Rt9 departAG   885.  1706.   802.  2250.    189811.4   0  32   30.
   1
SB         AAFB aprchAG  1824.  1620.  1193.  1391.      1011.4   0  32   30.
   1
SB         AAFB aprchAG  1193.  1391.  1000.  1255.      1011.4   0  32   30.
   1
SB         AAFB aprchAG  1000.  1255.   900.  1266.      1011.4   0  44   30.
   1
NB         AAFB deparAG   893.  1239.   968.  1226.      1011.4   0  32   30.
   1
NB         AAFB deparAG   968.  1226.  1056.  1264.      1011.4   0  32   30.
   1
NB         AAFB deparAG  1056.  1264.  1222.  1382.      1011.4   0  32   30.
   1
NB         AAFB deparAG  1222.  1382.  1831.  1596.      1011.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                PAGE  1

      JOB: Site 2 Opt 1/2 2014 2B1PM14.DAT                     RUN: Site 2 Opt 1/2 2014 PM
      DATE: 05/06/2009   TIME: 10:10:36.23


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.   171. AG    311.  11.4    .0 32.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.   175. AG    311.  11.4    .0 32.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.   182. AG    311.  11.4    .0 32.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.   186. AG    311.  11.4    .0 32.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.   197. AG    311.  11.4    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.   203. AG    311.  11.4    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.   210. AG    311.  11.4    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.   211. AG    311.  11.4    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.    32. AG   1898.  11.4    .0 32.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.    22. AG   1898.  11.4    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.    15. AG   1898.  11.4    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.    29. AG     10.  11.4    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.    40. AG     10.  11.4    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.    56. AG     10.  11.4    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.     8. AG   1898.  11.4    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.     1. AG   1898.  11.4    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.   350. AG   1898.  11.4    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.   351. AG   1898.  11.4    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.   250. AG     10.  11.4    .0 32.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.   235. AG     10.  11.4    .0 32.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.   276. AG     10.  11.4    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.   100. AG     10.  11.4    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.    67. AG     10.  11.4    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.    55. AG     10.  11.4    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.    71. AG     10.  11.4    .0 32.0
1
                                                                                                                    PAGE  2
      JOB: Site 2 Opt 1/2 2014 2B1PM14.DAT                     RUN: Site 2 Opt 1/2 2014 PM
      DATE: 05/06/2009   TIME: 10:10:36.23

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)           *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0        5.0   *
      2. SE 164 S             *       873.0     1060.0        5.0   *
      3. SE 82 S              *       920.0     1129.0        5.0   *
      4. SE CNR               *       987.0     1178.0        5.0   *
      5. SE 82 E              *      1056.0     1224.0        5.0   *
      6. SE 164 E             *      1127.0     1270.0        5.0   *
      7. SE MID E             *      1295.0     1374.0        5.0   *
      8. NE MID E             *      1218.0     1483.0        5.0   *
      9. NE 164 E             *      1112.0     1375.0        5.0   *
     10. NE 82 E              *      1046.0     1328.0        5.0   *
     11. NE CNR               *       951.0     1290.0        5.0   *
     12. NE 82 N              *       947.0     1396.0        5.0   *
     13. NE 164 N             *       950.0     1478.0        5.0   *
     14. NE MID N             *       927.0     1639.0        5.0   *
     15. NW MID N             *       855.0     1602.0        5.0   *
     16. NW 164 N             *       867.0     1442.0        5.0   *
     17. NW 82 N              *       859.0     1362.0        5.0   *
     18. W CNR                *       842.0     1280.0        5.0   *
     19. SW 82 S              *       824.0     1202.0        5.0   *
     20. SW 164 S             *       797.0     1123.0        5.0   *
     21. SW MID S             *       722.0      975.0        5.0   *
1
                                                                                                                    PAGE  3
      JOB: Site 2 Opt 1/2 2014 2B1PM14.DAT                     RUN: Site 2 Opt 1/2 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.0    .8    .7    .2    .0    .0    .0    .0    .0    .0    .4    .5    .3    .3    .6    .5    .3    .2    .2    .1
   5.  *   1.1    .8    .6    .0    .0    .0    .0    .0    .0    .0    .4    .5    .2    .2    .8    .6    .4    .3    .3    .2
  10.  *   1.1    .6    .3    .0    .0    .0    .0    .0    .0    .0    .2    .2    .1    .1    .8    .5    .4    .4    .4    .3
  15.  *    .9    .4    .1    .0    .0    .0    .0    .0    .0    .0    .0    .2    .0    .0    .7    .5    .5    .4    .4    .4
  20.  *    .9    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .8    .5    .5    .4    .3
  25.  *    .6    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .6    .4    .5    .5    .4
  30.  *    .5    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .7    .6    .5    .4
  35.  *    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .5    .5
  40.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .6    .6    .5    .5
```

```
   45.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .6    .5    .6
   50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .6    .5
   55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6    .5    .5    .6
   60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .5    .5    .6    .6
   65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .6    .5    .6    .5
   70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .6    .5    .5    .6
   75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
   80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
   85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
   90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .5    .5
   95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .5    .5
  100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .4    .5    .5
  105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .5    .4    .5    .5
  110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
  115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
  120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
  125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .5    .5
  130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .5    .5    .5
  135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .6    .5
  140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .6    .5    .5    .5
  145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .7    .6    .5    .6    .5
  150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .6    .5    .5    .5    .5
  155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .6    .6    .6    .6    .5    .5
  160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .6    .6    .5    .6    .5    .5
  165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .5    .5    .5    .5    .6
  170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .4    .4    .5    .5    .5    .5    .6
  175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .5    .3    .5    .5    .5    .5    .5
  180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .4    .6    .3    .6    .5    .6    .5    .6
  185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .8    .3    .5    .4    .5    .5    .6
  190.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .3    .6    .8   1.1    .1    .4    .3    .4    .5    .6
  195.  *    .2    .1    .1    .0    .0    .0    .0    .0    .0    .0    .3    .8    .9   1.0    .1    .3    .3    .3    .4    .5
  200.  *    .3    .3    .2    .1    .0    .0    .0    .0    .0    .1    .4    .9   1.0   1.1    .1    .1    .2    .3    .3    .5
  205.  *    .4    .4    .3    .1    .1    .0    .0    .0    .1    .2    .7    .9   1.0    .9    .1    .1    .1    .3    .3    .3
1
                                                                                                                            PAGE  4
      JOB: Site 2 Opt 1/2 2014 2B1PM14.DAT                      RUN: Site 2 Opt 1/2 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
  210.  *    .6    .6    .5    .3    .1    .1    .0    .1    .1    .2    .7    .9   1.0    .8    .0    .1    .1    .1    .2    .2
  215.  *    .8    .6    .5    .3    .2    .1    .1    .1    .2    .3    .6   1.0    .8    .8    .0    .0    .1    .1    .1    .2
  220.  *    .9    .7    .6    .3    .3    .1    .1    .1    .3    .3    .6   1.0    .8    .7    .0    .0    .0    .0    .1    .1
  225.  *   1.0    .8    .5    .4    .3    .2    .1    .1    .3    .3    .8    .8    .7    .7    .0    .0    .0    .0    .0    .0
  230.  *   1.0    .8    .6    .3    .2    .2    .1    .1    .3    .3    .7    .8    .8    .7    .0    .0    .0    .0    .0    .0
  235.  *   1.0    .8    .5    .3    .2    .2    .1    .1    .2    .3    .6    .7    .7    .7    .0    .0    .0    .0    .0    .0
  240.  *    .9    .7    .5    .4    .3    .2    .0    .1    .2    .2    .6    .7    .7    .7    .0    .0    .0    .0    .0    .0
  245.  *    .8    .7    .4    .3    .2    .2    .0    .1    .2    .2    .5    .7    .7    .7    .0    .0    .0    .0    .0    .0
  250.  *    .8    .6    .4    .3    .2    .2    .0    .1    .2    .2    .4    .7    .7    .7    .0    .0    .0    .0    .0    .0
  255.  *    .7    .5    .4    .3    .2    .1    .0    .1    .1    .2    .5    .7    .7    .7    .0    .0    .0    .0    .0    .0
  260.  *    .8    .5    .4    .3    .2    .1    .1    .1    .1    .2    .4    .7    .7    .7    .0    .0    .0    .0    .0    .0
  265.  *    .8    .5    .4    .3    .2    .2    .1    .1    .1    .2    .5    .6    .7    .7    .0    .0    .0    .0    .0    .0
  270.  *    .8    .5    .4    .2    .2    .2    .1    .2    .1    .2    .5    .6    .7    .7    .0    .0    .0    .0    .0    .0
  275.  *    .7    .5    .4    .2    .1    .2    .0    .1    .2    .2    .4    .6    .6    .7    .0    .0    .0    .0    .0    .0
  280.  *    .7    .6    .4    .2    .2    .1    .0    .1    .2    .2    .5    .6    .6    .7    .0    .0    .0    .0    .0    .0
  285.  *    .7    .6    .4    .2    .2    .1    .0    .1    .2    .2    .5    .6    .6    .7    .0    .0    .0    .0    .0    .0
  290.  *    .7    .6    .4    .2    .2    .1    .1    .1    .1    .2    .5    .6    .7    .7    .0    .0    .0    .0    .0    .0
  295.  *    .7    .6    .4    .2    .2    .1    .1    .1    .2    .3    .5    .7    .7    .7    .0    .0    .0    .0    .0    .0
  300.  *    .7    .6    .3    .2    .2    .2    .1    .2    .2    .2    .5    .7    .8    .7    .0    .0    .0    .0    .0    .0
  305.  *    .7    .6    .4    .3    .2    .2    .1    .2    .2    .2    .5    .7    .7    .8    .0    .0    .0    .0    .0    .0
  310.  *    .7    .6    .4    .3    .2    .3    .2    .1    .2    .3    .5    .7    .8    .8    .0    .0    .0    .0    .0    .0
  315.  *    .7    .6    .4    .2    .1    .2    .1    .1    .1    .2    .5    .7    .8    .9    .0    .0    .0    .0    .0    .0
  320.  *    .7    .6    .4    .3    .2    .2    .1    .1    .2    .2    .5    .8    .8    .8    .0    .0    .0    .0    .0    .0
  325.  *    .7    .5    .4    .3    .3    .2    .1    .1    .2    .3    .5    .8   1.0    .9    .0    .0    .0    .0    .0    .0
  330.  *    .8    .6    .4    .2    .4    .2    .1    .1    .2    .3    .5    .9    .9    .9    .0    .0    .0    .0    .0    .0
  335.  *    .8    .6    .5    .4    .3    .2    .1    .1    .2    .3    .7    .8    .9    .9    .1    .0    .0    .0    .0    .0
  340.  *    .9    .6    .4    .5    .3    .2    .0    .0    .1    .2    .6    .9   1.0    .9    .1    .1    .0    .0    .0    .0
  345.  *    .8    .6    .5    .5    .2    .1    .0    .0    .1    .2    .7   1.0    .7    .8    .2    .2    .1    .1    .0    .0
  350.  *    .9    .8    .7    .4    .2    .1    .0    .0    .1    .2    .6    .9    .6    .6    .4    .3    .2    .1    .1    .0
  355.  *    .9    .8    .7    .4    .1    .0    .0    .0    .0    .1    .5    .7    .5    .5    .6    .5    .2    .2    .1    .1
  360.  *   1.0    .8    .7    .2    .0    .0    .0    .0    .0    .0    .4    .5    .3    .3    .6    .5    .3    .2    .2    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX    *   1.1    .8    .7    .5    .4    .3    .2    .2    .3    .3    .8   1.0   1.0   1.1    .8    .8    .7    .6    .6    .6
 DEGR.  *     5     0     0   340   330   310   310   270   220   215   225   215   200   190     5    20    30    30    50    45

1
                                                                                                                            PAGE  5
      JOB: Site 2 Opt 1/2 2014 2B1PM14.DAT                      RUN: Site 2 Opt 1/2 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
    0.  *    .1
    5.  *    .1
   10.  *    .1
   15.  *    .1
   20.  *    .2
   25.  *    .3
   30.  *    .3
   35.  *    .4
   40.  *    .4
   45.  *    .5
   50.  *    .5
   55.  *    .4
```

```
  60.  *    .5
  65.  *    .4
  70.  *    .5
  75.  *    .5
  80.  *    .4
  85.  *    .5
  90.  *    .5
  95.  *    .5
 100.  *    .5
 105.  *    .5
 110.  *    .4
 115.  *    .5
 120.  *    .5
 125.  *    .5
 130.  *    .5
 135.  *    .5
 140.  *    .5
 145.  *    .5
 150.  *    .5
 155.  *    .5
 160.  *    .5
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .6
 185.  *    .6
 190.  *    .7
 195.  *    .7
 200.  *    .5
 205.  *    .5
1
                                                                                                                             PAGE  6
      JOB: Site 2 Opt 1/2 2014 2B1PM14.DAT                        RUN: Site 2 Opt 1/2 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .4
 215.  *    .3
 220.  *    .1
 225.  *    .1
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .1
 ------*------
 MAX   *    .7
 DEGR. *  190

 THE HIGHEST CONCENTRATION IS    1.10 PPM AT    5 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    1.10 PPM AT  190 DEGREES FROM REC14.
 THE 3RD HIGHEST CONCENTRATION IS    1.00 PPM AT  215 DEGREES FROM REC12.
```

```
Site 2 Opt 1/2 2030 2B1PM30.DAT         60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 1/2 2030 PM                   25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     360 9.2   0  56   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     360 9.2   0  56   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     360 9.2   0  56   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     360 9.2   0  56   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     180 9.2   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     180 9.2   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     180 9.2   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     180 9.2   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.    1005 9.2   0  44   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     975 9.2   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     975 9.2   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      30 9.2   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      30 9.2   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      30 9.2   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.    1690 9.2   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.    1690 9.2   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.    1690 9.2   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.    1690 9.2   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.     795 9.2   0  44   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.     795 9.2   0  44   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.     795 9.2   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.     290 9.2   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.     290 9.2   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.     290 9.2   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.     290 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 2 Opt 1/2 2030 2B1PM30.DAT                      RUN: Site 2 Opt 1/2 2030 PM
      DATE: 05/06/2009   TIME: 11:39:05.17


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-----------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.  171. AG     360.   9.2    .0 56.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.  175. AG     360.   9.2    .0 56.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.  182. AG     360.   9.2    .0 56.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.  186. AG     360.   9.2    .0 56.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.  197. AG     180.   9.2    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.  203. AG     180.   9.2    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.  210. AG     180.   9.2    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.  211. AG     180.   9.2    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.   32. AG    1005.   9.2    .0 44.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.   22. AG     975.   9.2    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.   15. AG     975.   9.2    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.   29. AG      30.   9.2    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.   40. AG      30.   9.2    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.   56. AG      30.   9.2    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.    8. AG    1690.   9.2    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.    1. AG    1690.   9.2    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.  350. AG    1690.   9.2    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.  351. AG    1690.   9.2    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.  250. AG     795.   9.2    .0 44.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.  235. AG     795.   9.2    .0 44.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.  276. AG     795.   9.2    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.  100. AG     290.   9.2    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.   67. AG     290.   9.2    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.   55. AG     290.   9.2    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.   71. AG     290.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 2 Opt 1/2 2030 2B1PM30.DAT                      RUN: Site 2 Opt 1/2 2030 PM
      DATE: 05/06/2009   TIME: 11:39:05.17

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0        5.0   *
      2. SE 164 S             *       873.0     1060.0        5.0   *
      3. SE 82 S              *       920.0     1129.0        5.0   *
      4. SE CNR               *       987.0     1178.0        5.0   *
      5. SE 82 E              *      1056.0     1224.0        5.0   *
      6. SE 164 E             *      1127.0     1270.0        5.0   *
      7. SE MID E             *      1295.0     1374.0        5.0   *
      8. NE MID E             *      1218.0     1483.0        5.0   *
      9. NE 164 E             *      1112.0     1375.0        5.0   *
     10. NE 82 E              *      1046.0     1328.0        5.0   *
     11. NE CNR               *       951.0     1290.0        5.0   *
     12. NE 82 N              *       947.0     1396.0        5.0   *
     13. NE 164 N             *       950.0     1478.0        5.0   *
     14. NE MID N             *       927.0     1639.0        5.0   *
     15. NW MID N             *       855.0     1602.0        5.0   *
     16. NW 164 N             *       867.0     1442.0        5.0   *
     17. NW 82 N              *       859.0     1362.0        5.0   *
     18. W CNR                *       842.0     1280.0        5.0   *
     19. SW 82 S              *       824.0     1202.0        5.0   *
     20. SW 164 S             *       797.0     1123.0        5.0   *
     21. SW MID S             *       722.0      975.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 2 Opt 1/2 2030 2B1PM30.DAT                      RUN: Site 2 Opt 1/2 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *     (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *    .4    .4    .5    .1    .2    .2    .3    .0    .0    .0    .4    .5    .3    .2    .6    .5    .2    .2    .1    .1
   5.  *    .4    .3    .2    .2    .2    .2    .3    .0    .0    .0    .2    .3    .2    .1    .6    .5    .2    .2    .2    .1
  10.  *    .4    .2    .2    .2    .2    .2    .3    .0    .0    .0    .0    .2    .1    .1    .7    .5    .4    .4    .3    .1
  15.  *    .4    .2    .2    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .4    .2    .1
  20.  *    .3    .2    .1    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .5    .5    .4    .4    .3    .1
  25.  *    .3    .0    .1    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .3    .2
  30.  *    .2    .0    .1    .1    .2    .3    .3    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .2    .2
  35.  *    .2    .0    .1    .1    .2    .3    .3    .0    .0    .0    .0    .0    .0    .0    .4    .4    .5    .4    .3    .2
  40.  *    .1    .1    .1    .1    .3    .3    .3    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .5    .3    .2
```

```
  45.  *    .0    .0    .1    .2    .3    .1    .3    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .2    .2
  50.  *    .0    .0    .1    .2    .3    .1    .3    .0    .1    .1    .0    .0    .0    .0    .4    .4    .4    .4    .3    .2
  55.  *    .0    .0    .2    .2    .1    .1    .3    .0    .1    .2    .1    .0    .0    .0    .4    .5    .4    .4    .3    .1
  60.  *    .0    .0    .0    .1    .1    .1    .3    .0    .2    .2    .2    .0    .0    .0    .4    .4    .4    .4    .4    .1
  65.  *    .0    .0    .0    .0    .1    .1    .2    .0    .3    .3    .2    .0    .0    .0    .4    .4    .5    .4    .4    .2
  70.  *    .0    .0    .0    .0    .0    .1    .2    .1    .3    .3    .2    .1    .0    .0    .4    .4    .4    .6    .4    .2
  75.  *    .0    .0    .0    .0    .0    .0    .1    .1    .5    .3    .2    .1    .0    .0    .4    .4    .5    .6    .4    .2
  80.  *    .0    .0    .0    .0    .0    .0    .0    .1    .5    .3    .3    .1    .1    .0    .4    .5    .5    .6    .3    .2
  85.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .2    .1    .1    .0    .4    .5    .5    .5    .2    .2
  90.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .2    .1    .1    .0    .4    .5    .5    .5    .2    .1
  95.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .3    .1    .1    .0    .4    .4    .5    .6    .2    .1
 100.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .2    .1    .1    .0    .4    .4    .5    .5    .2    .2
 105.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .4    .5    .5    .3    .2    .2
 110.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .4    .4    .5    .3    .2    .2
 115.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .4    .5    .5    .3    .2    .2
 120.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .1    .0    .0    .4    .5    .4    .2    .2    .2
 125.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .1    .1    .0    .4    .5    .5    .2    .2    .2
 130.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .1    .1    .0    .4    .4    .5    .2    .2    .2
 135.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .5    .4    .5    .2    .1    .2
 140.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .5    .4    .5    .2    .1    .2
 145.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .4    .5    .5    .2    .2    .2
 150.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .4    .5    .5    .2    .2    .2
 155.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .4    .5    .5    .2    .2    .2
 160.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .1    .4    .5    .4    .2    .2    .2
 165.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .2    .4    .4    .3    .1    .1    .2
 170.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .3    .3    .5    .3    .2    .1    .2
 175.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .4    .3    .5    .3    .2    .1    .2
 180.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .2    .2    .5    .2    .3    .2    .2    .1    .2
 185.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .2    .3    .7    .0    .2    .3    .3    .2    .2
 190.  *    .1    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .4    .3    .7    .0    .0    .3    .2    .2    .2
 195.  *    .1    .1    .0    .0    .0    .0    .0    .2    .2    .2    .3    .5    .4    .8    .0    .1    .1    .2    .2    .1
 200.  *    .2    .1    .1    .0    .0    .0    .0    .2    .2    .2    .5    .5    .5    .7    .0    .1    .1    .1    .1    .1
 205.  *    .2    .1    .1    .1    .0    .0    .0    .1    .2    .2    .5    .6    .5    .6    .0    .0    .1    .1    .1    .1
1
                                                                                                                PAGE  4
      JOB: Site 2 Opt 1/2 2030 2B1PM30.DAT                      RUN: Site 2 Opt 1/2 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
 210.  *    .3    .3    .2    .1    .1    .0    .0    .1    .2    .4    .5    .7    .6    .6    .0    .0    .0    .1    .1    .1
 215.  *    .4    .3    .2    .1    .1    .0    .0    .1    .3    .4    .6    .6    .6    .6    .0    .0    .0    .0    .1    .1
 220.  *    .4    .3    .2    .2    .1    .1    .0    .1    .2    .3    .5    .6    .6    .6    .0    .0    .0    .0    .0    .0
 225.  *    .5    .4    .2    .2    .1    .1    .0    .1    .2    .3    .4    .6    .6    .5    .0    .0    .0    .0    .0    .0
 230.  *    .5    .3    .3    .2    .2    .1    .0    .1    .1    .3    .5    .6    .5    .5    .0    .0    .0    .0    .0    .0
 235.  *    .4    .3    .2    .1    .1    .0    .0    .1    .1    .3    .4    .6    .5    .5    .0    .0    .0    .0    .0    .0
 240.  *    .4    .3    .2    .1    .1    .0    .1    .1    .2    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 245.  *    .4    .2    .2    .1    .0    .0    .1    .1    .1    .3    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 250.  *    .4    .2    .2    .2    .1    .0    .1    .1    .1    .2    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0
 255.  *    .3    .2    .1    .1    .1    .1    .1    .0    .1    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 260.  *    .3    .2    .1    .1    .1    .2    .1    .0    .1    .1    .3    .5    .5    .5    .0    .0    .0    .0    .0    .0
 265.  *    .3    .2    .1    .1    .1    .2    .1    .0    .1    .1    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 270.  *    .3    .2    .2    .1    .2    .4    .2    .0    .1    .1    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0
 275.  *    .3    .2    .2    .1    .2    .4    .2    .1    .1    .1    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0
 280.  *    .3    .2    .2    .1    .3    .3    .3    .1    .2    .1    .4    .4    .5    .5    .0    .0    .0    .0    .0    .0
 285.  *    .3    .2    .2    .1    .3    .3    .3    .1    .1    .1    .4    .4    .5    .5    .0    .0    .0    .0    .0    .0
 290.  *    .3    .2    .1    .1    .4    .3    .2    .1    .1    .1    .4    .5    .4    .5    .0    .0    .0    .0    .0    .0
 295.  *    .3    .2    .1    .1    .4    .3    .3    .1    .1    .1    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 300.  *    .3    .2    .1    .1    .4    .3    .4    .1    .2    .2    .4    .6    .6    .5    .0    .0    .0    .0    .0    .0
 305.  *    .3    .2    .1    .2    .4    .3    .3    .1    .2    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 310.  *    .3    .2    .2    .3    .4    .2    .3    .1    .1    .2    .4    .5    .6    .6    .0    .0    .0    .0    .0    .0
 315.  *    .3    .2    .2    .3    .4    .3    .4    .1    .1    .2    .4    .6    .6    .6    .0    .0    .0    .0    .0    .0
 320.  *    .3    .2    .2    .2    .3    .3    .4    .1    .2    .2    .4    .6    .6    .7    .0    .0    .0    .0    .0    .0
 325.  *    .3    .2    .2    .2    .4    .3    .4    .1    .2    .2    .4    .6    .6    .7    .0    .0    .0    .0    .0    .0
 330.  *    .3    .2    .2    .2    .5    .4    .4    .1    .2    .3    .4    .6    .7    .8    .0    .0    .0    .0    .0    .0
 335.  *    .3    .2    .3    .2    .4    .4    .3    .0    .1    .2    .5    .7    .8    .6    .0    .0    .0    .0    .0    .0
 340.  *    .4    .3    .2    .3    .4    .3    .3    .0    .1    .2    .5    .8    .6    .7    .1    .0    .0    .0    .0    .0
 345.  *    .3    .3    .2    .4    .5    .3    .3    .0    .1    .2    .5    .6    .7    .6    .1    .1    .1    .0    .0    .0
 350.  *    .3    .2    .3    .4    .3    .2    .3    .0    .0    .1    .5    .6    .4    .5    .3    .2    .2    .1    .0    .0
 355.  *    .4    .4    .4    .4    .2    .2    .3    .0    .0    .1    .4    .5    .3    .5    .6    .3    .2    .1    .1    .0
 360.  *    .4    .4    .5    .1    .2    .2    .3    .0    .0    .0    .4    .5    .3    .2    .6    .5    .2    .2    .1    .1
 ------*-----------------------------------------------------------------------------------------------------------------------
 MAX   *    .5    .4    .5    .4    .5    .4    .4    .2    .5    .4    .6    .8    .8    .8    .7    .6    .5    .6    .4    .2
 DEGR. *   225     0     0   345   330   270   300   190    75   210   215   340   335   195    10    15    15    70    60    25

1
                                                                                                                PAGE  5
      JOB: Site 2 Opt 1/2 2030 2B1PM30.DAT                      RUN: Site 2 Opt 1/2 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .1
  55.  *    .1
```

```
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .1
 100.  *    .1
 105.  *    .1
 110.  *    .2
 115.  *    .2
 120.  *    .2
 125.  *    .2
 130.  *    .2
 135.  *    .2
 140.  *    .2
 145.  *    .2
 150.  *    .2
 155.  *    .2
 160.  *    .2
 165.  *    .2
 170.  *    .2
 175.  *    .2
 180.  *    .2
 185.  *    .2
 190.  *    .2
 195.  *    .2
 200.  *    .2
 205.  *    .2
1
                                                                                                                         PAGE  6
      JOB: Site 2 Opt 1/2 2030 2B1PM30.DAT                         RUN: Site 2 Opt 1/2 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .1
 215.  *    .1
 220.  *    .1
 225.  *    .0
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .2
 DEGR. *   75

 THE HIGHEST CONCENTRATION IS     .80 PPM AT  340 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS     .80 PPM AT  335 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS     .80 PPM AT  195 DEGREES FROM REC14.
```

```
Site 2 Opt  3 2014 2B3AM14.DAT          60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 3 2014 AM                        25  1   0
  1
EB         Rt9 aprch AG   792.  2248.   878.  1704.    117211.4   0  32   30.
  1
EB         Rt9 aprch AG   878.  1704.   896.  1490.    117211.4   0  32   30.
  1
EB         Rt9 aprch AG   896.  1490.   893.  1407.    117211.4   0  32   30.
  1
EB         Rt9 aprch AG   893.  1407.   879.  1273.    117211.4   0  32   30.
  1
EB         Rt9 departAG   879.  1272.   839.  1143.    117211.4   0  32   30.
  1
EB         Rt9 departAG   839.  1143.   799.  1049.    117211.4   0  32   30.
  1
EB         Rt9 departAG   799.  1049.   710.   894.    117211.4   0  32   30.
  1
EB         Rt9 departAG   710.   894.   403.   384.    117211.4   0  32   30.
  1
WB         Rt9 aprch AG   422.   375.   796.   977.     59211.4   0  32   30.
  1
WB         Rt9 thru  AG   796.   977.   861.  1137.     59211.4   0  32   30.
  1
WB         Rt9 thru  AG   861.  1137.   897.  1268.     59211.4   0  32   30.
  1
WB         Rt9 right AG   804.   985.   868.  1102.      1011.4   0  32   30.
  1
WB         Rt9 right AG   869.  1102.   912.  1154.      1011.4   0  32   30.
  1
WB         Rt9 right AG   912.  1154.  1059.  1254.      1011.4   0  32   30.
  1
WB         Rt9 departAG   897.  1269.   918.  1410.     59211.4   0  32   30.
  1
WB         Rt9 departAG   918.  1410.   920.  1500.     59211.4   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.     59211.4   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.     59211.4   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.      1011.4   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.      1011.4   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.      1011.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 2 Opt  3 2014 2B3AM14.DAT                     RUN: Site 2 Opt 3 2014 AM
      DATE: 05/06/2009   TIME: 11:44:13.41


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. EB        Rt9 aprch *   792.0    2248.0     878.0    1704.0 *     551.   171. AG  1172.  11.4    .0 32.0
       2. EB        Rt9 aprch *   878.0    1704.0     896.0    1490.0 *     215.   175. AG  1172.  11.4    .0 32.0
       3. EB        Rt9 aprch *   896.0    1490.0     893.0    1407.0 *      83.   182. AG  1172.  11.4    .0 32.0
       4. EB        Rt9 aprch *   893.0    1407.0     879.0    1273.0 *     135.   186. AG  1172.  11.4    .0 32.0
       5. EB        Rt9 depart*   879.0    1272.0     839.0    1143.0 *     135.   197. AG  1172.  11.4    .0 32.0
       6. EB        Rt9 depart*   839.0    1143.0     799.0    1049.0 *     102.   203. AG  1172.  11.4    .0 32.0
       7. EB        Rt9 depart*   799.0    1049.0     710.0     894.0 *     179.   210. AG  1172.  11.4    .0 32.0
       8. EB        Rt9 depart*   710.0     894.0     403.0     384.0 *     595.   211. AG  1172.  11.4    .0 32.0
       9. WB        Rt9 aprch *   422.0     375.0     796.0     977.0 *     709.    32. AG   592.  11.4    .0 32.0
      10. WB        Rt9 thru  *   796.0     977.0     861.0    1137.0 *     173.    22. AG   592.  11.4    .0 32.0
      11. WB        Rt9 thru  *   861.0    1137.0     897.0    1268.0 *     136.    15. AG   592.  11.4    .0 32.0
      12. WB        Rt9 right *   804.0     985.0     868.0    1102.0 *     133.    29. AG    10.  11.4    .0 32.0
      13. WB        Rt9 right *   869.0    1102.0     912.0    1154.0 *      67.    40. AG    10.  11.4    .0 32.0
      14. WB        Rt9 right *   912.0    1154.0    1059.0    1254.0 *     178.    56. AG    10.  11.4    .0 32.0
      15. WB        Rt9 depart*   897.0    1269.0     918.0    1410.0 *     143.     8. AG   592.  11.4    .0 32.0
      16. WB        Rt9 depart*   918.0    1410.0     920.0    1500.0 *      90.     1. AG   592.  11.4    .0 32.0
      17. WB        Rt9 depart*   920.0    1500.0     885.0    1706.0 *     209.   350. AG   592.  11.4    .0 32.0
      18. WB        Rt9 depart*   885.0    1706.0     802.0    2250.0 *     550.   351. AG   592.  11.4    .0 32.0
      19. SB        AAFB aprch*  1824.0    1620.0    1193.0    1391.0 *     671.   250. AG    10.  11.4    .0 32.0
      20. SB        AAFB aprch*  1193.0    1391.0    1000.0    1255.0 *     236.   235. AG    10.  11.4    .0 32.0
      21. SB        AAFB aprch*  1000.0    1255.0     900.0    1266.0 *     101.   276. AG    10.  11.4    .0 44.0
      22. NB        AAFB depar*   893.0    1239.0     968.0    1226.0 *      76.   100. AG    10.  11.4    .0 32.0
      23. NB        AAFB depar*   968.0    1226.0    1056.0    1264.0 *      96.    67. AG    10.  11.4    .0 32.0
      24. NB        AAFB depar*  1056.0    1264.0    1222.0    1382.0 *     204.    55. AG    10.  11.4    .0 32.0
      25. NB        AAFB depar*  1222.0    1382.0    1831.0    1596.0 *     646.    71. AG    10.  11.4    .0 32.0
1
                                                                                                                  PAGE  2
      JOB: Site 2 Opt  3 2014 2B3AM14.DAT                     RUN: Site 2 Opt 3 2014 AM
      DATE: 05/06/2009   TIME: 11:44:13.41

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
      1. SE MID S             *       798.0      929.0       5.0   *
      2. SE 164 S             *       873.0     1060.0       5.0   *
      3. SE 82 S              *       920.0     1129.0       5.0   *
      4. SE CNR               *       987.0     1178.0       5.0   *
      5. SE 82 E              *      1056.0     1224.0       5.0   *
      6. SE 164 E             *      1127.0     1270.0       5.0   *
      7. SE MID E             *      1295.0     1374.0       5.0   *
      8. NE MID E             *      1218.0     1483.0       5.0   *
      9. NE 164 E             *      1112.0     1375.0       5.0   *
     10. NE 82 E              *      1046.0     1328.0       5.0   *
     11. NE CNR               *       951.0     1290.0       5.0   *
     12. NE 82 N              *       947.0     1396.0       5.0   *
     13. NE 164 N             *       950.0     1478.0       5.0   *
     14. NE MID N             *       927.0     1639.0       5.0   *
     15. NW MID N             *       855.0     1602.0       5.0   *
     16. NW 164 N             *       867.0     1442.0       5.0   *
     17. NW 82 N              *       859.0     1362.0       5.0   *
     18. W CNR                *       842.0     1280.0       5.0   *
     19. SW 82 S              *       824.0     1202.0       5.0   *
     20. SW 164 S             *       797.0     1123.0       5.0   *
     21. SW MID S             *       722.0      975.0       5.0   *
1
                                                                                                                  PAGE  3
      JOB: Site 2 Opt  3 2014 2B3AM14.DAT                     RUN: Site 2 Opt 3 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .5    .5    .2    .0    .0    .0    .0    .0    .0    .0    .2    .4    .3    .2    .5    .5    .3    .3    .1    .0
   5.  *    .6    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .1    .6    .7    .4    .4    .3    .1
  10.  *    .6    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .4    .2    .2
  15.  *    .6    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .7    .5    .4    .3    .2
  20.  *    .4    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .4    .4    .3
  25.  *    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .5    .6    .5    .4    .3
  30.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .5    .5
  35.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .7    .6    .4    .4    .5
  40.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .6    .4    .6    .5
```

```
 45.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .7    .6    .5    .6    .5
 50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .6    .4    .6    .5
 55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6    .4    .5    .5
 60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .5    .5
 65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .5    .5
 70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .5    .6
 75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .5    .6
 80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .5    .6
 85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
 90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .4    .4
 95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .4    .4
100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .4
105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .5    .5
115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .4    .5
120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .4    .5
125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .4    .4    .5
130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .4    .4    .5
135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .4    .5
140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .4    .4    .5
145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .4    .5
150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .4    .6    .5
155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .7    .4    .6    .5
160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .6    .4    .5    .6
165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .4    .5    .6    .4    .6    .5
170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .4    .6    .5    .5    .5    .5
175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .6    .5    .6    .5    .5
180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .4    .3    .4    .5    .5    .5    .7
185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .6    .1    .3    .5    .5    .5    .6
190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .4    .6    .0    .2    .3    .5    .7    .7
195.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .6    .0    .3    .3    .5    .6    .5
200.  *    .2    .2    .0    .0    .0    .0    .0    .0    .0    .0    .1    .4    .5    .6    .0    .2    .2    .5    .4    .5
205.  *    .2    .2    .2    .0    .0    .0    .0    .0    .0    .0    .5    .6    .7    .5    .0    .1    .1    .2    .4    .4
1
                                                                                                                       PAGE  4
     JOB: Site 2 Opt  3 2014 2B3AM14.DAT                       RUN: Site 2 Opt 3 2014 AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*-------------------------------------------------------------------------------------------------------------------------
210.  *    .4    .4    .4    .2    .0    .0    .0    .0    .0    .1    .6    .6    .6    .5    .0    .0    .1    .1    .4    .3
215.  *    .4    .4    .4    .2    .1    .0    .0    .0    .0    .1    .5    .5    .5    .5    .0    .0    .0    .1    .2    .2
220.  *    .5    .4    .4    .3    .1    .1    .0    .0    .0    .1    .5    .5    .5    .5    .0    .0    .0    .0    .0    .2
225.  *    .6    .5    .5    .4    .1    .1    .0    .0    .0    .1    .4    .4    .5    .5    .0    .0    .0    .0    .0    .0
230.  *    .6    .5    .5    .4    .2    .0    .0    .0    .1    .1    .3    .5    .5    .5    .0    .0    .0    .0    .0    .0
235.  *    .6    .5    .3    .3    .0    .0    .0    .0    .1    .1    .3    .5    .4    .5    .0    .0    .0    .0    .0    .0
240.  *    .6    .4    .3    .3    .1    .0    .0    .0    .1    .1    .3    .5    .4    .5    .0    .0    .0    .0    .0    .0
245.  *    .5    .4    .4    .2    .0    .0    .0    .0    .0    .1    .5    .4    .4    .5    .0    .0    .0    .0    .0    .0
250.  *    .5    .5    .3    .2    .1    .1    .0    .0    .1    .2    .4    .4    .4    .5    .0    .0    .0    .0    .0    .0
255.  *    .5    .5    .3    .2    .1    .1    .0    .0    .1    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
260.  *    .5    .4    .3    .3    .1    .1    .0    .0    .1    .2    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
265.  *    .4    .4    .3    .2    .2    .1    .0    .0    .1    .2    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
270.  *    .4    .5    .3    .2    .1    .0    .0    .0    .1    .2    .3    .5    .5    .5    .0    .0    .0    .0    .0    .0
275.  *    .4    .5    .4    .2    .1    .1    .0    .0    .1    .2    .3    .5    .5    .5    .0    .0    .0    .0    .0    .0
280.  *    .4    .4    .4    .2    .1    .1    .0    .1    .0    .2    .3    .3    .4    .5    .0    .0    .0    .0    .0    .0
285.  *    .4    .4    .3    .2    .2    .1    .0    .1    .0    .2    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
290.  *    .4    .4    .3    .2    .1    .1    .0    .1    .1    .2    .3    .5    .4    .5    .0    .0    .0    .0    .0    .0
295.  *    .4    .4    .3    .2    .1    .1    .0    .1    .0    .1    .3    .5    .5    .5    .0    .0    .0    .0    .0    .0
300.  *    .4    .4    .3    .2    .1    .0    .0    .0    .1    .2    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
305.  *    .4    .4    .3    .3    .2    .0    .0    .0    .1    .1    .3    .4    .4    .6    .0    .0    .0    .0    .0    .0
310.  *    .4    .4    .3    .3    .1    .0    .0    .1    .1    .1    .3    .3    .5    .6    .0    .0    .0    .0    .0    .0
315.  *    .4    .4    .3    .2    .1    .0    .1    .1    .1    .2    .3    .5    .5    .6    .0    .0    .0    .0    .0    .0
320.  *    .4    .4    .3    .2    .1    .1    .1    .1    .1    .2    .3    .5    .6    .7    .0    .0    .0    .0    .0    .0
325.  *    .4    .5    .3    .2    .0    .1    .1    .1    .2    .1    .4    .5    .6    .7    .0    .0    .0    .0    .0    .0
330.  *    .4    .4    .3    .2    .1    .2    .0    .1    .1    .2    .4    .5    .6    .5    .0    .0    .0    .0    .0    .0
335.  *    .4    .3    .4    .2    .1    .1    .0    .0    .1    .2    .4    .7    .5    .6    .1    .0    .0    .0    .0    .0
340.  *    .5    .4    .3    .3    .2    .1    .0    .0    .1    .2    .5    .7    .6    .7    .1    .1    .0    .0    .0    .0
345.  *    .5    .5    .3    .3    .1    .0    .0    .0    .1    .1    .5    .6    .6    .6    .2    .2    .1    .0    .0    .0
350.  *    .6    .5    .4    .2    .1    .0    .0    .0    .0    .1    .4    .6    .4    .3    .4    .2    .2    .1    .0    .0
355.  *    .5    .5    .5    .1    .0    .0    .0    .0    .0    .0    .4    .4    .4    .3    .4    .5    .3    .2    .1    .0
360.  *    .5    .5    .2    .0    .0    .0    .0    .0    .0    .0    .2    .4    .3    .2    .5    .5    .3    .3    .1    .0
------*-------------------------------------------------------------------------------------------------------------------------
MAX   *    .6    .5    .5    .4    .2    .2    .1    .1    .2    .2    .6    .7    .7    .7    .7    .7    .7    .6    .7    .7
DEGR. *     5     0   225   225   230   330   315   280   325   250   210   335   205   320    15     5   155   175   190   180

1
                                                                                                                       PAGE  5
     JOB: Site 2 Opt  3 2014 2B3AM14.DAT                       RUN: Site 2 Opt 3 2014 AM

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21
------*------
  0.  *    .0
  5.  *    .0
 10.  *    .0
 15.  *    .0
 20.  *    .2
 25.  *    .3
 30.  *    .3
 35.  *    .5
 40.  *    .5
 45.  *    .5
 50.  *    .5
 55.  *    .6
```

```
  60.  *    .6
  65.  *    .5
  70.  *    .5
  75.  *    .5
  80.  *    .5
  85.  *    .6
  90.  *    .5
  95.  *    .5
 100.  *    .5
 105.  *    .5
 110.  *    .5
 115.  *    .5
 120.  *    .5
 125.  *    .5
 130.  *    .5
 135.  *    .5
 140.  *    .5
 145.  *    .5
 150.  *    .5
 155.  *    .5
 160.  *    .5
 165.  *    .5
 170.  *    .6
 175.  *    .6
 180.  *    .5
 185.  *    .6
 190.  *    .6
 195.  *    .6
 200.  *    .6
 205.  *    .5
1
                                                                                                                              PAGE  6
      JOB: Site 2 Opt  3 2014 2B3AM14.DAT                        RUN: Site 2 Opt 3 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .3
 220.  *    .2
 225.  *    .1
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .6
 DEGR. *   55

 THE HIGHEST CONCENTRATION IS     .70 PPM AT  335 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS     .70 PPM AT  205 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS     .70 PPM AT  320 DEGREES FROM REC14.
```

```
Site 2 Opt 3 2030 2B3AM30.DAT           60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 3 2030 AM                     25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.    1535 9.2   0  56   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.    1535 9.2   0  56   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.    1535 9.2   0  56   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.    1535 9.2   0  56   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     860 9.2   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     860 9.2   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     860 9.2   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     860 9.2   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.     255 9.2   0  44   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     180 9.2   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     180 9.2   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      75 9.2   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      75 9.2   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      75 9.2   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.     400 9.2   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.     400 9.2   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.     400 9.2   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.     400 9.2   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.     245 9.2   0  44   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.     245 9.2   0  44   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.     245 9.2   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.     775 9.2   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.     775 9.2   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.     775 9.2   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.     775 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 2 Opt 3 2030 2B3AM30.DAT                        RUN: Site 2 Opt 3 2030 AM
      DATE: 05/06/2009   TIME: 11:49:42.19


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.   171. AG   1535.   9.2    .0 56.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.   175. AG   1535.   9.2    .0 56.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.   182. AG   1535.   9.2    .0 56.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.   186. AG   1535.   9.2    .0 56.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.   197. AG    860.   9.2    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.   203. AG    860.   9.2    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.   210. AG    860.   9.2    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.   211. AG    860.   9.2    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.    32. AG    255.   9.2    .0 44.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.    22. AG    180.   9.2    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.    15. AG    180.   9.2    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.    29. AG     75.   9.2    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.    40. AG     75.   9.2    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.    56. AG     75.   9.2    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.     8. AG    400.   9.2    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.     1. AG    400.   9.2    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.   350. AG    400.   9.2    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.   351. AG    400.   9.2    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.   250. AG    245.   9.2    .0 44.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.   235. AG    245.   9.2    .0 44.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.   276. AG    245.   9.2    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.   100. AG    775.   9.2    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.    67. AG    775.   9.2    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.    55. AG    775.   9.2    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.    71. AG    775.   9.2    .0 32.0
1
                                                                                                               PAGE  2
      JOB: Site 2 Opt 3 2030 2B3AM30.DAT                        RUN: Site 2 Opt 3 2030 AM
      DATE: 05/06/2009   TIME: 11:49:42.19

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
      1. SE MID S             *       798.0      929.0       5.0   *
      2. SE 164 S             *       873.0     1060.0       5.0   *
      3. SE 82 S              *       920.0     1129.0       5.0   *
      4. SE CNR               *       987.0     1178.0       5.0   *
      5. SE 82 E              *      1056.0     1224.0       5.0   *
      6. SE 164 E             *      1127.0     1270.0       5.0   *
      7. SE MID E             *      1295.0     1374.0       5.0   *
      8. NE MID E             *      1218.0     1483.0       5.0   *
      9. NE 164 E             *      1112.0     1375.0       5.0   *
     10. NE 82 E              *      1046.0     1328.0       5.0   *
     11. NE CNR               *       951.0     1290.0       5.0   *
     12. NE 82 N              *       947.0     1396.0       5.0   *
     13. NE 164 N             *       950.0     1478.0       5.0   *
     14. NE MID N             *       927.0     1639.0       5.0   *
     15. NW MID N             *       855.0     1602.0       5.0   *
     16. NW 164 N             *       867.0     1442.0       5.0   *
     17. NW 82 N              *       859.0     1362.0       5.0   *
     18. W CNR                *       842.0     1280.0       5.0   *
     19. SW 82 S              *       824.0     1202.0       5.0   *
     20. SW 164 S             *       797.0     1123.0       5.0   *
     21. SW MID S             *       722.0      975.0       5.0   *
1
                                                                                                               PAGE  3
      JOB: Site 2 Opt 3 2030 2B3AM30.DAT                        RUN: Site 2 Opt 3 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .3    .3    .4    .1    .2    .2    .3    .0    .0    .0    .3    .2    .2    .2    .7    .6    .5    .4    .3    .1
   5.  *    .2    .2    .2    .1    .2    .2    .3    .0    .0    .0    .1    .2    .1    .1    .8    .7    .7    .5    .3    .3
  10.  *    .2    .2    .2    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .1    .8    .9    .7    .5    .4    .3
  15.  *    .1    .1    .1    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .8    .8    .5    .4    .3
  20.  *    .0    .0    .1    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .8    .7    .6    .6    .5    .2
  25.  *    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .7    .7    .6    .6    .3    .2
  30.  *    .0    .0    .1    .2    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .7    .7    .6    .5    .3    .3
  35.  *    .0    .0    .1    .2    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .6    .5    .6    .3    .3
  40.  *    .0    .0    .1    .2    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .4    .3
```

```
  45.  *    .0    .0    .2    .2    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .3    .3
  50.  *    .0    .0    .1    .1    .2    .2    .4    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .5    .3    .3
  55.  *    .0    .0    .0    .2    .2    .2    .4    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .5    .3    .2
  60.  *    .0    .0    .0    .2    .2    .1    .3    .0    .1    .1    .0    .0    .0    .0    .5    .5    .6    .5    .3    .2
  65.  *    .0    .0    .0    .0    .1    .1    .2    .0    .2    .3    .1    .0    .0    .0    .5    .5    .5    .5    .3    .2
  70.  *    .0    .0    .0    .0    .0    .1    .2    .0    .2    .3    .2    .0    .0    .0    .5    .5    .5    .5    .3    .3
  75.  *    .0    .0    .0    .0    .0    .0    .1    .1    .2    .3    .2    .1    .0    .0    .5    .5    .5    .4    .3    .3
  80.  *    .0    .0    .0    .0    .0    .0    .1    .1    .4    .3    .2    .1    .0    .0    .5    .5    .5    .4    .3    .2
  85.  *    .0    .0    .0    .0    .0    .0    .1    .1    .3    .3    .1    .1    .0    .0    .6    .6    .5    .4    .3    .2
  90.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .1    .1    .1    .0    .5    .6    .6    .5    .2    .2
  95.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .1    .0    .1    .0    .5    .6    .6    .3    .2    .2
 100.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .2    .0    .1    .0    .5    .6    .6    .4    .2    .2
 105.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .6    .5    .4    .2    .2
 110.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .5    .5    .3    .2    .2
 115.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .4    .5    .3    .2    .2
 120.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .5    .5    .4    .2    .2
 125.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .6    .5    .5    .4    .2    .2
 130.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .5    .6    .3    .2    .2
 135.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .7    .6    .3    .2    .2
 140.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .6    .6    .3    .2    .2
 145.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .7    .6    .6    .2    .2    .2
 150.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .7    .6    .2    .2    .2
 155.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .7    .6    .2    .3    .2
 160.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .6    .7    .6    .2    .3    .2
 165.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .6    .7    .5    .2    .2    .2
 170.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .2    .0    .0    .1    .5    .6    .5    .2    .2    .3
 175.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .2    .0    .0    .3    .5    .5    .5    .2    .2    .3
 180.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .1    .5    .4    .6    .4    .2    .2    .2
 185.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .1    .5    .4    .6    .4    .2    .3    .2
 190.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .2    .6    .1    .3    .3    .2    .2    .2
 195.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .3    .4    .7    .1    .3    .3    .1    .2    .3
 200.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .4    .5    .7    .1    .2    .1    .0    .3    .2
 205.  *    .2    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .4    .5    .6    .0    .2    .1    .0    .3    .2
1
                                                                                                                  PAGE  4
      JOB: Site 2 Opt 3 2030 2B3AM30.DAT                        RUN: Site 2 Opt 3 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)*  REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9 REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .2    .1    .1    .0    .0    .0    .0    .1    .2    .2    .3    .4    .5    .5    .0    .0    .1    .0    .1    .2
 215.  *    .2    .2    .2    .0    .0    .0    .0    .1    .3    .1    .3    .5    .5    .5    .0    .0    .1    .0    .0    .2
 220.  *    .2    .2    .2    .0    .0    .0    .0    .1    .2    .1    .3    .4    .5    .5    .0    .0    .1    .0    .0    .0
 225.  *    .3    .2    .2    .0    .0    .0    .0    .0    .1    .1    .3    .4    .5    .5    .0    .0    .0    .0    .0    .0
 230.  *    .3    .2    .1    .0    .0    .0    .0    .0    .0    .0    .3    .4    .5    .5    .0    .0    .0    .0    .0    .0
 235.  *    .2    .1    .2    .0    .0    .0    .1    .0    .0    .0    .3    .4    .5    .5    .0    .0    .0    .0    .0    .0
 240.  *    .3    .1    .2    .0    .0    .1    .1    .0    .0    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
 245.  *    .3    .1    .1    .1    .0    .1    .1    .0    .1    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
 250.  *    .3    .1    .1    .0    .0    .2    .1    .0    .1    .1    .2    .4    .4    .5    .0    .0    .0    .0    .0    .0
 255.  *    .3    .2    .1    .0    .0    .2    .1    .0    .1    .1    .2    .4    .4    .5    .0    .0    .0    .0    .0    .0
 260.  *    .2    .2    .1    .1    .2    .2    .2    .0    .1    .1    .4    .4    .4    .5    .0    .0    .0    .0    .0    .0
 265.  *    .2    .2    .1    .1    .3    .2    .2    .0    .1    .1    .3    .5    .5    .5    .0    .0    .0    .0    .0    .0
 270.  *    .2    .1    .1    .1    .3    .3    .2    .0    .1    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
 275.  *    .2    .1    .1    .1    .2    .3    .2    .1    .1    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
 280.  *    .2    .1    .2    .1    .2    .3    .3    .1    .2    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
 285.  *    .2    .1    .1    .1    .4    .3    .2    .1    .1    .1    .4    .4    .4    .4    .0    .0    .0    .0    .0    .0
 290.  *    .2    .1    .1    .2    .3    .3    .2    .1    .1    .1    .4    .4    .4    .5    .0    .0    .0    .0    .0    .0
 295.  *    .2    .1    .1    .2    .3    .3    .3    .1    .2    .2    .4    .5    .4    .5    .0    .0    .0    .0    .0    .0
 300.  *    .2    .1    .1    .2    .3    .3    .3    .1    .1    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 305.  *    .2    .1    .1    .3    .3    .2    .3    .1    .1    .1    .4    .4    .5    .5    .0    .0    .0    .0    .0    .0
 310.  *    .2    .1    .1    .2    .3    .2    .3    .1    .1    .2    .4    .4    .4    .5    .0    .0    .0    .0    .0    .0
 315.  *    .2    .1    .1    .2    .3    .3    .3    .1    .1    .2    .4    .5    .4    .5    .0    .0    .0    .0    .0    .0
 320.  *    .2    .1    .1    .2    .3    .3    .3    .1    .2    .2    .4    .5    .4    .6    .0    .0    .0    .0    .0    .0
 325.  *    .2    .1    .1    .2    .4    .3    .3    .1    .2    .1    .4    .5    .4    .7    .0    .1    .0    .0    .0    .0
 330.  *    .2    .1    .2    .2    .3    .4    .3    .1    .2    .2    .5    .5    .5    .7    .1    .1    .0    .0    .0    .0
 335.  *    .2    .2    .2    .3    .4    .3    .2    .0    .1    .2    .5    .6    .5    .7    .2    .2    .0    .0    .0    .0
 340.  *    .2    .2    .2    .5    .3    .3    .2    .0    .1    .2    .5    .6    .5    .7    .2    .3    .1    .0    .0    .0
 345.  *    .2    .2    .2    .5    .3    .3    .2    .0    .1    .2    .4    .5    .5    .5    .3    .3    .3    .0    .0    .0
 350.  *    .2    .2    .5    .4    .3    .2    .2    .0    .0    .1    .4    .5    .5    .5    .4    .4    .4    .1    .0    .0
 355.  *    .3    .3    .4    .3    .2    .2    .3    .0    .0    .0    .3    .5    .3    .3    .7    .6    .4    .3    .1    .0
 360.  *    .3    .3    .4    .1    .2    .2    .3    .0    .0    .0    .3    .2    .2    .2    .7    .6    .5    .4    .3    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .3    .3    .5    .5    .4    .4    .4    .1    .4    .3    .5    .6    .5    .7    .8    .9    .8    .6    .5    .3
 DEGR. *    0     0   350   340   285   330    50    75    80    65   330   335   200   195     5    10    15    20    20     5

1
                                                                                                                  PAGE  5
      JOB: Site 2 Opt 3 2030 2B3AM30.DAT                        RUN: Site 2 Opt 3 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .2
  35.  *    .2
  40.  *    .2
  45.  *    .3
  50.  *    .3
  55.  *    .2
```

```
  60.  *    .2
  65.  *    .2
  70.  *    .2
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .2
 100.  *    .2
 105.  *    .2
 110.  *    .2
 115.  *    .2
 120.  *    .2
 125.  *    .2
 130.  *    .2
 135.  *    .2
 140.  *    .2
 145.  *    .2
 150.  *    .2
 155.  *    .2
 160.  *    .2
 165.  *    .2
 170.  *    .3
 175.  *    .4
 180.  *    .4
 185.  *    .4
 190.  *    .4
 195.  *    .4
 200.  *    .4
 205.  *    .3
1
                                                                                                                         PAGE  6
      JOB: Site 2 Opt 3 2030 2B3AM30.DAT                         RUN: Site 2 Opt 3 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .2
 215.  *    .1
 220.  *    .1
 225.  *    .1
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .4
 DEGR. *  175

 THE HIGHEST CONCENTRATION IS     .90 PPM AT   10 DEGREES FROM REC16.
 THE 2ND HIGHEST CONCENTRATION IS     .80 PPM AT    5 DEGREES FROM REC15.
 THE 3RD HIGHEST CONCENTRATION IS     .80 PPM AT   15 DEGREES FROM REC17.
```

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Site 2 Opt  3 2014 2B3PM14.DAT          60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.       929.       5.0
SE 164 S                  873.      1060.       5.0
SE 82 S                   920.      1129.       5.0
SE CNR                    987.      1178.       5.0
SE 82 E                  1056.      1224.       5.0
SE 164 E                 1127.      1270.       5.0
SE MID E                 1295.      1374.       5.0
NE MID E                 1218.      1483.       5.0
NE 164 E                 1112.      1375.       5.0
NE 82 E                  1046.      1328.       5.0
NE CNR                    951.      1290.       5.0
NE 82 N                   947.      1396.       5.0
NE 164 N                  950.      1478.       5.0
NE MID N                  927.      1639.       5.0
NW MID N                  855.      1602.       5.0
NW 164 N                  867.      1442.       5.0
NW 82 N                   859.      1362.       5.0
W CNR                     842.      1280.       5.0
SW 82 S                   824.      1202.       5.0
SW 164 S                  797.      1123.       5.0
SW MID S                  722.       975.       5.0
Site 2 Opt 3 2014 PM                     25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     60411.4   0  32   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     60411.4   0  32   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     60411.4   0  32   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     60411.4   0  32   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     60411.4   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     60411.4   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     60411.4   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     60411.4   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.    186411.4   0  32   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.    186411.4   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.    186411.4   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      1011.4   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      1011.4   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      1011.4   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.    186411.4   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.    186411.4   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.    186411.4   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.    186411.4   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.      1011.4   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.      1011.4   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.      1011.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                 PAGE  1

      JOB: Site 2 Opt  3 2014 2B3PM14.DAT                    RUN: Site 2 Opt 3 2014 PM
      DATE: 05/06/2009   TIME: 11:44:36.37


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)        (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. EB        Rt9 aprch *   792.0    2248.0     878.0    1704.0 *    551.  171. AG    604.  11.4    .0 32.0
       2. EB        Rt9 aprch *   878.0    1704.0     896.0    1490.0 *    215.  175. AG    604.  11.4    .0 32.0
       3. EB        Rt9 aprch *   896.0    1490.0     893.0    1407.0 *     83.  182. AG    604.  11.4    .0 32.0
       4. EB        Rt9 aprch *   893.0    1407.0     879.0    1273.0 *    135.  186. AG    604.  11.4    .0 32.0
       5. EB        Rt9 depart*   879.0    1272.0     839.0    1143.0 *    135.  197. AG    604.  11.4    .0 32.0
       6. EB        Rt9 depart*   839.0    1143.0     799.0    1049.0 *    102.  203. AG    604.  11.4    .0 32.0
       7. EB        Rt9 depart*   799.0    1049.0     710.0     894.0 *    179.  210. AG    604.  11.4    .0 32.0
       8. EB        Rt9 depart*   710.0     894.0     403.0     384.0 *    595.  211. AG    604.  11.4    .0 32.0
       9. WB        Rt9 aprch *   422.0     375.0     796.0     977.0 *    709.   32. AG   1864.  11.4    .0 32.0
      10. WB        Rt9 thru  *   796.0     977.0     861.0    1137.0 *    173.   22. AG   1864.  11.4    .0 32.0
      11. WB        Rt9 thru  *   861.0    1137.0     897.0    1268.0 *    136.   15. AG   1864.  11.4    .0 32.0
      12. WB        Rt9 right *   804.0     985.0     868.0    1102.0 *    133.   29. AG     10.  11.4    .0 32.0
      13. WB        Rt9 right *   869.0    1102.0     912.0    1154.0 *     67.   40. AG     10.  11.4    .0 32.0
      14. WB        Rt9 right *   912.0    1154.0    1059.0    1254.0 *    178.   56. AG     10.  11.4    .0 32.0
      15. WB        Rt9 depart*   897.0    1269.0     918.0    1410.0 *    143.    8. AG   1864.  11.4    .0 32.0
      16. WB        Rt9 depart*   918.0    1410.0     920.0    1500.0 *     90.    1. AG   1864.  11.4    .0 32.0
      17. WB        Rt9 depart*   920.0    1500.0     885.0    1706.0 *    209.  350. AG   1864.  11.4    .0 32.0
      18. WB        Rt9 depart*   885.0    1706.0     802.0    2250.0 *    550.  351. AG   1864.  11.4    .0 32.0
      19. SB        AAFB aprch*  1824.0    1620.0    1193.0    1391.0 *    671.  250. AG     10.  11.4    .0 32.0
      20. SB        AAFB aprch*  1193.0    1391.0    1000.0    1255.0 *    236.  235. AG     10.  11.4    .0 32.0
      21. SB        AAFB aprch*  1000.0    1255.0     900.0    1266.0 *    101.  276. AG     10.  11.4    .0 44.0
      22. NB        AAFB depar*   893.0    1239.0     968.0    1226.0 *     76.  100. AG     10.  11.4    .0 32.0
      23. NB        AAFB depar*   968.0    1226.0    1056.0    1264.0 *     96.   67. AG     10.  11.4    .0 32.0
      24. NB        AAFB depar*  1056.0    1264.0    1222.0    1382.0 *    204.   55. AG     10.  11.4    .0 32.0
      25. NB        AAFB depar*  1222.0    1382.0    1831.0    1596.0 *    646.   71. AG     10.  11.4    .0 32.0
1
                                                                                                                     PAGE  2
      JOB: Site 2 Opt  3 2014 2B3PM14.DAT                    RUN: Site 2 Opt 3 2014 PM
      DATE: 05/06/2009   TIME: 11:44:36.37

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z       *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0       929.0        5.0   *
      2. SE 164 S             *       873.0      1060.0        5.0   *
      3. SE 82 S              *       920.0      1129.0        5.0   *
      4. SE CNR               *       987.0      1178.0        5.0   *
      5. SE 82 E              *      1056.0      1224.0        5.0   *
      6. SE 164 E             *      1127.0      1270.0        5.0   *
      7. SE MID E             *      1295.0      1374.0        5.0   *
      8. NE MID E             *      1218.0      1483.0        5.0   *
      9. NE 164 E             *      1112.0      1375.0        5.0   *
     10. NE 82 E              *      1046.0      1328.0        5.0   *
     11. NE CNR               *       951.0      1290.0        5.0   *
     12. NE 82 N              *       947.0      1396.0        5.0   *
     13. NE 164 N             *       950.0      1478.0        5.0   *
     14. NE MID N             *       927.0      1639.0        5.0   *
     15. NW MID N             *       855.0      1602.0        5.0   *
     16. NW 164 N             *       867.0      1442.0        5.0   *
     17. NW 82 N              *       859.0      1362.0        5.0   *
     18. W CNR                *       842.0      1280.0        5.0   *
     19. SW 82 S              *       824.0      1202.0        5.0   *
     20. SW 164 S             *       797.0      1123.0        5.0   *
     21. SW MID S             *       722.0       975.0        5.0   *
1
                                                                                                                     PAGE  3
      JOB: Site 2 Opt  3 2014 2B3PM14.DAT                    RUN: Site 2 Opt 3 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *   1.2    .9    .6    .2    .0    .0    .0    .0    .0    .0    .4    .5    .3    .3    .7    .6    .3    .2    .2    .1
   5.  *   1.3    .9    .5    .0    .0    .0    .0    .0    .0    .0    .4    .5    .2    .2    .8    .7    .6    .3    .3    .2
  10.  *   1.1    .7    .2    .0    .0    .0    .0    .0    .0    .0    .2    .2    .1    .1    .8    .7    .6    .5    .5    .3
  15.  *    .9    .4    .1    .0    .0    .0    .0    .0    .0    .0    .0    .1    .0    .0    .9    .7    .6    .5    .5    .5
  20.  *    .9    .3    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .8    .7    .7    .4    .5    .4
  25.  *    .6    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .8    .6    .5    .5    .7    .4
  30.  *    .5    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .6    .7    .7    .6    .4
  35.  *    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .8    .7    .6    .5    .5
  40.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .7    .7    .7    .6    .6
```

```
  45.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .7    .7    .7    .6    .6
  50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .6    .7    .6
  55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .7    .6    .6    .7
  60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .7    .6    .6    .6    .6
  65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .7    .6    .7    .6
  70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .7    .6    .6    .6
  75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .6    .6    .5
  80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .4    .6    .6
  85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .6    .6
  90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .6    .6
  95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .6    .6
 100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .6    .6    .6
 105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .6    .6    .6
 110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .6    .6    .6
 115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .6    .6
 120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .6    .6
 125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .6    .6    .4    .6    .6
 130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .7    .6    .6    .6    .6
 135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .7    .6    .6    .6    .6
 140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .6    .7    .6    .6    .6
 145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .7    .7    .6    .7    .6
 150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .6    .6    .6    .6    .6
 155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .7    .6    .7    .6    .7    .6
 160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .5    .8    .6    .7    .6    .6
 165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .7    .7    .6    .6    .7
 170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .4    .5    .6    .6    .6    .6    .8
 175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .5    .4    .5    .6    .5    .6    .6
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .4    .7    .3    .6    .7    .6    .6    .7
 185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .9    .3    .5    .6    .5    .5    .6
 190.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .3    .6    .9   1.1    .1    .5    .4    .5    .6    .7
 195.  *    .2    .1    .1    .0    .0    .0    .0    .0    .0    .0    .3    .7   1.0   1.0    .1    .3    .4    .4    .6    .7
 200.  *    .3    .3    .2    .1    .0    .0    .0    .0    .0    .1    .4   1.0   1.1   1.1    .1    .1    .2    .3    .5    .6
 205.  *    .5    .4    .3    .1    .1    .0    .0    .0    .1    .2    .6   1.1   1.1   1.0    .1    .1    .1    .3    .4    .5
1
                                                                                                                PAGE  4
      JOB: Site 2 Opt  3 2014 2B3PM14.DAT                      RUN: Site 2 Opt 3 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
 210.  *    .7    .7    .4    .3    .1    .1    .0    .1    .1    .2    .8   1.1   1.2    .9    .0    .1    .1    .1    .2    .4
 215.  *    .8    .8    .6    .3    .2    .1    .1    .1    .2    .3    .7    .9   1.0    .8    .0    .0    .1    .1    .1    .3
 220.  *    .9    .9    .8    .3    .3    .1    .1    .1    .3    .3    .7   1.0   1.0    .8    .0    .0    .0    .0    .1    .1
 225.  *   1.0   1.0    .6    .4    .2    .2    .1    .1    .3    .3    .8    .8    .9    .8    .0    .0    .0    .0    .0    .0
 230.  *   1.0    .9    .7    .3    .2    .2    .1    .1    .3    .3    .7    .7    .8    .8    .0    .0    .0    .0    .0    .0
 235.  *   1.0    .8    .7    .3    .2    .2    .1    .1    .1    .3    .5    .7    .7    .8    .0    .0    .0    .0    .0    .0
 240.  *    .9    .7    .6    .4    .3    .2    .0    .1    .2    .2    .6    .7    .7    .8    .0    .0    .0    .0    .0    .0
 245.  *   1.0    .7    .5    .3    .2    .2    .0    .1    .2    .2    .6    .7    .7    .8    .0    .0    .0    .0    .0    .0
 250.  *    .9    .6    .5    .2    .2    .2    .0    .1    .2    .2    .5    .7    .7    .8    .0    .0    .0    .0    .0    .0
 255.  *    .8    .6    .4    .2    .2    .1    .0    .1    .1    .2    .6    .7    .7    .8    .0    .0    .0    .0    .0    .0
 260.  *    .8    .7    .5    .3    .2    .1    .1    .1    .1    .2    .5    .7    .7    .8    .0    .0    .0    .0    .0    .0
 265.  *    .8    .7    .5    .4    .2    .2    .1    .1    .1    .3    .5    .6    .7    .7    .0    .0    .0    .0    .0    .0
 270.  *    .7    .6    .5    .3    .2    .2    .1    .2    .1    .3    .6    .7    .7    .7    .0    .0    .0    .0    .0    .0
 275.  *    .7    .6    .5    .3    .1    .2    .0    .1    .2    .3    .5    .7    .7    .7    .0    .0    .0    .0    .0    .0
 280.  *    .7    .6    .4    .3    .2    .1    .0    .1    .2    .3    .5    .8    .8    .8    .0    .0    .0    .0    .0    .0
 285.  *    .7    .6    .4    .3    .2    .1    .0    .1    .2    .2    .5    .8    .8    .8    .0    .0    .0    .0    .0    .0
 290.  *    .7    .6    .5    .3    .2    .1    .1    .1    .1    .2    .5    .7    .7    .8    .0    .0    .0    .0    .0    .0
 295.  *    .7    .6    .5    .3    .1    .1    .1    .1    .2    .2    .5    .7    .7    .7    .0    .0    .0    .0    .0    .0
 300.  *    .7    .6    .4    .3    .2    .2    .1    .2    .2    .2    .5    .6    .7    .7    .0    .0    .0    .0    .0    .0
 305.  *    .7    .6    .5    .3    .2    .2    .1    .2    .2    .2    .5    .7    .7    .8    .0    .0    .0    .0    .0    .0
 310.  *    .7    .6    .5    .3    .2    .3    .2    .1    .2    .3    .5    .6    .8    .8    .0    .0    .0    .0    .0    .0
 315.  *    .7    .6    .5    .2    .1    .2    .1    .1    .1    .2    .5    .7    .8   1.0    .0    .0    .0    .0    .0    .0
 320.  *    .7    .6    .5    .4    .2    .2    .1    .1    .2    .2    .5    .8    .8    .9    .0    .0    .0    .0    .0    .0
 325.  *    .7    .6    .5    .4    .3    .2    .1    .1    .2    .3    .6    .9   1.0   1.0    .0    .0    .0    .0    .0    .0
 330.  *    .8    .7    .5    .3    .4    .2    .1    .1    .2    .3    .6    .9    .9   1.0    .0    .0    .0    .0    .0    .0
 335.  *    .8    .8    .6    .4    .3    .2    .1    .1    .2    .3    .8   1.0    .9   1.0    .1    .0    .0    .0    .0    .0
 340.  *    .9    .8    .5    .5    .3    .2    .0    .0    .1    .2    .6   1.1   1.1   1.0    .1    .1    .0    .0    .0    .0
 345.  *    .8    .7    .6    .4    .2    .1    .0    .0    .1    .2    .6   1.0    .9    .8    .3    .2    .1    .0    .0    .0
 350.  *    .9    .9    .8    .4    .2    .1    .0    .0    .1    .2    .6   1.1    .8    .6    .4    .5    .2    .1    .1    .0
 355.  *   1.0    .9    .7    .4    .1    .0    .0    .0    .0    .1    .5    .8    .6    .5    .5    .6    .3    .2    .1    .1
 360.  *   1.2    .9    .6    .2    .0    .0    .0    .0    .0    .0    .4    .5    .3    .3    .7    .6    .3    .2    .2    .1
 ------*-----------------------------------------------------------------------------------------------------------------------
 MAX   *   1.3   1.0    .8    .5    .4    .3    .2    .2    .3    .3    .8   1.1   1.2   1.1    .9    .8    .7    .7    .7    .8
 DEGR. *     5   225   350   340   330   310   310   270   220   215   225   205   210   190    15    35    30    30    25   170

1
                                                                                                                PAGE  5
      JOB: Site 2 Opt  3 2014 2B3PM14.DAT                      RUN: Site 2 Opt 3 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .1
   5.  *    .1
  10.  *    .1
  15.  *    .0
  20.  *    .2
  25.  *    .3
  30.  *    .5
  35.  *    .6
  40.  *    .5
  45.  *    .6
  50.  *    .7
  55.  *    .5
```

```
  60.  *    .5
  65.  *    .5
  70.  *    .6
  75.  *    .6
  80.  *    .5
  85.  *    .6
  90.  *    .6
  95.  *    .5
 100.  *    .6
 105.  *    .6
 110.  *    .5
 115.  *    .5
 120.  *    .6
 125.  *    .6
 130.  *    .6
 135.  *    .6
 140.  *    .6
 145.  *    .6
 150.  *    .6
 155.  *    .6
 160.  *    .6
 165.  *    .6
 170.  *    .6
 175.  *    .6
 180.  *    .7
 185.  *    .8
 190.  *    .7
 195.  *    .6
 200.  *    .7
 205.  *    .6
1
                                                                                                                              PAGE  6
      JOB: Site 2 Opt  3 2014 2B3PM14.DAT                        RUN: Site 2 Opt 3 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .4
 215.  *    .3
 220.  *    .2
 225.  *    .1
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .1
 ------*------
 MAX   *    .8
 DEGR. *  185

 THE HIGHEST CONCENTRATION IS    1.30 PPM AT    5 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    1.20 PPM AT  210 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    1.10 PPM AT  205 DEGREES FROM REC12.
```

```
Site 2 Opt 3 2030 2B3PM30.DAT           60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 3 2030 PM                     25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     360 9.2   0  56   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     360 9.2   0  56   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     360 9.2   0  56   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     360 9.2   0  56   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     180 9.2   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     180 9.2   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     180 9.2   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     180 9.2   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.    1005 9.2   0  44   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     975 9.2   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     975 9.2   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      30 9.2   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      30 9.2   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      30 9.2   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.    1690 9.2   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.    1690 9.2   0  32   30.
```

```
  1
WB         Rt9 departAG   920.  1500.   885.  1706.    1690 9.2   0  32   30.
  1
WB         Rt9 departAG   885.  1706.   802.  2250.    1690 9.2   0  32   30.
  1
SB         AAFB aprchAG  1824.  1620.  1193.  1391.     795 9.2   0  44   30.
  1
SB         AAFB aprchAG  1193.  1391.  1000.  1255.     795 9.2   0  44   30.
  1
SB         AAFB aprchAG  1000.  1255.   900.  1266.     795 9.2   0  44   30.
  1
NB         AAFB deparAG   893.  1239.   968.  1226.     290 9.2   0  32   30.
  1
NB         AAFB deparAG   968.  1226.  1056.  1264.     290 9.2   0  32   30.
  1
NB         AAFB deparAG  1056.  1264.  1222.  1382.     290 9.2   0  32   30.
  1
NB         AAFB deparAG  1222.  1382.  1831.  1596.     290 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 2 Opt 3 2030 2B3PM30.DAT                         RUN: Site 2 Opt 3 2030 PM
      DATE: 05/06/2009   TIME: 11:50:06.03


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.   171. AG    360.   9.2    .0 56.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.   175. AG    360.   9.2    .0 56.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.   182. AG    360.   9.2    .0 56.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.   186. AG    360.   9.2    .0 56.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.   197. AG    180.   9.2    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.   203. AG    180.   9.2    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.   210. AG    180.   9.2    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.   211. AG    180.   9.2    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.    32. AG   1005.   9.2    .0 44.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.    22. AG    975.   9.2    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.    15. AG    975.   9.2    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.    29. AG     30.   9.2    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.    40. AG     30.   9.2    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.    56. AG     30.   9.2    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.     8. AG   1690.   9.2    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.     1. AG   1690.   9.2    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.   350. AG   1690.   9.2    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.   351. AG   1690.   9.2    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.   250. AG    795.   9.2    .0 44.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.   235. AG    795.   9.2    .0 44.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.   276. AG    795.   9.2    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.   100. AG    290.   9.2    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.    67. AG    290.   9.2    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.    55. AG    290.   9.2    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.    71. AG    290.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 2 Opt 3 2030 2B3PM30.DAT                         RUN: Site 2 Opt 3 2030 PM
      DATE: 05/06/2009   TIME: 11:50:06.03

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)         *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0        5.0   *
      2. SE 164 S             *       873.0     1060.0        5.0   *
      3. SE 82 S              *       920.0     1129.0        5.0   *
      4. SE CNR               *       987.0     1178.0        5.0   *
      5. SE 82 E              *      1056.0     1224.0        5.0   *
      6. SE 164 E             *      1127.0     1270.0        5.0   *
      7. SE MID E             *      1295.0     1374.0        5.0   *
      8. NE MID E             *      1218.0     1483.0        5.0   *
      9. NE 164 E             *      1112.0     1375.0        5.0   *
     10. NE 82 E              *      1046.0     1328.0        5.0   *
     11. NE CNR               *       951.0     1290.0        5.0   *
     12. NE 82 N              *       947.0     1396.0        5.0   *
     13. NE 164 N             *       950.0     1478.0        5.0   *
     14. NE MID N             *       927.0     1639.0        5.0   *
     15. NW MID N             *       855.0     1602.0        5.0   *
     16. NW 164 N             *       867.0     1442.0        5.0   *
     17. NW 82 N              *       859.0     1362.0        5.0   *
     18. W CNR                *       842.0     1280.0        5.0   *
     19. SW 82 S              *       824.0     1202.0        5.0   *
     20. SW 164 S             *       797.0     1123.0        5.0   *
     21. SW MID S             *       722.0      975.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 2 Opt 3 2030 2B3PM30.DAT                         RUN: Site 2 Opt 3 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .4    .4    .5    .1    .2    .2    .3    .0    .0    .0    .4    .5    .3    .2    .6    .5    .2    .2    .1    .1
   5.  *    .4    .3    .2    .2    .2    .2    .3    .0    .0    .0    .2    .3    .2    .1    .6    .5    .2    .2    .2    .1
  10.  *    .4    .2    .2    .2    .2    .2    .3    .0    .0    .0    .0    .2    .1    .1    .7    .5    .4    .4    .3    .1
  15.  *    .4    .2    .2    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .4    .2    .1
  20.  *    .3    .2    .1    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .5    .5    .4    .4    .3    .1
  25.  *    .3    .0    .1    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .3    .2
  30.  *    .2    .0    .1    .1    .2    .3    .3    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .2    .2
  35.  *    .2    .0    .1    .1    .2    .3    .3    .0    .0    .0    .0    .0    .0    .0    .4    .4    .5    .4    .3    .2
  40.  *    .1    .1    .1    .1    .3    .3    .3    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .5    .3    .2
```

```
  45.  *    .0    .0    .1    .2    .3    .1    .3    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .2    .2
  50.  *    .0    .0    .1    .2    .3    .1    .3    .0    .1    .1    .0    .0    .0    .0    .4    .4    .4    .4    .3    .2
  55.  *    .0    .0    .2    .2    .1    .1    .3    .0    .1    .2    .1    .0    .0    .0    .4    .5    .4    .4    .3    .1
  60.  *    .0    .0    .0    .1    .1    .1    .3    .0    .2    .2    .2    .0    .0    .0    .4    .4    .4    .4    .4    .1
  65.  *    .0    .0    .0    .0    .1    .1    .2    .0    .3    .3    .2    .0    .0    .0    .4    .4    .5    .4    .4    .2
  70.  *    .0    .0    .0    .0    .0    .1    .2    .1    .3    .3    .2    .1    .0    .0    .4    .4    .4    .6    .4    .2
  75.  *    .0    .0    .0    .0    .0    .0    .1    .1    .5    .3    .2    .1    .0    .0    .4    .4    .5    .6    .4    .2
  80.  *    .0    .0    .0    .0    .0    .0    .0    .1    .5    .3    .3    .1    .1    .0    .4    .5    .5    .6    .3    .2
  85.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .2    .1    .1    .0    .4    .5    .5    .5    .2    .2
  90.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .2    .1    .1    .0    .4    .5    .5    .5    .2    .1
  95.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .3    .1    .1    .0    .4    .4    .5    .6    .2    .1
 100.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .2    .1    .1    .0    .4    .4    .5    .5    .2    .2
 105.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .4    .5    .5    .3    .2    .2
 110.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .4    .4    .5    .3    .2    .2
 115.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .4    .5    .5    .3    .2    .2
 120.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .1    .0    .0    .4    .5    .4    .2    .2    .2
 125.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .1    .1    .0    .4    .5    .5    .2    .2    .2
 130.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .1    .1    .0    .4    .4    .5    .2    .2    .2
 135.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .5    .4    .5    .2    .1    .2
 140.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .5    .4    .5    .2    .1    .2
 145.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .4    .5    .5    .2    .2    .2
 150.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .4    .5    .5    .2    .2    .2
 155.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .4    .5    .5    .2    .2    .2
 160.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .1    .4    .5    .4    .2    .2    .2
 165.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .2    .4    .4    .3    .1    .1    .2
 170.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .3    .3    .5    .3    .2    .1    .2
 175.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .4    .3    .5    .3    .2    .1    .2
 180.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .2    .2    .5    .2    .3    .2    .2    .1    .2
 185.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .2    .3    .7    .0    .2    .3    .3    .2    .2
 190.  *    .1    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .4    .3    .7    .0    .0    .3    .2    .2    .2
 195.  *    .1    .1    .0    .0    .0    .0    .0    .2    .2    .2    .3    .5    .4    .8    .0    .1    .1    .2    .2    .1
 200.  *    .2    .1    .1    .0    .0    .0    .0    .2    .2    .2    .5    .5    .5    .7    .0    .1    .1    .1    .1    .1
 205.  *    .2    .1    .1    .1    .0    .0    .0    .1    .2    .2    .5    .6    .5    .6    .0    .0    .1    .1    .1    .1
1
                                                                                                                     PAGE  4
      JOB: Site 2 Opt 3 2030 2B3PM30.DAT                       RUN: Site 2 Opt 3 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
 210.  *    .3    .3    .2    .1    .1    .0    .0    .1    .2    .4    .5    .7    .6    .6    .0    .0    .0    .1    .1    .1
 215.  *    .4    .3    .2    .1    .1    .0    .0    .1    .3    .4    .6    .6    .6    .6    .0    .0    .0    .0    .1    .1
 220.  *    .4    .3    .2    .2    .1    .1    .0    .1    .2    .3    .5    .6    .6    .6    .0    .0    .0    .0    .0    .0
 225.  *    .5    .4    .2    .2    .1    .1    .0    .1    .2    .3    .4    .6    .6    .5    .0    .0    .0    .0    .0    .0
 230.  *    .5    .3    .3    .2    .2    .1    .0    .1    .1    .3    .5    .6    .5    .5    .0    .0    .0    .0    .0    .0
 235.  *    .4    .3    .2    .1    .1    .0    .0    .1    .1    .3    .4    .6    .5    .5    .0    .0    .0    .0    .0    .0
 240.  *    .4    .3    .2    .1    .1    .0    .1    .1    .2    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 245.  *    .4    .2    .2    .1    .0    .0    .1    .1    .1    .3    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 250.  *    .4    .2    .2    .2    .1    .0    .1    .1    .1    .2    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0
 255.  *    .3    .2    .1    .1    .1    .1    .1    .0    .1    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 260.  *    .3    .2    .1    .1    .1    .2    .1    .0    .1    .1    .3    .5    .5    .5    .0    .0    .0    .0    .0    .0
 265.  *    .3    .2    .1    .1    .1    .2    .1    .0    .1    .1    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 270.  *    .3    .2    .2    .1    .2    .4    .2    .0    .1    .1    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0
 275.  *    .3    .2    .2    .1    .2    .4    .2    .1    .1    .1    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0
 280.  *    .3    .2    .2    .1    .3    .3    .3    .1    .2    .1    .4    .4    .5    .5    .0    .0    .0    .0    .0    .0
 285.  *    .3    .2    .2    .1    .3    .3    .3    .1    .1    .1    .4    .4    .5    .5    .0    .0    .0    .0    .0    .0
 290.  *    .3    .2    .1    .1    .4    .3    .2    .1    .1    .1    .4    .5    .4    .5    .0    .0    .0    .0    .0    .0
 295.  *    .3    .2    .1    .1    .4    .3    .3    .1    .1    .1    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 300.  *    .3    .2    .1    .1    .4    .3    .4    .1    .2    .2    .4    .6    .6    .5    .0    .0    .0    .0    .0    .0
 305.  *    .3    .2    .1    .2    .4    .3    .3    .1    .2    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
 310.  *    .3    .2    .2    .3    .4    .2    .3    .1    .1    .2    .4    .5    .6    .6    .0    .0    .0    .0    .0    .0
 315.  *    .3    .2    .2    .3    .4    .3    .4    .1    .1    .2    .4    .6    .6    .6    .0    .0    .0    .0    .0    .0
 320.  *    .3    .2    .2    .2    .3    .3    .4    .1    .2    .2    .4    .6    .6    .7    .0    .0    .0    .0    .0    .0
 325.  *    .3    .2    .2    .2    .4    .3    .4    .1    .2    .2    .4    .6    .6    .7    .0    .0    .0    .0    .0    .0
 330.  *    .3    .2    .2    .2    .5    .4    .4    .1    .2    .3    .4    .6    .7    .8    .0    .0    .0    .0    .0    .0
 335.  *    .3    .2    .3    .2    .4    .4    .3    .0    .1    .2    .5    .7    .8    .6    .0    .0    .0    .0    .0    .0
 340.  *    .4    .3    .2    .3    .4    .3    .3    .0    .1    .2    .5    .8    .6    .7    .1    .0    .0    .0    .0    .0
 345.  *    .3    .3    .2    .4    .5    .3    .3    .0    .1    .2    .5    .6    .7    .6    .1    .1    .1    .0    .0    .0
 350.  *    .3    .2    .3    .4    .3    .2    .3    .0    .0    .1    .5    .6    .4    .5    .3    .2    .2    .1    .0    .0
 355.  *    .4    .4    .4    .4    .2    .2    .3    .0    .0    .1    .4    .5    .3    .5    .6    .3    .2    .1    .1    .0
 360.  *    .4    .4    .5    .1    .2    .2    .3    .0    .0    .0    .4    .5    .3    .2    .6    .5    .2    .2    .1    .1
 ------*-------------------------------------------------------------------------------------------------------------------------
 MAX   *    .5    .4    .5    .4    .5    .4    .4    .2    .5    .4    .6    .8    .8    .8    .7    .6    .5    .6    .4    .2
 DEGR. *  225     0     0   345   330   270   300   190    75   210   215   340   335   195    10    15    15    70    60    25

1
                                                                                                                     PAGE  5
      JOB: Site 2 Opt 3 2030 2B3PM30.DAT                       RUN: Site 2 Opt 3 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .1
  55.  *    .1
```

```
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .1
 100.  *    .1
 105.  *    .1
 110.  *    .2
 115.  *    .2
 120.  *    .2
 125.  *    .2
 130.  *    .2
 135.  *    .2
 140.  *    .2
 145.  *    .2
 150.  *    .2
 155.  *    .2
 160.  *    .2
 165.  *    .2
 170.  *    .2
 175.  *    .2
 180.  *    .2
 185.  *    .2
 190.  *    .2
 195.  *    .2
 200.  *    .2
 205.  *    .2
1
                                                                                                                                PAGE  6
      JOB: Site 2 Opt 3 2030 2B3PM30.DAT                         RUN: Site 2 Opt 3 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .1
 215.  *    .1
 220.  *    .1
 225.  *    .0
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .2
 DEGR. *   75

 THE HIGHEST CONCENTRATION IS     .80 PPM AT  340 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS     .80 PPM AT  335 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS     .80 PPM AT  195 DEGREES FROM REC14.
```

```
Site 2 Opt 8 2014 2B8AM14.DAT           60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 8 2014 AM                     25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     98511.4   0  32   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     98511.4   0  32   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     98511.4   0  32   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     98511.4   0  32   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     98511.4   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     98511.4   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     98511.4   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     98511.4   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.     39911.4   0  32   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     39911.4   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     39911.4   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      1011.4   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      1011.4   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      1011.4   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.     39911.4   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.     39911.4   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.     39911.4   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.     39911.4   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.      1011.4   0  32   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.      1011.4   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.      1011.4   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.      1011.4   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.      1011.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 2 Opt 8 2014 2B8AM14.DAT                       RUN: Site 2 Opt 8 2014 AM
      DATE: 05/06/2009   TIME: 12:07:25.77


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.   171. AG    985.  11.4    .0 32.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.   175. AG    985.  11.4    .0 32.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.   182. AG    985.  11.4    .0 32.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.   186. AG    985.  11.4    .0 32.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.   197. AG    985.  11.4    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.   203. AG    985.  11.4    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.   210. AG    985.  11.4    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.   211. AG    985.  11.4    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.    32. AG    399.  11.4    .0 32.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.    22. AG    399.  11.4    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.    15. AG    399.  11.4    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.    29. AG     10.  11.4    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.    40. AG     10.  11.4    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.    56. AG     10.  11.4    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.     8. AG    399.  11.4    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.     1. AG    399.  11.4    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.   350. AG    399.  11.4    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.   351. AG    399.  11.4    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.   250. AG     10.  11.4    .0 32.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.   235. AG     10.  11.4    .0 32.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.   276. AG     10.  11.4    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.   100. AG     10.  11.4    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.    67. AG     10.  11.4    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.    55. AG     10.  11.4    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.    71. AG     10.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 2 Opt 8 2014 2B8AM14.DAT                       RUN: Site 2 Opt 8 2014 AM
      DATE: 05/06/2009   TIME: 12:07:25.77

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
      1. SE MID S             *       798.0       929.0       5.0   *
      2. SE 164 S             *       873.0      1060.0       5.0   *
      3. SE 82 S              *       920.0      1129.0       5.0   *
      4. SE CNR               *       987.0      1178.0       5.0   *
      5. SE 82 E              *      1056.0      1224.0       5.0   *
      6. SE 164 E             *      1127.0      1270.0       5.0   *
      7. SE MID E             *      1295.0      1374.0       5.0   *
      8. NE MID E             *      1218.0      1483.0       5.0   *
      9. NE 164 E             *      1112.0      1375.0       5.0   *
     10. NE 82 E              *      1046.0      1328.0       5.0   *
     11. NE CNR               *       951.0      1290.0       5.0   *
     12. NE 82 N              *       947.0      1396.0       5.0   *
     13. NE 164 N             *       950.0      1478.0       5.0   *
     14. NE MID N             *       927.0      1639.0       5.0   *
     15. NW MID N             *       855.0      1602.0       5.0   *
     16. NW 164 N             *       867.0      1442.0       5.0   *
     17. NW 82 N              *       859.0      1362.0       5.0   *
     18. W CNR                *       842.0      1280.0       5.0   *
     19. SW 82 S              *       824.0      1202.0       5.0   *
     20. SW 164 S             *       797.0      1123.0       5.0   *
     21. SW MID S             *       722.0       975.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 2 Opt 8 2014 2B8AM14.DAT                       RUN: Site 2 Opt 8 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *     .4    .3    .1    .0    .0    .0    .0    .0    .0    .0    .1    .2    .1    .2    .4    .3    .3    .2    .1    .0
   5.  *     .4    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .5    .5    .3    .4    .1    .0
  10.  *     .5    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .3    .3    .2    .2
  15.  *     .5    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .4    .3    .2    .2
  20.  *     .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .4    .4    .2    .2
  25.  *     .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .4    .3    .2    .3
  30.  *     .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .5    .5    .4    .3
  35.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .5    .4    .4    .4
  40.  *     .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .3    .4
```

```
 45.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .4    .4    .4
 50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .5    .4    .5    .4
 55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .5    .4    .4    .4
 60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .5
 65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
 70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
 75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .3    .4    .3
 80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .3    .4    .5
 85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
 90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
 95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .2    .4    .4
105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .2    .4    .4
110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .3    .4    .4
125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .3    .4    .4
130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .4    .4    .4
135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .4    .4    .4
140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .4
145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .4    .4    .4
150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .4    .4    .5    .4
155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .5    .4    .5    .4
160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .5    .4    .4    .4
165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .4    .4    .5
170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .3    .6    .4    .4    .5    .5
175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .4    .4    .4
180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .2    .3    .5    .4
185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .3    .0    .3    .2    .3    .5    .5
190.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .2    .4    .0    .2    .2    .3    .5    .5
195.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .4    .0    .1    .1    .4    .3    .5
200.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .0    .0    .2    .4    .3    .5
205.  *    .2    .2    .1    .0    .0    .0    .0    .0    .0    .0    .3    .3    .5    .3    .0    .0    .1    .1    .3    .4
1
                                                                                                                    PAGE  4
      JOB: Site 2 Opt 8 2014 2B8AM14.DAT                        RUN: Site 2 Opt 8 2014 AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*-----------------------------------------------------------------------------------------------------------------------
210.  *    .2    .3    .3    .1    .0    .0    .0    .0    .0    .0    .4    .3    .4    .4    .0    .0    .0    .1    .2    .2
215.  *    .3    .4    .3    .1    .0    .0    .0    .0    .0    .0    .4    .4    .3    .4    .0    .0    .0    .0    .1    .2
220.  *    .4    .4    .4    .2    .1    .0    .0    .0    .0    .0    .3    .4    .3    .4    .0    .0    .0    .0    .0    .1
225.  *    .4    .4    .3    .2    .1    .0    .0    .0    .0    .1    .3    .3    .4    .4    .0    .0    .0    .0    .0    .0
230.  *    .4    .5    .4    .2    .0    .0    .0    .0    .0    .1    .3    .3    .4    .4    .0    .0    .0    .0    .0    .0
235.  *    .5    .4    .3    .2    .0    .0    .0    .0    .0    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
240.  *    .5    .3    .3    .1    .0    .0    .0    .0    .0    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
245.  *    .4    .3    .3    .1    .0    .0    .0    .0    .0    .1    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
250.  *    .4    .4    .2    .1    .1    .0    .0    .0    .0    .1    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0
255.  *    .4    .3    .2    .2    .1    .0    .0    .0    .1    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
260.  *    .4    .3    .2    .1    .1    .0    .0    .0    .1    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
265.  *    .3    .3    .2    .1    .1    .0    .0    .0    .1    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
270.  *    .3    .3    .2    .1    .1    .0    .0    .0    .1    .1    .2    .4    .4    .3    .0    .0    .0    .0    .0    .0
275.  *    .3    .3    .2    .2    .1    .0    .0    .0    .0    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
280.  *    .3    .3    .2    .2    .1    .1    .0    .0    .0    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
285.  *    .3    .3    .3    .2    .0    .1    .0    .1    .0    .1    .3    .3    .3    .3    .0    .0    .0    .0    .0    .0
290.  *    .3    .3    .2    .2    .1    .1    .0    .1    .0    .1    .3    .4    .3    .3    .0    .0    .0    .0    .0    .0
295.  *    .3    .3    .2    .1    .1    .0    .0    .0    .0    .1    .3    .4    .4    .3    .0    .0    .0    .0    .0    .0
300.  *    .3    .3    .2    .1    .1    .0    .0    .0    .0    .0    .3    .4    .4    .3    .0    .0    .0    .0    .0    .0
305.  *    .3    .3    .2    .1    .1    .0    .0    .0    .1    .1    .3    .3    .4    .3    .0    .0    .0    .0    .0    .0
310.  *    .3    .3    .3    .2    .1    .0    .0    .1    .1    .1    .3    .3    .4    .4    .0    .0    .0    .0    .0    .0
315.  *    .3    .3    .3    .1    .1    .0    .0    .1    .1    .2    .3    .3    .4    .4    .0    .0    .0    .0    .0    .0
320.  *    .3    .3    .3    .1    .0    .0    .0    .1    .1    .1    .3    .4    .3    .4    .0    .0    .0    .0    .0    .0
325.  *    .3    .4    .3    .1    .0    .0    .0    .1    .1    .1    .2    .4    .3    .5    .0    .0    .0    .0    .0    .0
330.  *    .3    .3    .2    .1    .0    .0    .0    .0    .1    .1    .3    .3    .4    .5    .0    .0    .0    .0    .0    .0
335.  *    .3    .3    .3    .1    .0    .1    .0    .0    .1    .2    .4    .3    .4    .5    .0    .0    .0    .0    .0    .0
340.  *    .3    .3    .3    .1    .0    .0    .0    .0    .1    .2    .4    .6    .4    .6    .1    .0    .0    .0    .0    .0
345.  *    .3    .3    .3    .0    .0    .0    .0    .0    .0    .1    .5    .5    .3    .3    .1    .2    .0    .0    .0    .0
350.  *    .5    .4    .3    .0    .0    .0    .0    .0    .0    .0    .3    .4    .3    .3    .4    .2    .2    .0    .0    .0
355.  *    .5    .3    .2    .0    .0    .0    .0    .0    .0    .0    .2    .4    .3    .3    .4    .3    .3    .1    .0    .0
360.  *    .4    .3    .1    .0    .0    .0    .0    .0    .0    .0    .1    .2    .1    .2    .4    .3    .3    .2    .1    .0
------*-----------------------------------------------------------------------------------------------------------------------
MAX   *    .5    .5    .4    .2    .1    .1    .0    .1    .1    .2    .5    .6    .5    .6    .6    .6    .5    .5    .5    .5
DEGR. *    10   230   220   220   220   280     0   285   255   315   345   340   205   340    15    10    30    30    50    60

1
                                                                                                                    PAGE  5
      JOB: Site 2 Opt 8 2014 2B8AM14.DAT                        RUN: Site 2 Opt 8 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21
------*------
  0.  *    .0
  5.  *    .0
 10.  *    .0
 15.  *    .0
 20.  *    .1
 25.  *    .3
 30.  *    .3
 35.  *    .3
 40.  *    .3
 45.  *    .4
 50.  *    .5
 55.  *    .5
```

```
  60.  *    .4
  65.  *    .4
  70.  *    .4
  75.  *    .4
  80.  *    .4
  85.  *    .3
  90.  *    .3
  95.  *    .4
 100.  *    .4
 105.  *    .4
 110.  *    .4
 115.  *    .4
 120.  *    .4
 125.  *    .4
 130.  *    .4
 135.  *    .4
 140.  *    .4
 145.  *    .4
 150.  *    .4
 155.  *    .4
 160.  *    .4
 165.  *    .4
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .6
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                             PAGE  6
      JOB: Site 2 Opt 8 2014 2B8AM14.DAT                             RUN: Site 2 Opt 8 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .4
 215.  *    .2
 220.  *    .1
 225.  *    .1
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .6
 DEGR. *  185

 THE HIGHEST CONCENTRATION IS     .60 PPM AT  340 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS     .60 PPM AT  340 DEGREES FROM REC14.
 THE 3RD HIGHEST CONCENTRATION IS     .60 PPM AT   15 DEGREES FROM REC15.
```

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Site 2 Opt 8 2030 2B8AM30.DAT           60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 8 2030 AM                     25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.    1535 9.2   0  56   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.    1535 9.2   0  56   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.    1535 9.2   0  56   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.    1535 9.2   0  56   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     860 9.2   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     860 9.2   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     860 9.2   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     860 9.2   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.     255 9.2   0  44   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     180 9.2   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     180 9.2   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      75 9.2   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      75 9.2   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      75 9.2   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.     400 9.2   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.     400 9.2   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.     400 9.2   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.     400 9.2   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.     245 9.2   0  44   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.     245 9.2   0  44   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.     245 9.2   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.     775 9.2   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.     775 9.2   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.     775 9.2   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.     775 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 2 Opt 8 2030 2B8AM30.DAT                        RUN: Site 2 Opt 8 2030 AM
      DATE: 05/11/2009   TIME: 03:35:41.54


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *    551.   171. AG   1535.   9.2    .0 56.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *    215.   175. AG   1535.   9.2    .0 56.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *     83.   182. AG   1535.   9.2    .0 56.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *    135.   186. AG   1535.   9.2    .0 56.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *    135.   197. AG    860.   9.2    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *    102.   203. AG    860.   9.2    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *    179.   210. AG    860.   9.2    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *    595.   211. AG    860.   9.2    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *    709.    32. AG    255.   9.2    .0 44.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *    173.    22. AG    180.   9.2    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *    136.    15. AG    180.   9.2    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *    133.    29. AG     75.   9.2    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *     67.    40. AG     75.   9.2    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *    178.    56. AG     75.   9.2    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *    143.     8. AG    400.   9.2    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *     90.     1. AG    400.   9.2    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *    209.   350. AG    400.   9.2    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *    550.   351. AG    400.   9.2    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *    671.   250. AG    245.   9.2    .0 44.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *    236.   235. AG    245.   9.2    .0 44.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *    101.   276. AG    245.   9.2    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *     76.   100. AG    775.   9.2    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *     96.    67. AG    775.   9.2    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *    204.    55. AG    775.   9.2    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *    646.    71. AG    775.   9.2    .0 32.0
1
                                                                                                                PAGE  2
      JOB: Site 2 Opt 8 2030 2B8AM30.DAT                        RUN: Site 2 Opt 8 2030 AM
      DATE: 05/11/2009   TIME: 03:35:41.54

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0       5.0    *
      2. SE 164 S             *       873.0     1060.0       5.0    *
      3. SE 82 S              *       920.0     1129.0       5.0    *
      4. SE CNR               *       987.0     1178.0       5.0    *
      5. SE 82 E              *      1056.0     1224.0       5.0    *
      6. SE 164 E             *      1127.0     1270.0       5.0    *
      7. SE MID E             *      1295.0     1374.0       5.0    *
      8. NE MID E             *      1218.0     1483.0       5.0    *
      9. NE 164 E             *      1112.0     1375.0       5.0    *
     10. NE 82 E              *      1046.0     1328.0       5.0    *
     11. NE CNR               *       951.0     1290.0       5.0    *
     12. NE 82 N              *       947.0     1396.0       5.0    *
     13. NE 164 N             *       950.0     1478.0       5.0    *
     14. NE MID N             *       927.0     1639.0       5.0    *
     15. NW MID N             *       855.0     1602.0       5.0    *
     16. NW 164 N             *       867.0     1442.0       5.0    *
     17. NW 82 N              *       859.0     1362.0       5.0    *
     18. W CNR                *       842.0     1280.0       5.0    *
     19. SW 82 S              *       824.0     1202.0       5.0    *
     20. SW 164 S             *       797.0     1123.0       5.0    *
     21. SW MID S             *       722.0      975.0       5.0    *
1
                                                                                                                PAGE  3
      JOB: Site 2 Opt 8 2030 2B8AM30.DAT                        RUN: Site 2 Opt 8 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *    .3    .3    .4    .1    .2    .2    .3    .0    .0    .0    .3    .2    .2    .2    .7    .6    .5    .4    .3    .1
   5.  *    .2    .2    .2    .1    .2    .2    .3    .0    .0    .0    .1    .2    .1    .1    .8    .7    .7    .5    .3    .3
  10.  *    .2    .2    .2    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .1    .8    .9    .7    .5    .4    .3
  15.  *    .1    .1    .1    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .8    .8    .5    .4    .3
  20.  *    .0    .0    .1    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .8    .7    .6    .6    .5    .2
  25.  *    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .7    .7    .6    .6    .3    .2
  30.  *    .0    .0    .1    .2    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .7    .7    .6    .5    .3    .3
  35.  *    .0    .0    .1    .2    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .6    .5    .6    .3    .3
  40.  *    .0    .0    .1    .2    .2    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .4    .3
```

```
   45.  *    .0    .0    .2    .2    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .3    .3
   50.  *    .0    .0    .1    .1    .2    .2    .4    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .5    .3    .3
   55.  *    .0    .0    .0    .2    .2    .2    .4    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .5    .3    .2
   60.  *    .0    .0    .0    .2    .2    .1    .3    .0    .1    .1    .0    .0    .0    .0    .5    .5    .6    .5    .3    .2
   65.  *    .0    .0    .0    .0    .1    .1    .2    .0    .2    .3    .1    .0    .0    .0    .5    .5    .5    .5    .3    .2
   70.  *    .0    .0    .0    .0    .0    .1    .2    .0    .2    .3    .2    .0    .0    .0    .5    .5    .5    .5    .3    .3
   75.  *    .0    .0    .0    .0    .0    .0    .1    .1    .2    .3    .2    .1    .0    .0    .5    .5    .5    .4    .3    .3
   80.  *    .0    .0    .0    .0    .0    .0    .1    .1    .4    .3    .2    .1    .0    .0    .5    .5    .5    .4    .3    .2
   85.  *    .0    .0    .0    .0    .0    .0    .1    .1    .3    .3    .1    .1    .0    .0    .6    .6    .5    .4    .3    .2
   90.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .1    .1    .1    .0    .5    .6    .6    .5    .2    .2
   95.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .1    .0    .1    .0    .5    .6    .6    .3    .2    .2
  100.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .2    .0    .1    .0    .5    .6    .6    .4    .2    .2
  105.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .6    .5    .4    .2    .2
  110.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .5    .5    .3    .2    .2
  115.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .4    .5    .3    .2    .2
  120.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .1    .1    .0    .0    .5    .5    .5    .4    .2    .2
  125.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .6    .5    .5    .4    .2    .2
  130.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .5    .6    .3    .2    .2
  135.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .7    .6    .3    .2    .2
  140.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .6    .6    .3    .2    .2
  145.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .7    .6    .6    .2    .2    .2
  150.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .7    .6    .2    .2    .2
  155.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .6    .7    .6    .2    .3    .2
  160.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .6    .7    .6    .2    .3    .2
  165.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .0    .0    .0    .6    .7    .5    .2    .2    .2
  170.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .2    .0    .0    .1    .5    .6    .5    .2    .2    .3
  175.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .3    .2    .0    .0    .3    .5    .5    .5    .2    .2    .3
  180.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .1    .5    .4    .6    .4    .2    .2    .2
  185.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .1    .5    .4    .6    .4    .2    .3    .2
  190.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .2    .6    .1    .3    .3    .2    .2    .2
  195.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .3    .4    .7    .1    .3    .3    .1    .2    .3
  200.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .4    .5    .7    .1    .2    .1    .0    .3    .2
  205.  *    .2    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .4    .5    .6    .0    .2    .1    .0    .3    .2
1
                                                                                                                 PAGE  4
      JOB: Site 2 Opt 8 2030 2B8AM30.DAT                       RUN: Site 2 Opt 8 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
  210.  *    .2    .1    .1    .0    .0    .0    .0    .1    .2    .2    .3    .4    .5    .5    .0    .0    .1    .0    .1    .2
  215.  *    .2    .2    .2    .0    .0    .0    .0    .1    .3    .1    .3    .5    .5    .5    .0    .0    .1    .0    .0    .2
  220.  *    .2    .2    .2    .0    .0    .0    .0    .1    .2    .1    .3    .4    .5    .5    .0    .0    .1    .0    .0    .0
  225.  *    .3    .2    .2    .0    .0    .0    .0    .0    .1    .1    .3    .4    .5    .5    .0    .0    .0    .0    .0    .0
  230.  *    .3    .2    .1    .0    .0    .0    .0    .0    .0    .0    .3    .4    .5    .5    .0    .0    .0    .0    .0    .0
  235.  *    .2    .1    .2    .0    .0    .0    .1    .0    .0    .0    .3    .4    .5    .5    .0    .0    .0    .0    .0    .0
  240.  *    .3    .1    .2    .0    .0    .1    .1    .0    .0    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
  245.  *    .3    .1    .1    .1    .0    .1    .1    .0    .1    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
  250.  *    .3    .1    .1    .0    .0    .2    .1    .0    .1    .1    .2    .4    .4    .5    .0    .0    .0    .0    .0    .0
  255.  *    .3    .2    .1    .0    .0    .2    .1    .0    .1    .1    .2    .4    .4    .5    .0    .0    .0    .0    .0    .0
  260.  *    .2    .2    .1    .1    .2    .2    .2    .0    .1    .1    .4    .4    .4    .5    .0    .0    .0    .0    .0    .0
  265.  *    .2    .2    .1    .1    .3    .2    .2    .0    .1    .1    .3    .5    .5    .5    .0    .0    .0    .0    .0    .0
  270.  *    .2    .1    .1    .1    .3    .3    .2    .0    .1    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
  275.  *    .2    .1    .1    .1    .2    .3    .2    .1    .1    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
  280.  *    .2    .1    .2    .1    .2    .3    .3    .1    .2    .1    .3    .4    .4    .5    .0    .0    .0    .0    .0    .0
  285.  *    .2    .1    .1    .1    .4    .3    .2    .1    .1    .1    .4    .4    .4    .4    .0    .0    .0    .0    .0    .0
  290.  *    .2    .1    .1    .2    .3    .3    .2    .1    .1    .1    .4    .4    .4    .5    .0    .0    .0    .0    .0    .0
  295.  *    .2    .1    .1    .2    .3    .3    .3    .1    .2    .2    .4    .5    .4    .5    .0    .0    .0    .0    .0    .0
  300.  *    .2    .1    .1    .2    .3    .3    .3    .1    .1    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
  305.  *    .2    .1    .1    .3    .3    .2    .3    .1    .1    .1    .4    .4    .5    .5    .0    .0    .0    .0    .0    .0
  310.  *    .2    .1    .1    .2    .3    .2    .3    .1    .1    .2    .4    .4    .4    .5    .0    .0    .0    .0    .0    .0
  315.  *    .2    .1    .1    .2    .3    .3    .3    .1    .1    .2    .4    .5    .4    .5    .0    .0    .0    .0    .0    .0
  320.  *    .2    .1    .1    .2    .3    .3    .3    .1    .2    .2    .4    .5    .4    .6    .0    .0    .0    .0    .0    .0
  325.  *    .2    .1    .1    .2    .4    .3    .3    .1    .2    .1    .4    .5    .4    .7    .0    .1    .0    .0    .0    .0
  330.  *    .2    .1    .2    .2    .3    .4    .3    .1    .2    .2    .5    .5    .5    .7    .1    .1    .0    .0    .0    .0
  335.  *    .2    .2    .2    .3    .4    .3    .2    .0    .1    .2    .5    .6    .5    .7    .2    .2    .0    .0    .0    .0
  340.  *    .2    .2    .2    .5    .3    .3    .2    .0    .1    .2    .5    .6    .5    .7    .2    .3    .1    .0    .0    .0
  345.  *    .2    .2    .2    .5    .3    .3    .2    .0    .1    .2    .4    .5    .5    .5    .3    .3    .3    .0    .0    .0
  350.  *    .2    .2    .5    .4    .3    .2    .2    .0    .0    .1    .4    .5    .5    .5    .4    .4    .4    .1    .0    .0
  355.  *    .3    .3    .4    .3    .2    .2    .3    .0    .0    .0    .3    .5    .3    .3    .7    .6    .4    .3    .1    .0
  360.  *    .3    .3    .4    .1    .2    .2    .3    .0    .0    .0    .3    .2    .2    .2    .7    .6    .5    .4    .3    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .3    .3    .5    .5    .4    .4    .4    .1    .4    .3    .5    .6    .5    .7    .8    .9    .8    .6    .5    .3
 DEGR. *    0     0   350   340   285   330    50    75    80    65   330   335   200   195     5    10    15    20    20     5

1
                                                                                                                 PAGE  5
      JOB: Site 2 Opt 8 2030 2B8AM30.DAT                       RUN: Site 2 Opt 8 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
    0.  *    .0
    5.  *    .0
   10.  *    .0
   15.  *    .0
   20.  *    .0
   25.  *    .0
   30.  *    .2
   35.  *    .2
   40.  *    .2
   45.  *    .3
   50.  *    .3
   55.  *    .2
```

```
  60.  *    .2
  65.  *    .2
  70.  *    .2
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .2
 100.  *    .2
 105.  *    .2
 110.  *    .2
 115.  *    .2
 120.  *    .2
 125.  *    .2
 130.  *    .2
 135.  *    .2
 140.  *    .2
 145.  *    .2
 150.  *    .2
 155.  *    .2
 160.  *    .2
 165.  *    .2
 170.  *    .3
 175.  *    .4
 180.  *    .4
 185.  *    .4
 190.  *    .4
 195.  *    .4
 200.  *    .4
 205.  *    .3
1
                                                                                                                             PAGE  6
      JOB: Site 2 Opt 8 2030 2B8AM30.DAT                         RUN: Site 2 Opt 8 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .2
 215.  *    .1
 220.  *    .1
 225.  *    .1
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .4
 DEGR. *  175

 THE HIGHEST CONCENTRATION IS     .90 PPM AT   10 DEGREES FROM REC16.
 THE 2ND HIGHEST CONCENTRATION IS     .80 PPM AT    5 DEGREES FROM REC15.
 THE 3RD HIGHEST CONCENTRATION IS     .80 PPM AT   15 DEGREES FROM REC17.
```

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Site 2 Opt 8 2014 2B8PM14.DAT           60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 8 2014 PM                        25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     31111.4   0  32   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     31111.4   0  32   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     31111.4   0  32   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     31111.4   0  32   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     31111.4   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     31111.4   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     31111.4   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     31111.4   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.    189811.4   0  32   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.    189811.4   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.    189811.4   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      1011.4   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      1011.4   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      1011.4   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.    189811.4   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.    189811.4   0  32   30.
```

```
  1
WB         Rt9 departAG   920.  1500.   885.  1706.    189811.4   0  32   30.
  1
WB         Rt9 departAG   885.  1706.   802.  2250.    189811.4   0  32   30.
  1
SB         AAFB aprchAG  1824.  1620.  1193.  1391.      1011.4   0  32   30.
  1
SB         AAFB aprchAG  1193.  1391.  1000.  1255.      1011.4   0  32   30.
  1
SB         AAFB aprchAG  1000.  1255.   900.  1266.      1011.4   0  44   30.
  1
NB         AAFB deparAG   893.  1239.   968.  1226.      1011.4   0  32   30.
  1
NB         AAFB deparAG   968.  1226.  1056.  1264.      1011.4   0  32   30.
  1
NB         AAFB deparAG  1056.  1264.  1222.  1382.      1011.4   0  32   30.
  1
NB         AAFB deparAG  1222.  1382.  1831.  1596.      1011.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 2 Opt 8 2014 2B8PM14.DAT                      RUN: Site 2 Opt 8 2014 PM
      DATE: 05/06/2009   TIME: 12:11:32.33


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------
       1. EB        Rt9 aprch *    792.0    2248.0     878.0    1704.0 *     551.  171. AG    311.  11.4    .0 32.0
       2. EB        Rt9 aprch *    878.0    1704.0     896.0    1490.0 *     215.  175. AG    311.  11.4    .0 32.0
       3. EB        Rt9 aprch *    896.0    1490.0     893.0    1407.0 *      83.  182. AG    311.  11.4    .0 32.0
       4. EB        Rt9 aprch *    893.0    1407.0     879.0    1273.0 *     135.  186. AG    311.  11.4    .0 32.0
       5. EB        Rt9 depart*    879.0    1272.0     839.0    1143.0 *     135.  197. AG    311.  11.4    .0 32.0
       6. EB        Rt9 depart*    839.0    1143.0     799.0    1049.0 *     102.  203. AG    311.  11.4    .0 32.0
       7. EB        Rt9 depart*    799.0    1049.0     710.0     894.0 *     179.  210. AG    311.  11.4    .0 32.0
       8. EB        Rt9 depart*    710.0     894.0     403.0     384.0 *     595.  211. AG    311.  11.4    .0 32.0
       9. WB        Rt9 aprch *    422.0     375.0     796.0     977.0 *     709.   32. AG   1898.  11.4    .0 32.0
      10. WB        Rt9 thru  *    796.0     977.0     861.0    1137.0 *     173.   22. AG   1898.  11.4    .0 32.0
      11. WB        Rt9 thru  *    861.0    1137.0     897.0    1268.0 *     136.   15. AG   1898.  11.4    .0 32.0
      12. WB        Rt9 right *    804.0     985.0     868.0    1102.0 *     133.   29. AG     10.  11.4    .0 32.0
      13. WB        Rt9 right *    869.0    1102.0     912.0    1154.0 *      67.   40. AG     10.  11.4    .0 32.0
      14. WB        Rt9 right *    912.0    1154.0    1059.0    1254.0 *     178.   56. AG     10.  11.4    .0 32.0
      15. WB        Rt9 depart*    897.0    1269.0     918.0    1410.0 *     143.    8. AG   1898.  11.4    .0 32.0
      16. WB        Rt9 depart*    918.0    1410.0     920.0    1500.0 *      90.    1. AG   1898.  11.4    .0 32.0
      17. WB        Rt9 depart*    920.0    1500.0     885.0    1706.0 *     209.  350. AG   1898.  11.4    .0 32.0
      18. WB        Rt9 depart*    885.0    1706.0     802.0    2250.0 *     550.  351. AG   1898.  11.4    .0 32.0
      19. SB        AAFB aprch*   1824.0    1620.0    1193.0    1391.0 *     671.  250. AG     10.  11.4    .0 32.0
      20. SB        AAFB aprch*   1193.0    1391.0    1000.0    1255.0 *     236.  235. AG     10.  11.4    .0 32.0
      21. SB        AAFB aprch*   1000.0    1255.0     900.0    1266.0 *     101.  276. AG     10.  11.4    .0 44.0
      22. NB        AAFB depar*    893.0    1239.0     968.0    1226.0 *      76.  100. AG     10.  11.4    .0 32.0
      23. NB        AAFB depar*    968.0    1226.0    1056.0    1264.0 *      96.   67. AG     10.  11.4    .0 32.0
      24. NB        AAFB depar*   1056.0    1264.0    1222.0    1382.0 *     204.   55. AG     10.  11.4    .0 32.0
      25. NB        AAFB depar*   1222.0    1382.0    1831.0    1596.0 *     646.   71. AG     10.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 2 Opt 8 2014 2B8PM14.DAT                      RUN: Site 2 Opt 8 2014 PM
      DATE: 05/06/2009   TIME: 12:11:32.33

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)         *
         RECEPTOR             *      X          Y          Z      *
     -------------------------*-----------------------------------*
      1. SE MID S             *       798.0      929.0       5.0   *
      2. SE 164 S             *       873.0     1060.0       5.0   *
      3. SE 82 S              *       920.0     1129.0       5.0   *
      4. SE CNR               *       987.0     1178.0       5.0   *
      5. SE 82 E              *      1056.0     1224.0       5.0   *
      6. SE 164 E             *      1127.0     1270.0       5.0   *
      7. SE MID E             *      1295.0     1374.0       5.0   *
      8. NE MID E             *      1218.0     1483.0       5.0   *
      9. NE 164 E             *      1112.0     1375.0       5.0   *
     10. NE 82 E              *      1046.0     1328.0       5.0   *
     11. NE CNR               *       951.0     1290.0       5.0   *
     12. NE 82 N              *       947.0     1396.0       5.0   *
     13. NE 164 N             *       950.0     1478.0       5.0   *
     14. NE MID N             *       927.0     1639.0       5.0   *
     15. NW MID N             *       855.0     1602.0       5.0   *
     16. NW 164 N             *       867.0     1442.0       5.0   *
     17. NW 82 N              *       859.0     1362.0       5.0   *
     18. W CNR                *       842.0     1280.0       5.0   *
     19. SW 82 S              *       824.0     1202.0       5.0   *
     20. SW 164 S             *       797.0     1123.0       5.0   *
     21. SW MID S             *       722.0      975.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 2 Opt 8 2014 2B8PM14.DAT                      RUN: Site 2 Opt 8 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.0    .8    .7    .2    .0    .0    .0    .0    .0    .0    .4    .5    .3    .3    .6    .5    .3    .2    .2    .1
   5.  *   1.1    .8    .6    .0    .0    .0    .0    .0    .0    .0    .4    .5    .2    .2    .8    .6    .4    .3    .3    .2
  10.  *   1.1    .6    .3    .0    .0    .0    .0    .0    .0    .0    .2    .2    .1    .1    .8    .5    .4    .4    .4    .3
  15.  *    .9    .4    .1    .0    .0    .0    .0    .0    .0    .0    .0    .2    .0    .0    .7    .5    .5    .4    .4    .4
  20.  *    .9    .3    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .8    .5    .5    .4    .3
  25.  *    .6    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .6    .4    .5    .5    .4
  30.  *    .5    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .7    .6    .5    .4
  35.  *    .2    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .6    .5    .5    .5
  40.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .6    .6    .5    .5
```

```
  45.  *    .1    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .6    .5    .6
  50.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .6    .5
  55.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6    .5    .5    .6
  60.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .5    .5    .6    .6
  65.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .6    .5    .6    .5
  70.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .6    .5    .5    .6
  75.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
  80.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
  85.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
  90.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .5    .5
  95.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .5    .5
 100.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .4    .5    .5
 105.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .6    .5    .4    .5    .5
 110.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
 115.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
 120.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .5    .5    .5
 125.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .5    .5
 130.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .5    .5    .5
 135.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .5    .6    .5
 140.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .6    .5    .6    .5    .5    .5
 145.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .5    .7    .6    .5    .6    .5
 150.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .7    .6    .5    .5    .5    .5
 155.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .6    .6    .6    .6    .5    .5
 160.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .6    .6    .5    .6    .5    .5
 165.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .3    .4    .5    .5    .5    .5    .6
 170.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .4    .4    .5    .5    .5    .5    .6
 175.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .1    .2    .5    .3    .5    .5    .5    .5    .5
 180.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .2    .4    .6    .3    .6    .5    .6    .5    .6
 185.  *    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .0    .4    .5    .8    .3    .5    .4    .5    .5    .6
 190.  *    .1    .1    .0    .0    .0    .0    .0    .0    .0    .0    .3    .6    .8   1.1    .1    .4    .3    .4    .5    .6
 195.  *    .2    .1    .1    .0    .0    .0    .0    .0    .0    .0    .3    .8    .9   1.0    .1    .3    .3    .3    .4    .5
 200.  *    .3    .3    .2    .1    .0    .0    .0    .0    .0    .1    .4    .9   1.0   1.1    .1    .1    .2    .3    .3    .5
 205.  *    .4    .4    .3    .1    .1    .0    .0    .0    .1    .2    .7    .9   1.0    .9    .1    .1    .1    .3    .3    .3
1
                                                                                                                PAGE  4
      JOB: Site 2 Opt 8 2014 2B8PM14.DAT                        RUN: Site 2 Opt 8 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .6    .6    .5    .3    .1    .1    .0    .1    .1    .2    .7    .9   1.0    .8    .0    .1    .1    .1    .2    .2
 215.  *    .8    .6    .5    .3    .2    .1    .1    .1    .2    .3    .6   1.0    .8    .8    .0    .0    .1    .1    .1    .2
 220.  *    .9    .7    .6    .3    .3    .1    .1    .1    .3    .3    .6   1.0    .8    .7    .0    .0    .0    .0    .1    .1
 225.  *   1.0    .8    .5    .4    .3    .2    .1    .1    .3    .3    .8    .8    .7    .7    .0    .0    .0    .0    .0    .0
 230.  *   1.0    .8    .6    .3    .2    .2    .1    .1    .3    .3    .7    .8    .8    .7    .0    .0    .0    .0    .0    .0
 235.  *   1.0    .8    .5    .3    .2    .2    .1    .1    .2    .3    .6    .7    .7    .7    .0    .0    .0    .0    .0    .0
 240.  *    .9    .7    .5    .4    .3    .2    .0    .1    .2    .2    .6    .7    .7    .7    .0    .0    .0    .0    .0    .0
 245.  *    .8    .7    .4    .3    .2    .2    .0    .1    .2    .2    .5    .7    .7    .7    .0    .0    .0    .0    .0    .0
 250.  *    .8    .6    .4    .3    .2    .2    .0    .1    .2    .2    .4    .7    .7    .7    .0    .0    .0    .0    .0    .0
 255.  *    .7    .5    .4    .3    .2    .1    .0    .1    .1    .2    .5    .7    .7    .7    .0    .0    .0    .0    .0    .0
 260.  *    .8    .5    .4    .3    .2    .1    .1    .1    .1    .2    .4    .7    .7    .7    .0    .0    .0    .0    .0    .0
 265.  *    .8    .5    .4    .3    .2    .2    .1    .1    .1    .2    .5    .6    .7    .7    .0    .0    .0    .0    .0    .0
 270.  *    .8    .5    .4    .2    .2    .2    .1    .2    .1    .2    .5    .6    .7    .7    .0    .0    .0    .0    .0    .0
 275.  *    .7    .5    .4    .2    .1    .2    .0    .1    .2    .2    .4    .6    .6    .7    .0    .0    .0    .0    .0    .0
 280.  *    .7    .6    .4    .2    .2    .1    .0    .1    .2    .2    .5    .6    .6    .7    .0    .0    .0    .0    .0    .0
 285.  *    .7    .6    .4    .2    .2    .1    .0    .1    .2    .2    .5    .6    .6    .7    .0    .0    .0    .0    .0    .0
 290.  *    .7    .6    .4    .2    .2    .1    .1    .1    .1    .2    .5    .6    .7    .7    .0    .0    .0    .0    .0    .0
 295.  *    .7    .6    .4    .2    .2    .1    .1    .1    .2    .3    .5    .7    .7    .7    .0    .0    .0    .0    .0    .0
 300.  *    .7    .6    .3    .2    .2    .2    .1    .2    .2    .2    .5    .7    .8    .7    .0    .0    .0    .0    .0    .0
 305.  *    .7    .6    .4    .3    .2    .2    .1    .2    .2    .2    .5    .7    .7    .8    .0    .0    .0    .0    .0    .0
 310.  *    .7    .6    .4    .3    .2    .3    .2    .1    .2    .3    .5    .7    .8    .8    .0    .0    .0    .0    .0    .0
 315.  *    .7    .6    .4    .2    .1    .2    .1    .1    .1    .2    .5    .7    .8    .9    .0    .0    .0    .0    .0    .0
 320.  *    .7    .6    .4    .3    .2    .2    .1    .1    .2    .2    .5    .8    .8    .8    .0    .0    .0    .0    .0    .0
 325.  *    .7    .5    .4    .3    .3    .2    .1    .1    .2    .3    .5    .8   1.0    .9    .0    .0    .0    .0    .0    .0
 330.  *    .8    .6    .4    .2    .4    .2    .1    .1    .2    .3    .5    .9    .9    .9    .0    .0    .0    .0    .0    .0
 335.  *    .8    .6    .5    .4    .3    .2    .1    .1    .2    .3    .7    .8    .9    .9    .1    .0    .0    .0    .0    .0
 340.  *    .9    .6    .4    .5    .3    .2    .0    .0    .1    .2    .6    .9   1.0    .9    .1    .1    .0    .0    .0    .0
 345.  *    .8    .6    .5    .5    .2    .1    .0    .0    .1    .2    .7   1.0    .7    .8    .2    .2    .1    .1    .0    .0
 350.  *    .9    .8    .7    .4    .2    .1    .0    .0    .1    .2    .6    .9    .6    .6    .4    .3    .2    .1    .1    .0
 355.  *    .9    .8    .7    .4    .1    .0    .0    .0    .0    .1    .5    .7    .5    .5    .6    .5    .2    .2    .1    .1
 360.  *   1.0    .8    .7    .2    .0    .0    .0    .0    .0    .0    .4    .5    .3    .3    .6    .5    .3    .2    .2    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.1    .8    .7    .5    .4    .3    .2    .2    .3    .3    .8   1.0   1.0   1.1    .8    .8    .7    .6    .6    .6
 DEGR. *     5     0     0   340   330   310   310   270   220   215   225   215   200   190     5    20    30    30    50    45

1
                                                                                                                PAGE  5
      JOB: Site 2 Opt 8 2014 2B8PM14.DAT                        RUN: Site 2 Opt 8 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .1
   5.  *    .1
  10.  *    .1
  15.  *    .1
  20.  *    .2
  25.  *    .3
  30.  *    .3
  35.  *    .4
  40.  *    .4
  45.  *    .5
  50.  *    .5
  55.  *    .4
```

```
  60.  *    .5
  65.  *    .4
  70.  *    .5
  75.  *    .5
  80.  *    .4
  85.  *    .5
  90.  *    .5
  95.  *    .5
 100.  *    .5
 105.  *    .5
 110.  *    .4
 115.  *    .5
 120.  *    .5
 125.  *    .5
 130.  *    .5
 135.  *    .5
 140.  *    .5
 145.  *    .5
 150.  *    .5
 155.  *    .5
 160.  *    .5
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .6
 185.  *    .6
 190.  *    .7
 195.  *    .7
 200.  *    .5
 205.  *    .5
1
                                                                                                                         PAGE  6
      JOB: Site 2 Opt 8 2014 2B8PM14.DAT                             RUN: Site 2 Opt 8 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .4
 215.  *    .3
 220.  *    .1
 225.  *    .1
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .1
 ------*------
 MAX   *    .7
 DEGR. *  190

 THE HIGHEST CONCENTRATION IS    1.10 PPM AT    5 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    1.10 PPM AT  190 DEGREES FROM REC14.
 THE 3RD HIGHEST CONCENTRATION IS    1.00 PPM AT  215 DEGREES FROM REC12.
```

```
Site 2 Opt 8 2030 2B8PM30.DAT           60.0321.0.0000.000210.30480000    1
1
SE MID S                  798.      929.       5.0
SE 164 S                  873.     1060.       5.0
SE 82 S                   920.     1129.       5.0
SE CNR                    987.     1178.       5.0
SE 82 E                  1056.     1224.       5.0
SE 164 E                 1127.     1270.       5.0
SE MID E                 1295.     1374.       5.0
NE MID E                 1218.     1483.       5.0
NE 164 E                 1112.     1375.       5.0
NE 82 E                  1046.     1328.       5.0
NE CNR                    951.     1290.       5.0
NE 82 N                   947.     1396.       5.0
NE 164 N                  950.     1478.       5.0
NE MID N                  927.     1639.       5.0
NW MID N                  855.     1602.       5.0
NW 164 N                  867.     1442.       5.0
NW 82 N                   859.     1362.       5.0
W CNR                     842.     1280.       5.0
SW 82 S                   824.     1202.       5.0
SW 164 S                  797.     1123.       5.0
SW MID S                  722.      975.       5.0
Site 2 Opt 8 2030 PM                     25  1   0
  1
EB        Rt9 aprch AG   792.  2248.   878.  1704.     360 9.2   0  56   30.
  1
EB        Rt9 aprch AG   878.  1704.   896.  1490.     360 9.2   0  56   30.
  1
EB        Rt9 aprch AG   896.  1490.   893.  1407.     360 9.2   0  56   30.
  1
EB        Rt9 aprch AG   893.  1407.   879.  1273.     360 9.2   0  56   30.
  1
EB        Rt9 departAG   879.  1272.   839.  1143.     180 9.2   0  32   30.
  1
EB        Rt9 departAG   839.  1143.   799.  1049.     180 9.2   0  32   30.
  1
EB        Rt9 departAG   799.  1049.   710.   894.     180 9.2   0  32   30.
  1
EB        Rt9 departAG   710.   894.   403.   384.     180 9.2   0  32   30.
  1
WB        Rt9 aprch AG   422.   375.   796.   977.    1005 9.2   0  44   30.
  1
WB        Rt9 thru  AG   796.   977.   861.  1137.     975 9.2   0  32   30.
  1
WB        Rt9 thru  AG   861.  1137.   897.  1268.     975 9.2   0  32   30.
  1
WB        Rt9 right AG   804.   985.   868.  1102.      30 9.2   0  32   30.
  1
WB        Rt9 right AG   869.  1102.   912.  1154.      30 9.2   0  32   30.
  1
WB        Rt9 right AG   912.  1154.  1059.  1254.      30 9.2   0  32   30.
  1
WB        Rt9 departAG   897.  1269.   918.  1410.    1690 9.2   0  32   30.
  1
WB        Rt9 departAG   918.  1410.   920.  1500.    1690 9.2   0  32   30.
```

```
  1
WB        Rt9 departAG   920.  1500.   885.  1706.    1690 9.2   0  32   30.
  1
WB        Rt9 departAG   885.  1706.   802.  2250.    1690 9.2   0  32   30.
  1
SB        AAFB aprchAG  1824.  1620.  1193.  1391.     795 9.2   0  44   30.
  1
SB        AAFB aprchAG  1193.  1391.  1000.  1255.     795 9.2   0  44   30.
  1
SB        AAFB aprchAG  1000.  1255.   900.  1266.     795 9.2   0  44   30.
  1
NB        AAFB deparAG   893.  1239.   968.  1226.     290 9.2   0  32   30.
  1
NB        AAFB deparAG   968.  1226.  1056.  1264.     290 9.2   0  32   30.
  1
NB        AAFB deparAG  1056.  1264.  1222.  1382.     290 9.2   0  32   30.
  1
NB        AAFB deparAG  1222.  1382.  1831.  1596.     290 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 2 Opt 8 2030 2B8PM30.DAT                     RUN: Site 2 Opt 8 2030 PM
      DATE: 05/06/2009   TIME: 12:13:45.47


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)        (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. EB        Rt9 aprch *   792.0    2248.0     878.0    1704.0 *    551.  171. AG    360.   9.2    .0 56.0
       2. EB        Rt9 aprch *   878.0    1704.0     896.0    1490.0 *    215.  175. AG    360.   9.2    .0 56.0
       3. EB        Rt9 aprch *   896.0    1490.0     893.0    1407.0 *     83.  182. AG    360.   9.2    .0 56.0
       4. EB        Rt9 aprch *   893.0    1407.0     879.0    1273.0 *    135.  186. AG    360.   9.2    .0 56.0
       5. EB        Rt9 depart*   879.0    1272.0     839.0    1143.0 *    135.  197. AG    180.   9.2    .0 32.0
       6. EB        Rt9 depart*   839.0    1143.0     799.0    1049.0 *    102.  203. AG    180.   9.2    .0 32.0
       7. EB        Rt9 depart*   799.0    1049.0     710.0     894.0 *    179.  210. AG    180.   9.2    .0 32.0
       8. EB        Rt9 depart*   710.0     894.0     403.0     384.0 *    595.  211. AG    180.   9.2    .0 32.0
       9. WB        Rt9 aprch *   422.0     375.0     796.0     977.0 *    709.   32. AG   1005.   9.2    .0 44.0
      10. WB        Rt9 thru  *   796.0     977.0     861.0    1137.0 *    173.   22. AG    975.   9.2    .0 32.0
      11. WB        Rt9 thru  *   861.0    1137.0     897.0    1268.0 *    136.   15. AG    975.   9.2    .0 32.0
      12. WB        Rt9 right *   804.0     985.0     868.0    1102.0 *    133.   29. AG     30.   9.2    .0 32.0
      13. WB        Rt9 right *   869.0    1102.0     912.0    1154.0 *     67.   40. AG     30.   9.2    .0 32.0
      14. WB        Rt9 right *   912.0    1154.0    1059.0    1254.0 *    178.   56. AG     30.   9.2    .0 32.0
      15. WB        Rt9 depart*   897.0    1269.0     918.0    1410.0 *    143.    8. AG   1690.   9.2    .0 32.0
      16. WB        Rt9 depart*   918.0    1410.0     920.0    1500.0 *     90.    1. AG   1690.   9.2    .0 32.0
      17. WB        Rt9 depart*   920.0    1500.0     885.0    1706.0 *    209.  350. AG   1690.   9.2    .0 32.0
      18. WB        Rt9 depart*   885.0    1706.0     802.0    2250.0 *    550.  351. AG   1690.   9.2    .0 32.0
      19. SB        AAFB aprch*  1824.0    1620.0    1193.0    1391.0 *    671.  250. AG    795.   9.2    .0 44.0
      20. SB        AAFB aprch*  1193.0    1391.0    1000.0    1255.0 *    236.  235. AG    795.   9.2    .0 44.0
      21. SB        AAFB aprch*  1000.0    1255.0     900.0    1266.0 *    101.  276. AG    795.   9.2    .0 44.0
      22. NB        AAFB depar*   893.0    1239.0     968.0    1226.0 *     76.  100. AG    290.   9.2    .0 32.0
      23. NB        AAFB depar*   968.0    1226.0    1056.0    1264.0 *     96.   67. AG    290.   9.2    .0 32.0
      24. NB        AAFB depar*  1056.0    1264.0    1222.0    1382.0 *    204.   55. AG    290.   9.2    .0 32.0
      25. NB        AAFB depar*  1222.0    1382.0    1831.0    1596.0 *    646.   71. AG    290.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 2 Opt 8 2030 2B8PM30.DAT                     RUN: Site 2 Opt 8 2030 PM
      DATE: 05/06/2009   TIME: 12:13:45.47

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)         *
         RECEPTOR             *      X          Y          Z      *
     -------------------------*-------------------------------------*
      1. SE MID S             *       798.0      929.0       5.0   *
      2. SE 164 S             *       873.0     1060.0       5.0   *
      3. SE 82 S              *       920.0     1129.0       5.0   *
      4. SE CNR               *       987.0     1178.0       5.0   *
      5. SE 82 E              *      1056.0     1224.0       5.0   *
      6. SE 164 E             *      1127.0     1270.0       5.0   *
      7. SE MID E             *      1295.0     1374.0       5.0   *
      8. NE MID E             *      1218.0     1483.0       5.0   *
      9. NE 164 E             *      1112.0     1375.0       5.0   *
     10. NE 82 E              *      1046.0     1328.0       5.0   *
     11. NE CNR               *       951.0     1290.0       5.0   *
     12. NE 82 N              *       947.0     1396.0       5.0   *
     13. NE 164 N             *       950.0     1478.0       5.0   *
     14. NE MID N             *       927.0     1639.0       5.0   *
     15. NW MID N             *       855.0     1602.0       5.0   *
     16. NW 164 N             *       867.0     1442.0       5.0   *
     17. NW 82 N              *       859.0     1362.0       5.0   *
     18. W CNR                *       842.0     1280.0       5.0   *
     19. SW 82 S              *       824.0     1202.0       5.0   *
     20. SW 164 S             *       797.0     1123.0       5.0   *
     21. SW MID S             *       722.0      975.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 2 Opt 8 2030 2B8PM30.DAT                     RUN: Site 2 Opt 8 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .4    .4    .5    .1    .2    .2    .3    .0    .0    .0    .4    .5    .3    .2    .6    .5    .2    .2    .1    .1
   5.  *    .4    .3    .2    .2    .2    .2    .3    .0    .0    .0    .2    .3    .2    .1    .6    .5    .2    .2    .2    .1
  10.  *    .4    .2    .2    .2    .2    .2    .3    .0    .0    .0    .0    .2    .1    .1    .7    .5    .4    .4    .3    .1
  15.  *    .4    .2    .2    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .4    .2    .1
  20.  *    .3    .2    .1    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .5    .5    .4    .4    .3    .1
  25.  *    .3    .0    .1    .1    .3    .2    .3    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .3    .2
  30.  *    .2    .0    .1    .1    .2    .3    .3    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .2    .2
  35.  *    .2    .0    .1    .1    .2    .3    .3    .0    .0    .0    .0    .0    .0    .0    .4    .4    .5    .4    .3    .2
  40.  *    .1    .1    .1    .1    .3    .3    .3    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .5    .3    .2
```

```
   45.  *    .0    .0    .1    .2    .3    .1    .3    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .2    .2
   50.  *    .0    .0    .1    .2    .3    .1    .3    .0    .1    .1    .0    .0    .0    .0    .4    .4    .4    .4    .3    .2
   55.  *    .0    .0    .2    .2    .1    .1    .3    .0    .1    .2    .1    .0    .0    .0    .4    .5    .4    .4    .3    .1
   60.  *    .0    .0    .0    .1    .1    .1    .3    .0    .2    .2    .2    .0    .0    .0    .4    .4    .4    .4    .4    .1
   65.  *    .0    .0    .0    .0    .1    .1    .2    .0    .3    .3    .2    .0    .0    .0    .4    .4    .5    .4    .4    .2
   70.  *    .0    .0    .0    .0    .0    .1    .2    .1    .3    .3    .2    .1    .0    .0    .4    .4    .4    .6    .4    .2
   75.  *    .0    .0    .0    .0    .0    .0    .1    .1    .5    .3    .2    .1    .0    .0    .4    .4    .5    .6    .4    .2
   80.  *    .0    .0    .0    .0    .0    .0    .0    .1    .5    .3    .3    .1    .1    .0    .4    .5    .5    .6    .3    .2
   85.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .2    .1    .1    .0    .4    .5    .5    .5    .2    .2
   90.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .2    .2    .1    .1    .0    .4    .5    .5    .5    .2    .1
   95.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .3    .1    .1    .0    .4    .4    .5    .6    .2    .1
  100.  *    .0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .2    .1    .1    .0    .4    .4    .5    .5    .2    .2
  105.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .4    .5    .5    .3    .2    .2
  110.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .4    .4    .5    .3    .2    .2
  115.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .0    .4    .5    .5    .3    .2    .2
  120.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .1    .0    .0    .4    .5    .4    .2    .2    .2
  125.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .1    .1    .0    .4    .5    .5    .2    .2    .2
  130.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .3    .1    .1    .0    .4    .4    .5    .2    .2    .2
  135.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .5    .4    .5    .2    .1    .2
  140.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .5    .4    .5    .2    .1    .2
  145.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .4    .5    .5    .2    .2    .2
  150.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .0    .4    .5    .5    .2    .2    .2
  155.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .0    .4    .5    .5    .2    .2    .2
  160.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .0    .0    .1    .4    .5    .4    .2    .2    .2
  165.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .0    .2    .4    .4    .3    .1    .1    .2
  170.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .3    .3    .5    .3    .2    .1    .2
  175.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .1    .1    .4    .3    .5    .3    .2    .1    .2
  180.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .2    .2    .5    .2    .3    .2    .2    .1    .2
  185.  *    .0    .0    .0    .0    .0    .0    .0    .1    .2    .2    .2    .2    .3    .7    .0    .2    .3    .3    .2    .2
  190.  *    .1    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .4    .3    .7    .0    .0    .3    .2    .2    .2
  195.  *    .1    .1    .0    .0    .0    .0    .0    .2    .2    .2    .3    .5    .4    .8    .0    .1    .1    .2    .2    .1
  200.  *    .2    .1    .1    .0    .0    .0    .0    .2    .2    .2    .5    .5    .5    .7    .0    .1    .1    .1    .1    .1
  205.  *    .2    .1    .1    .1    .0    .0    .0    .1    .2    .2    .5    .6    .5    .6    .0    .0    .1    .1    .1    .1
1
                                                                                                                PAGE  4
      JOB: Site 2 Opt 8 2030 2B8PM30.DAT                       RUN: Site 2 Opt 8 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
  210.  *    .3    .3    .2    .1    .1    .0    .0    .1    .2    .4    .5    .7    .6    .6    .0    .0    .0    .1    .1    .1
  215.  *    .4    .3    .2    .1    .1    .0    .0    .1    .3    .4    .6    .6    .6    .6    .0    .0    .0    .0    .1    .1
  220.  *    .4    .3    .2    .2    .1    .1    .0    .1    .2    .3    .5    .6    .6    .6    .0    .0    .0    .0    .0    .0
  225.  *    .5    .4    .2    .2    .1    .1    .0    .1    .2    .3    .4    .6    .6    .5    .0    .0    .0    .0    .0    .0
  230.  *    .5    .3    .3    .2    .2    .1    .0    .1    .1    .3    .5    .6    .5    .5    .0    .0    .0    .0    .0    .0
  235.  *    .4    .3    .2    .1    .1    .0    .0    .1    .1    .3    .4    .6    .5    .5    .0    .0    .0    .0    .0    .0
  240.  *    .4    .3    .2    .1    .1    .0    .1    .1    .2    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
  245.  *    .4    .2    .2    .1    .0    .0    .1    .1    .1    .3    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
  250.  *    .4    .2    .2    .2    .1    .0    .1    .1    .1    .2    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0
  255.  *    .3    .2    .1    .1    .1    .1    .1    .0    .1    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
  260.  *    .3    .2    .1    .1    .1    .2    .1    .0    .1    .1    .3    .5    .5    .5    .0    .0    .0    .0    .0    .0
  265.  *    .3    .2    .1    .1    .1    .2    .1    .0    .1    .1    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
  270.  *    .3    .2    .2    .1    .2    .4    .2    .0    .1    .1    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0
  275.  *    .3    .2    .2    .1    .2    .4    .2    .1    .1    .1    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0
  280.  *    .3    .2    .2    .1    .3    .3    .3    .1    .2    .1    .4    .4    .5    .5    .0    .0    .0    .0    .0    .0
  285.  *    .3    .2    .2    .1    .3    .3    .3    .1    .1    .1    .4    .4    .5    .5    .0    .0    .0    .0    .0    .0
  290.  *    .3    .2    .1    .1    .4    .3    .2    .1    .1    .1    .4    .5    .4    .5    .0    .0    .0    .0    .0    .0
  295.  *    .3    .2    .1    .1    .4    .3    .3    .1    .1    .1    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
  300.  *    .3    .2    .1    .1    .4    .3    .4    .1    .2    .2    .4    .6    .6    .5    .0    .0    .0    .0    .0    .0
  305.  *    .3    .2    .1    .2    .4    .3    .3    .1    .2    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
  310.  *    .3    .2    .2    .3    .4    .2    .3    .1    .1    .2    .4    .5    .6    .6    .0    .0    .0    .0    .0    .0
  315.  *    .3    .2    .2    .3    .4    .3    .4    .1    .1    .2    .4    .6    .6    .6    .0    .0    .0    .0    .0    .0
  320.  *    .3    .2    .2    .2    .3    .3    .4    .1    .2    .2    .4    .6    .6    .7    .0    .0    .0    .0    .0    .0
  325.  *    .3    .2    .2    .2    .4    .3    .4    .1    .2    .2    .4    .6    .6    .7    .0    .0    .0    .0    .0    .0
  330.  *    .3    .2    .2    .2    .5    .4    .4    .1    .2    .3    .4    .6    .7    .8    .0    .0    .0    .0    .0    .0
  335.  *    .3    .2    .3    .2    .4    .4    .3    .0    .1    .2    .5    .7    .8    .6    .0    .0    .0    .0    .0    .0
  340.  *    .4    .3    .2    .3    .4    .3    .3    .0    .1    .2    .5    .8    .6    .7    .1    .0    .0    .0    .0    .0
  345.  *    .3    .3    .2    .4    .5    .3    .3    .0    .1    .2    .5    .6    .7    .6    .1    .1    .1    .0    .0    .0
  350.  *    .3    .2    .3    .4    .3    .2    .3    .0    .0    .1    .5    .6    .4    .5    .3    .2    .2    .1    .0    .0
  355.  *    .4    .4    .4    .4    .2    .2    .3    .0    .0    .1    .4    .5    .3    .5    .6    .3    .2    .1    .1    .0
  360.  *    .4    .4    .5    .1    .2    .2    .3    .0    .0    .0    .4    .5    .3    .2    .6    .5    .2    .2    .1    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .5    .4    .5    .4    .5    .4    .4    .2    .5    .4    .6    .8    .8    .8    .7    .6    .5    .6    .4    .2
 DEGR. *   225     0     0   345   330   270   300   190    75   210   215   340   335   195    10    15    15    70    60    25

1
                                                                                                                PAGE  5
      JOB: Site 2 Opt 8 2030 2B8PM30.DAT                       RUN: Site 2 Opt 8 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
    0.  *    .0
    5.  *    .0
   10.  *    .0
   15.  *    .0
   20.  *    .0
   25.  *    .0
   30.  *    .1
   35.  *    .1
   40.  *    .1
   45.  *    .1
   50.  *    .1
   55.  *    .1
```

```
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .1
 100.  *    .1
 105.  *    .1
 110.  *    .2
 115.  *    .2
 120.  *    .2
 125.  *    .2
 130.  *    .2
 135.  *    .2
 140.  *    .2
 145.  *    .2
 150.  *    .2
 155.  *    .2
 160.  *    .2
 165.  *    .2
 170.  *    .2
 175.  *    .2
 180.  *    .2
 185.  *    .2
 190.  *    .2
 195.  *    .2
 200.  *    .2
 205.  *    .2
1
                                                                                                                            PAGE  6
      JOB: Site 2 Opt 8 2030 2B8PM30.DAT                         RUN: Site 2 Opt 8 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .1
 215.  *    .1
 220.  *    .1
 225.  *    .0
 230.  *    .0
 235.  *    .0
 240.  *    .0
 245.  *    .0
 250.  *    .0
 255.  *    .0
 260.  *    .0
 265.  *    .0
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .2
 DEGR. *   75

 THE HIGHEST CONCENTRATION IS     .80 PPM AT  340 DEGREES FROM REC12.
 THE 2ND HIGHEST CONCENTRATION IS     .80 PPM AT  335 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS     .80 PPM AT  195 DEGREES FROM REC14.
```

Site 3

```
Site 3 Existing AM - 3EXAM.DAT          60.0321.0.0000.000210.30480000    1
1
SW MID W                -114.     1937.       5.0
SW 164 W                   8.     1953.       5.0
SW 82 W                   90.     1961.       5.0
SW CNR                   174.     1953.       5.0
SW 82 S                  218.     1880.       5.0
SW 164 S                 245.     1804.       5.0
SW MID S                 281.     1726.       5.0
SE MID S                 388.     1751.       5.0
SE 164 S                 338.     1834.       5.0
SE 82 S                  315.     1914.       5.0
SE CNR                   304.     1995.       5.0
SE 82 E                  376.     2022.       5.0
SE 164 E                 454.     2045.       5.0
SE MID E                 571.     2079.       5.0
NE MID E                 519.     2169.       5.0
NE 164 E                 374.     2130.       5.0
NE 82 E                  295.     2110.       5.0
N CNR                    215.     2090.       5.0
NW 82 W                  136.     2072.       5.0
NW 164 W                  54.     2058.       5.0
NW MID W                 -88.     2040.       5.0
Site 3 Existing AM                       28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.     59515.5   0  44   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.     59515.5   0  44   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.     59515.5   0  44   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.     59515.5   0  44   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.     59515.5   0  44   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.     59515.5   0  44   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.     59515.5   0  44   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.     59515.5   0  44   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       133        94       2.0  595  141.4 1394 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    105015.5   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    105015.5   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    105015.5   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    105015.5   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    105015.5   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    105015.5   0  44   30.
  1
```

```
SB        Rt8 departAG   791.  1427.   995.  1367.    105015.5   0  44   30.
  1
EB        Rt1 aprch AG  -757.  1920.  -322.  1944.    189015.5   0  56   30.
  1
EB        Rt1 aprch AG  -322.  1944.   -72.  1967.    189015.5   0  56   30.
  1
EB        Rt1 aprch AG   -72.  1967.   233.  2014.    189015.5   0  56   30.
  2
EB        Rt1 aprch AG   162.  2003.   -17.  1976.      0.  36   3
       133        47       2.0 1890  141.4 1616 1 3
  1
EB        Rt1 departAG   234.  2016.  1198.  2281.    201515.5   0  56   30.
  1
WB        Rt1 aprch AG  1187.  2341.   752.  2213.    180515.5   0  68   30.
  1
WB        Rt1 thru  AG   752.  2213.   221.  2064.    122515.5   0  44   30.
  1
WB        Rt1 thru  AG   221.  2064.    89.  2037.    122515.5   0  44   30.
  1
WB        Rt1 thru  AG    87.  2035.  -118.  2009.    122515.5   0  56   30.
  1
WB        Rt1 thru  AG  -118.  2009.  -758.  1962.    122515.5   0  56   30.
  1
WB        Rt1 left  AG   607.  2149.   205.  2045.     58015.5   0  44   30.
  2
EB        Rt1 left  AG   296.  2069.   549.  2134.      0.  24   2
       133        94       2.0  580  141.4 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 3 Existing AM - 3EXAM.DAT                       RUN: Site 3 Existing AM
      DATE: 05/06/2009   TIME: 08:55:21.03


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-----------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *     251.   283. AG    595.  15.5    .0 44.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *     168.   287. AG    595.  15.5    .0 44.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *     128.   300. AG    595.  15.5    .0 44.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *     120.   309. AG    595.  15.5    .0 44.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *      97.   321. AG    595.  15.5    .0 44.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *     122.   332. AG    595.  15.5    .0 44.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *      67.   338. AG    595.  15.5    .0 44.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *     110.   349. AG    595.  15.5    .0 44.0
       9. NB        Rt8 aprch *    273.0    1978.0     305.8    1816.3 *     165.   169. AG    536. 100.0    .0 24.0  .81   8.4
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *     189.   161. AG   1050.  15.5    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *     126.   153. AG   1050.  15.5    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *      92.   142. AG   1050.  15.5    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *     123.   130. AG   1050.  15.5    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *     146.   117. AG   1050.  15.5    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *     188.   108. AG   1050.  15.5    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *     213.   106. AG   1050.  15.5    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   1890.  15.5    .0 56.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   1890.  15.5    .0 56.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *     309.    81. AG   1890.  15.5    .0 56.0
      20. EB        Rt1 aprch *    162.0    2003.0       1.9    1978.9 *     162.   261. AG    402. 100.0    .0 36.0  .63   8.2
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   2015.  15.5    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *     453.   254. AG   1805.  15.5    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *     552.   254. AG   1225.  15.5    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *     135.   258. AG   1225.  15.5    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *     207.   263. AG   1225.  15.5    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   1225.  15.5    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *     415.   255. AG    580.  15.5    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0     440.4    2106.1 *     149.    76. AG    536. 100.0    .0 24.0  .65   7.6
1
                                                                                                                 PAGE  2
      JOB: Site 3 Existing AM - 3EXAM.DAT                       RUN: Site 3 Existing AM
      DATE: 05/06/2009   TIME: 08:55:21.03

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*---------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     133       94       2.0       595       1394     141.40      1        3
      20. EB        Rt1 aprch *     133       47       2.0      1890       1616     141.40      1        3
      28. EB        Rt1 left  *     133       94       2.0       580       1700     141.40      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0        5.0   *
      2. SW 164 W             *         8.0     1953.0        5.0   *
      3. SW 82 W              *        90.0     1961.0        5.0   *
      4. SW CNR               *       174.0     1953.0        5.0   *
      5. SW 82 S              *       218.0     1880.0        5.0   *
      6. SW 164 S             *       245.0     1804.0        5.0   *
      7. SW MID S             *       281.0     1726.0        5.0   *
      8. SE MID S             *       388.0     1751.0        5.0   *
      9. SE 164 S             *       338.0     1834.0        5.0   *
     10. SE 82 S              *       315.0     1914.0        5.0   *
     11. SE CNR               *       304.0     1995.0        5.0   *
     12. SE 82 E              *       376.0     2022.0        5.0   *
     13. SE 164 E             *       454.0     2045.0        5.0   *
     14. SE MID E             *       571.0     2079.0        5.0   *
     15. NE MID E             *       519.0     2169.0        5.0   *
     16. NE 164 E             *       374.0     2130.0        5.0   *
     17. NE 82 E              *       295.0     2110.0        5.0   *
     18. N CNR                *       215.0     2090.0        5.0   *
     19. NW 82 W              *       136.0     2072.0        5.0   *
     20. NW 164 W             *        54.0     2058.0        5.0   *
     21. NW MID W             *       -88.0     2040.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 3 Existing AM - 3EXAM.DAT                       RUN: Site 3 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *   1.4   2.2   2.4   1.1   1.0   1.5   1.9    .7    .8   1.2   1.8   2.2   1.6   1.4    .0    .0    .0    .0    .0    .0
   5.  *   1.2   2.3   2.3   1.0   1.4   1.8   2.0    .6    .9   1.1   1.8   2.2   1.5   1.4    .0    .0    .0    .0    .0    .0
  10.  *   1.3   2.3   2.3   1.1   1.4   1.9   2.0    .5    .7   1.1   2.0   2.2   1.5   1.5    .0    .0    .0    .0    .0    .0
```

```
  15.  *   1.3   2.4   2.4   1.1   1.6   2.2   2.0    .4    .7   1.1   2.1   2.3   1.5   1.4    .1    .0    .0    .0    .0    .0
  20.  *   1.3   2.4   2.3   1.2   1.8   2.2   1.7    .4    .7   1.1   2.1   2.2   1.5   1.4    .1    .1    .0    .0    .0    .0
  25.  *   1.3   2.5   2.4   1.3   1.8   2.2   1.4    .3    .6   1.0   2.2   2.2   1.6   1.5    .1    .1    .0    .0    .0    .0
  30.  *   1.4   2.7   2.5   1.4   2.0   2.3   1.2    .3    .6   1.1   2.3   2.2   1.6   1.5    .1    .1    .1    .0    .0    .0
  35.  *   1.5   2.8   2.6   1.6   2.1   2.1   1.1    .4    .6   1.0   2.2   2.2   1.7   1.7    .1    .1    .1    .0    .0    .0
  40.  *   1.6   3.0   2.8   1.7   2.3   2.1   1.0    .4    .5   1.0   2.3   2.1   1.8   1.8    .1    .1    .1    .1    .1    .0
  45.  *   1.8   3.2   2.9   2.0   2.3   2.0    .9    .3    .5   1.0   2.2   2.1   1.9   1.9    .2    .1    .1    .1    .1    .0
  50.  *   1.8   3.5   3.0   2.0   2.4   1.9    .8    .3    .5   1.0   2.3   2.2   1.9   1.8    .2    .2    .1    .1    .1    .0
  55.  *   2.2   3.5   3.1   2.4   2.1   1.9    .8    .3    .4    .7   2.3   2.2   2.1   2.1    .4    .3    .2    .2    .2    .0
  60.  *   2.4   3.7   3.2   2.4   2.0   1.7    .7    .2    .3    .6   2.1   2.1   2.1   2.0    .6    .6    .5    .5    .4    .4
  65.  *   2.7   4.0   3.2   2.2   2.0   1.5    .7    .1    .3    .6   1.8   2.0   2.0   2.0    .8    .8   1.0   1.0    .9    .6
  70.  *   2.9   3.7   3.1   2.1   1.8   1.4    .6    .0    .2    .4   1.6   1.8   1.7   1.9   1.2   1.3   1.3   1.4   1.2   1.0
  75.  *   2.9   3.7   2.7   1.9   1.7   1.2    .5    .0    .1    .3   1.3   1.4   1.6   1.5   1.5   1.6   1.7   1.7   1.6   1.4
  80.  *   2.8   3.0   2.4   1.6   1.4    .9    .6    .0    .0    .1    .9   1.1   1.1   1.1   1.7   1.9   2.1   2.1   1.9   1.8
  85.  *   2.1   2.3   1.8   1.2   1.3    .9    .6    .0    .0    .1    .4    .8    .8    .9   2.0   2.0   2.5   2.4   2.2   2.0
  90.  *   1.6   1.7   1.4   1.2   1.2    .8    .7    .0    .0    .0    .3    .4    .5    .5   2.0   2.2   2.8   2.7   2.2   2.0
  95.  *   1.3   1.2   1.2   1.1   1.3    .6    .6    .0    .0    .0    .2    .3    .3    .4   1.9   2.4   2.8   2.6   2.1   2.1
 100.  *    .8   1.0    .9   1.1   1.3    .7    .6    .0    .0    .0    .1    .2    .2    .2   1.9   2.3   2.9   2.4   2.1   1.9
 105.  *    .6    .7    .7   1.1   1.4    .7    .6    .0    .0    .0    .0    .1    .1    .2   1.8   2.5   2.9   2.4   2.0   2.2
 110.  *    .4    .6    .6   1.1   1.4    .6    .8    .0    .1    .0    .0    .1    .1    .1   1.8   2.5   3.0   2.1   1.7   2.1
 115.  *    .2    .5    .6   1.2   1.4    .7    .8    .0    .1    .0    .0    .1    .1    .1   1.7   2.6   3.0   1.9   2.1   2.1
 120.  *    .1    .4    .6   1.1   1.3    .8   1.0    .1    .1    .0    .0    .1    .1    .1   1.6   2.5   2.8   1.8   1.9   2.3
 125.  *    .1    .3    .5   1.0   1.1    .9    .9    .2    .1    .0    .0    .1    .1    .1   1.5   2.6   2.8   1.7   1.9   2.2
 130.  *    .1    .1    .5   1.2   1.1   1.0    .7    .4    .1    .0    .0    .1    .1    .1   1.5   2.5   2.6   1.7   1.8   2.2
 135.  *    .1    .1    .4    .9   1.1    .9    .6    .5    .2    .0    .0    .0    .1    .1   1.5   2.5   2.5   1.7   2.0   2.2
 140.  *    .1    .1    .4    .8   1.1    .6    .5    .6    .4    .0    .0    .0    .0    .1   1.4   2.5   2.5   1.7   2.0   2.0
 145.  *    .1    .1    .1    .5    .9    .6    .4    .6    .7    .1    .0    .0    .0    .0   1.4   2.5   2.5   2.0   1.8   2.0
 150.  *    .1    .1    .0    .4    .7    .5    .2    .6    .6    .1    .1    .0    .0    .0   1.4   2.5   2.4   2.0   1.9   2.1
 155.  *    .0    .0    .0    .3    .5    .3    .1    .6    .7    .4    .1    .0    .0    .0   1.4   2.5   2.5   2.0   1.9   1.9
 160.  *    .0    .0    .0    .2    .2    .2    .1    .7    .7    .7    .3    .0    .0    .0   1.5   2.6   2.5   2.3   1.6   1.9
 165.  *    .0    .0    .0    .2    .2    .1    .0    .7    .8    .8    .7    .0    .0    .0   1.5   2.6   2.4   2.2   1.7   1.9
 170.  *    .0    .0    .0    .0    .2    .0    .0    .6    .8    .9   1.0    .0    .0    .0   1.5   2.6   2.5   2.1   1.8   1.9
 175.  *    .0    .0    .0    .0    .0    .0    .0    .5    .7   1.2   1.3    .0    .0    .0   1.4   2.6   2.7   2.0   1.7   1.9
 180.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.4   1.5    .1    .0    .0   1.4   2.6   2.7   1.7   1.8   1.9
 185.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.6   1.7    .3    .0    .0   1.4   2.7   2.6   1.5   1.8   1.8
 190.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.9   1.9    .4    .0    .1   1.4   2.8   2.3   1.4   1.8   1.8
 195.  *    .1    .1    .0    .0    .0    .0    .0    .6    .8   2.0   2.0    .5    .1    .1   1.5   2.9   2.2   1.4   1.8   1.8
 200.  *    .1    .1    .0    .0    .0    .0    .0    .7    .7   2.0   2.1    .7    .3    .1   1.6   3.1   2.2   1.6   1.9   1.7
 205.  *    .1    .1    .1    .0    .0    .0    .0    .6    .7   2.1   1.8    .8    .3    .1   1.7   3.1   2.1   1.5   2.0   1.7
1
                                                                                                                     PAGE  4
      JOB: Site 3 Existing AM - 3EXAM.DAT                      RUN: Site 3 Existing AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .0    .0    .0    .0    .5    .7   2.1   1.9    .9    .4    .1   1.9   3.2   1.8   1.6   2.0   1.7
 215.  *    .1    .1    .1    .0    .0    .0    .0    .6    .7   2.1   1.8    .8    .5    .2   2.2   3.3   1.9   1.6   2.0   1.6
 220.  *    .1    .1    .1    .0    .0    .0    .0    .6    .8   2.0   1.7    .8    .5    .2   2.5   3.1   1.8   1.7   2.0   1.6
 225.  *    .1    .1    .1    .0    .0    .0    .0    .6    .9   1.9   1.6    .9    .5    .3   2.5   3.0   1.9   1.9   2.1   1.7
 230.  *    .2    .2    .1    .0    .0    .0    .0    .6    .9   2.0   1.5    .9    .6    .4   2.8   3.0   1.8   1.9   2.0   1.5
 235.  *    .2    .2    .1    .0    .0    .0    .0    .6   1.1   2.0   1.5   1.0    .7    .6   2.9   2.8   2.1   1.9   1.8   1.7
 240.  *    .3    .3    .2    .0    .0    .0    .0    .6   1.2   2.0   1.4   1.1   1.0    .9   2.8   2.6   1.9   1.9   2.0   1.6
 245.  *    .5    .5    .4    .0    .0    .0    .0    .6   1.3   2.0   1.4   1.2   1.1   1.3   2.8   2.5   2.0   2.0   1.8   1.6
 250.  *    .6    .8    .7    .2    .0    .0    .0    .6   1.4   2.0   1.6   1.4   1.5   1.5   2.8   2.1   1.8   1.8   1.8   1.5
 255.  *   1.0   1.1   1.1    .6    .0    .0    .0    .6   1.5   2.0   1.9   2.0   1.8   2.3   2.2   1.7   1.5   1.5   1.5   1.6
 260.  *   1.3   1.6   1.5    .9    .1    .0    .0    .6   1.6   2.3   2.2   2.2   2.6   2.7   1.9   1.5   1.2   1.3   1.3   1.4
 265.  *   1.6   1.8   2.1   1.2    .3    .1    .0    .6   1.8   2.5   2.4   2.5   2.7   2.9   1.2   1.1    .9   1.0   1.0   1.2
 270.  *   1.8   1.9   2.3   1.5    .4    .2    .0    .7   2.1   2.6   2.4   2.3   2.7   2.9    .5    .5    .6    .6    .7    .8
 275.  *   1.9   2.1   2.6   1.7    .5    .3    .1    .8   2.3   2.7   2.3   2.4   2.8   2.6    .3    .2    .3    .3    .5    .6
 280.  *   2.0   1.9   2.8   2.0    .8    .3    .3    .9   2.4   2.8   2.3   2.0   2.7   2.3    .2    .1    .1    .1    .3    .3
 285.  *   1.9   2.0   2.9   2.0    .8    .4    .3   1.1   2.5   3.1   2.0   2.1   2.7   2.1    .1    .1    .1    .1    .2    .3
 290.  *   1.8   1.9   2.7   2.0    .9    .4    .3   1.3   2.6   3.1   1.9   2.0   2.5   2.1    .1    .1    .1    .0    .1    .1
 295.  *   1.8   1.8   2.7   1.9    .9    .6    .4   1.4   2.7   2.9   1.7   2.2   2.5   1.9    .1    .1    .1    .0    .1    .1
 300.  *   1.6   1.9   2.8   2.0    .9    .6    .3   1.6   2.6   2.7   1.6   2.1   2.5   1.7    .1    .1    .1    .0    .0    .1
 305.  *   1.6   1.6   2.6   2.0    .9    .7    .5   1.5   2.7   2.8   1.5   2.0   2.5   1.7    .1    .1    .0    .0    .0    .1
 310.  *   1.5   1.6   2.6   2.0    .9    .5    .5   1.5   2.8   2.5   1.4   2.1   2.3   1.5    .1    .1    .0    .0    .0    .1
 315.  *   1.5   1.5   2.6   1.7   1.0    .6    .4   1.8   2.5   2.4   1.4   2.1   2.3   1.5    .1    .0    .0    .0    .0    .1
 320.  *   1.4   1.5   2.5   1.8   1.0    .6    .5   1.7   2.5   2.2   1.3   2.1   2.2   1.5    .0    .0    .0    .0    .0    .1
 325.  *   1.4   1.5   2.3   1.7    .9    .8    .6   1.6   2.4   2.1   1.4   2.2   2.2   1.4    .0    .0    .0    .0    .0    .0
 330.  *   1.2   1.6   2.3   1.6    .9    .8    .8   1.4   2.1   1.8   1.3   2.2   2.1   1.4    .0    .0    .0    .0    .0    .0
 335.  *   1.2   1.7   2.3   1.5    .8    .7    .8   1.3   1.9   1.8   1.4   2.2   2.1   1.5    .0    .0    .0    .0    .0    .0
 340.  *   1.3   1.8   2.3   1.5    .9    .7   1.0   1.1   1.9   1.4   1.6   2.3   2.0   1.5    .0    .0    .0    .0    .0    .0
 345.  *   1.3   2.0   2.4   1.4    .7   1.0   1.1    .7   1.4   1.3   1.6   2.3   2.0   1.6    .0    .0    .0    .0    .0    .0
 350.  *   1.3   2.1   2.3   1.3    .9   1.2   1.4    .8   1.4   1.2   1.7   2.3   1.9   1.5    .0    .0    .0    .0    .0    .0
 355.  *   1.4   2.2   2.3   1.3   1.0   1.2   1.7    .8   1.2   1.1   1.8   2.2   1.7   1.5    .0    .0    .0    .0    .0    .0
 360.  *   1.4   2.2   2.4   1.1   1.0   1.5   1.9    .7    .8   1.2   1.8   2.2   1.6   1.4    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   2.9   4.0   3.2   2.4   2.4   2.3   2.0   1.8   2.8   3.1   2.4   2.5   2.8   2.9   2.9   3.3   3.0   2.7   2.2   2.3
 DEGR. *   70    65    60    55    50    30    10   315   310   285   265   265   275   270   235   215   110    90    85   120

1
                                                                                                                     PAGE  5
      JOB: Site 3 Existing AM - 3EXAM.DAT                      RUN: Site 3 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .1
  55.  *    .1
  60.  *    .2
  65.  *    .4
  70.  *    .9
  75.  *   1.3
  80.  *   1.6
  85.  *   1.9
  90.  *   2.1
  95.  *   2.2
 100.  *   2.4
 105.  *   2.2
 110.  *   2.3
 115.  *   2.0
 120.  *   2.0
 125.  *   1.7
 130.  *   1.6
 135.  *   1.4
 140.  *   1.2
 145.  *   1.3
 150.  *   1.2
 155.  *   1.1
 160.  *   1.2
 165.  *   1.1
 170.  *   1.1
 175.  *   1.2
 180.  *   1.1
 185.  *   1.2
 190.  *   1.2
 195.  *   1.2
 200.  *   1.2
 205.  *   1.1
1
                                                                                                                            PAGE  6
      JOB: Site 3 Existing AM - 3EXAM.DAT                         RUN: Site 3 Existing AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   1.3
 215.  *   1.3
 220.  *   1.4
 225.  *   1.3
 230.  *   1.5
 235.  *   1.5
 240.  *   1.6
 245.  *   1.5
 250.  *   1.6
 255.  *   1.6
 260.  *   1.5
 265.  *   1.2
 270.  *    .9
 275.  *    .6
 280.  *    .4
 285.  *    .2
 290.  *    .2
 295.  *    .1
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   2.4
 DEGR. *  100

 THE HIGHEST CONCENTRATION IS    4.00 PPM AT   65 DEGREES FROM REC2 .
 THE 2ND HIGHEST CONCENTRATION IS    3.30 PPM AT  215 DEGREES FROM REC16.
 THE 3RD HIGHEST CONCENTRATION IS    3.20 PPM AT   60 DEGREES FROM REC3 .
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Site 3 Existing PM - 3EXPM.DAT          60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 Existing PM                       28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.     44515.5   0  44   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.     44515.5   0  44   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.     44515.5   0  44   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.     44515.5   0  44   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.     44515.5   0  44   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.     44515.5   0  44   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.     44515.5   0  44   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.     44515.5   0  44   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       150        94       2.0  445  141.4 1394 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    154515.5   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    154515.5   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    154515.5   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    154515.5   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    154515.5   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    154515.5   0  44   30.
  1
```

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SB        Rt8 departAG   791.  1427.   995.  1367.    154515.5   0  44   30.
  1
EB        Rt1 aprch AG  -757.  1920.  -322.  1944.    211515.5   0  56   30.
  1
EB        Rt1 aprch AG  -322.  1944.   -72.  1967.    211515.5   0  56   30.
  1
EB        Rt1 aprch AG   -72.  1967.   233.  2014.    211515.5   0  56   30.
  2
EB        Rt1 aprch AG   162.  2003.   -17.  1976.       0.  36   3
       150        64       2.0 2115  141.4 1602 1 3
  1
EB        Rt1 departAG   234.  2016.  1198.  2281.    191515.5   0  56   30.
  1
WB        Rt1 aprch AG  1187.  2341.   752.  2213.    220515.5   0  68   30.
  1
WB        Rt1 thru  AG   752.  2213.   221.  2064.    130515.5   0  44   30.
  1
WB        Rt1 thru  AG   221.  2064.    89.  2037.    130515.5   0  44   30.
  1
WB        Rt1 thru  AG    87.  2035.  -118.  2009.    130515.5   0  56   30.
  1
WB        Rt1 thru  AG  -118.  2009.  -758.  1962.    130515.5   0  56   30.
  1
WB        Rt1 left  AG   607.  2149.   205.  2045.     90015.5   0  44   30.
  2
EB        Rt1 left  AG   296.  2069.   549.  2134.       0.  24   2
       150        94       2.0  900  141.4 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 3 Existing PM - 3EXPM.DAT                       RUN: Site 3 Existing PM
      DATE: 05/06/2009   TIME: 08:55:03.84


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =    .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *     251.   283. AG    445.  15.5    .0 44.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *     168.   287. AG    445.  15.5    .0 44.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *     128.   300. AG    445.  15.5    .0 44.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *     120.   309. AG    445.  15.5    .0 44.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *      97.   321. AG    445.  15.5    .0 44.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *     122.   332. AG    445.  15.5    .0 44.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *      67.   338. AG    445.  15.5    .0 44.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *     110.   349. AG    445.  15.5    .0 44.0
       9. NB        Rt8 aprch *    273.0    1978.0     295.7    1866.2 *     114.   169. AG    475. 100.0    .0 24.0  .46   5.8
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *     189.   161. AG   1545.  15.5    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *     126.   153. AG   1545.  15.5    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *      92.   142. AG   1545.  15.5    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *     123.   130. AG   1545.  15.5    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *     146.   117. AG   1545.  15.5    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *     188.   108. AG   1545.  15.5    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *     213.   106. AG   1545.  15.5    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   2115.  15.5    .0 56.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   2115.  15.5    .0 56.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *     309.    81. AG   2115.  15.5    .0 56.0
      20. EB        Rt1 aprch *    162.0    2003.0     -82.0    1966.2 *     247.   261. AG    485. 100.0    .0 36.0  .81  12.5
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   1915.  15.5    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *     453.   254. AG   2205.  15.5    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *     552.   254. AG   1305.  15.5    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *     135.   258. AG   1305.  15.5    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *     207.   263. AG   1305.  15.5    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   1305.  15.5    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *     415.   255. AG    900.  15.5    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0     520.0    2126.6 *     231.    76. AG    475. 100.0    .0 24.0  .76  11.8
1
                                                                                                                 PAGE  2
      JOB: Site 3 Existing PM - 3EXPM.DAT                       RUN: Site 3 Existing PM
      DATE: 05/06/2009   TIME: 08:55:03.84

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     150       94       2.0       445       1394     141.40      1        3
      20. EB        Rt1 aprch *     150       64       2.0      2115       1602     141.40      1        3
      28. EB        Rt1 left  *     150       94       2.0       900       1700     141.40      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0       5.0   *
      2. SW 164 W             *         8.0     1953.0       5.0   *
      3. SW 82 W              *        90.0     1961.0       5.0   *
      4. SW CNR               *       174.0     1953.0       5.0   *
      5. SW 82 S              *       218.0     1880.0       5.0   *
      6. SW 164 S             *       245.0     1804.0       5.0   *
      7. SW MID S             *       281.0     1726.0       5.0   *
      8. SE MID S             *       388.0     1751.0       5.0   *
      9. SE 164 S             *       338.0     1834.0       5.0   *
     10. SE 82 S              *       315.0     1914.0       5.0   *
     11. SE CNR               *       304.0     1995.0       5.0   *
     12. SE 82 E              *       376.0     2022.0       5.0   *
     13. SE 164 E             *       454.0     2045.0       5.0   *
     14. SE MID E             *       571.0     2079.0       5.0   *
     15. NE MID E             *       519.0     2169.0       5.0   *
     16. NE 164 E             *       374.0     2130.0       5.0   *
     17. NE 82 E              *       295.0     2110.0       5.0   *
     18. N CNR                *       215.0     2090.0       5.0   *
     19. NW 82 W              *       136.0     2072.0       5.0   *
     20. NW 164 W             *        54.0     2058.0       5.0   *
     21. NW MID W             *       -88.0     2040.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 3 Existing PM - 3EXPM.DAT                       RUN: Site 3 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.5   3.0   2.7   1.3   1.3   1.8   1.8    .6    .8   1.1   1.7   2.2   2.2   1.5    .0    .0    .0    .0    .0    .0
   5.  *   1.5   2.8   2.6   1.2   1.5   1.9   1.7    .6    .9   1.0   1.8   2.2   2.2   1.5    .0    .0    .0    .0    .0    .0
  10.  *   1.5   2.9   2.6   1.2   1.6   2.0   1.8    .6    .8   1.1   1.9   2.2   2.2   1.4    .0    .0    .0    .0    .0    .0
```

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   15.  *   1.5   2.9   2.7   1.3   1.8   2.0   1.7    .6    .9   1.1   1.9   2.2   2.2   1.4    .1    .0    .0    .0    .0    .0
   20.  *   1.6   3.0   2.7   1.3   2.0   2.3   1.7    .5    .9   1.1   2.0   2.3   2.3   1.5    .1    .1    .0    .0    .0    .0
   25.  *   1.7   3.1   2.7   1.4   2.2   2.3   1.5    .5    .8   1.1   2.2   2.3   2.2   1.5    .1    .1    .1    .0    .0    .0
   30.  *   1.9   3.2   2.8   1.7   2.2   2.1   1.4    .5    .8   1.1   2.2   2.5   2.4   1.5    .1    .1    .1    .0    .0    .0
   35.  *   2.1   3.3   2.9   1.8   2.3   2.1   1.4    .4    .6   1.0   2.3   2.5   2.3   1.7    .1    .1    .1    .0    .1    .0
   40.  *   2.3   3.4   3.1   1.9   2.3   1.9   1.2    .4    .7   1.1   2.4   2.6   2.3   1.7    .1    .1    .1    .1    .1    .0
   45.  *   2.6   3.7   3.3   2.1   2.4   1.8   1.1    .3    .6   1.1   2.5   2.6   2.4   1.9    .2    .1    .1    .1    .1    .0
   50.  *   2.9   4.0   3.3   2.2   2.6   1.7   1.0    .3    .5   1.1   2.4   2.7   2.1   2.0    .2    .2    .2    .1    .1    .0
   55.  *   3.5   4.0   3.6   2.6   2.4   1.4   1.1    .3    .5    .9   2.3   2.5   2.3   2.0    .4    .4    .2    .2    .2    .1
   60.  *   3.7   4.4   3.7   2.7   2.2   1.3   1.0    .2    .3    .8   2.2   2.4   2.2   2.1    .7    .6    .6    .7    .6    .5
   65.  *   4.1   4.4   3.7   2.5   2.1   1.1   1.0    .1    .3    .6   2.1   2.2   2.0   2.0    .9   1.0   1.0    .9    .9    .7
   70.  *   4.1   4.2   3.6   2.3   1.9   1.0    .9    .0    .2    .4   1.8   2.0   1.8   1.8   1.2   1.4   1.6   1.5   1.2   1.1
   75.  *   4.0   4.0   3.0   2.1   1.7    .8    .7    .0    .1    .3   1.3   1.6   1.5   1.5   1.6   1.9   2.0   2.0   1.7   1.5
   80.  *   3.8   3.5   2.5   1.8   1.5    .8    .7    .0    .0    .1    .9   1.1   1.0   1.2   2.0   2.3   2.6   2.4   2.2   2.0
   85.  *   3.0   2.6   2.0   1.4   1.4    .7    .9    .0    .0    .1    .5    .7    .8    .8   2.0   2.7   2.8   2.8   2.4   2.2
   90.  *   2.3   1.9   1.4   1.2   1.3    .8    .8    .0    .0    .0    .3    .4    .5    .5   1.9   3.0   3.1   3.0   2.4   2.3
   95.  *   1.6   1.4   1.0   1.2   1.2    .8    .8    .0    .0    .0    .1    .3    .3    .3   2.1   3.0   3.2   2.7   2.4   2.2
  100.  *   1.1   1.1    .9   1.1   1.1    .8    .8    .0    .0    .0    .1    .2    .2    .2   2.0   3.0   3.1   2.6   2.2   2.2
  105.  *    .8    .7    .8   1.1   1.1    .8    .9    .0    .0    .0    .0    .1    .1    .2   2.0   3.0   3.1   2.3   2.0   2.5
  110.  *    .6    .6    .6   1.1   1.2    .8   1.0    .0    .0    .0    .0    .1    .1    .1   1.9   3.0   3.0   2.2   1.9   2.2
  115.  *    .3    .5    .7   1.0   1.1   1.0   1.2    .0    .0    .0    .0    .1    .1    .1   1.8   2.9   2.9   2.0   1.9   2.3
  120.  *    .1    .4    .5   1.0   1.0   1.2   1.4    .2    .1    .0    .0    .1    .1    .1   1.7   2.9   2.9   1.9   1.9   2.3
  125.  *    .1    .3    .5   1.0   1.0   1.3   1.1    .3    .1    .0    .0    .1    .1    .1   1.8   2.9   2.8   1.9   1.9   2.4
  130.  *    .1    .2    .5    .8   1.2   1.1   1.1    .5    .2    .0    .0    .0    .1    .1   1.7   2.7   2.7   1.8   2.0   2.5
  135.  *    .1    .2    .4    .8   1.3   1.2    .9    .4    .3    .1    .0    .0    .0    .1   1.7   2.7   2.7   1.7   2.0   2.4
  140.  *    .1    .1    .4    .9   1.2   1.0    .8    .6    .5    .1    .0    .0    .0    .0   1.6   2.7   2.6   1.8   2.1   2.3
  145.  *    .1    .1    .1    .9   1.1    .9    .6    .6    .6    .2    .0    .0    .0    .0   1.6   2.7   2.6   2.1   2.0   2.3
  150.  *    .1    .1    .1    .7    .9    .6    .4    .6    .6    .3    .0    .0    .0    .0   1.7   2.7   2.5   1.9   2.0   2.3
  155.  *    .0    .0    .0    .4    .8    .5    .2    .6    .7    .5    .2    .0    .0    .0   1.7   2.7   2.7   2.3   2.0   2.0
  160.  *    .0    .0    .0    .2    .5    .3    .1    .8    .8    .5    .4    .1    .0    .0   1.7   2.7   2.5   2.4   2.1   2.0
  165.  *    .0    .0    .0    .2    .3    .2    .0    .7    .8    .5    .5    .1    .0    .0   1.8   2.7   2.6   2.4   2.1   2.1
  170.  *    .0    .0    .0    .0    .2    .1    .0    .6    .7    .7   1.0    .1    .0    .0   1.9   2.7   2.7   2.4   2.0   2.1
  175.  *    .0    .0    .0    .0    .1    .0    .0    .7    .8    .6   1.0    .2    .0    .0   2.0   2.7   2.6   2.2   2.1   2.1
  180.  *    .0    .0    .0    .0    .0    .0    .0    .6    .8   1.0   1.3    .3    .1    .0   2.1   2.8   2.6   2.0   1.9   2.1
  185.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.1   1.4    .2    .1    .0   2.3   2.8   2.5   1.8   1.9   2.0
  190.  *    .0    .1    .0    .0    .0    .0    .0    .6    .8   1.2   1.6    .3    .0    .1   2.4   3.1   2.6   1.6   2.0   2.0
  195.  *    .1    .1    .0    .0    .0    .0    .0    .7    .8   1.2   1.8    .3    .3    .1   2.5   3.1   2.5   1.8   2.0   2.0
  200.  *    .1    .1    .0    .0    .0    .0    .0    .6    .8   1.3   1.7    .5    .2    .1   2.5   3.1   2.3   1.7   2.0   2.1
  205.  *    .1    .1    .1    .0    .0    .0    .0    .7    .7   1.6   1.7    .6    .2    .1   2.9   3.2   2.1   1.8   2.2   2.1
1
                                                                                                                  PAGE  4
      JOB: Site 3 Existing PM - 3EXPM.DAT                       RUN: Site 3 Existing PM

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
  ------*------------------------------------------------------------------------------------------------------------------------
  210.  *    .1    .1    .1    .0    .0    .0    .0    .7    .7   1.6   1.7    .7    .4    .1   3.1   3.3   2.1   1.9   2.2   2.1
  215.  *    .1    .1    .1    .0    .0    .0    .0    .7    .6   1.8   1.6    .8    .4    .2   3.1   3.2   2.2   1.9   2.4   2.2
  220.  *    .1    .1    .1    .0    .0    .0    .0    .6    .6   1.8   1.5    .8    .5    .2   3.2   3.2   2.2   2.0   2.4   2.3
  225.  *    .2    .2    .1    .0    .0    .0    .0    .7    .6   1.8   1.4    .8    .4    .5   3.4   3.1   2.2   2.1   2.4   2.2
  230.  *    .2    .2    .1    .0    .0    .0    .0    .6    .6   1.8   1.4    .8    .5    .4   3.5   3.2   2.2   2.3   2.4   2.1
  235.  *    .2    .4    .2    .0    .0    .0    .0    .6    .7   1.8   1.4   1.0    .6    .5   3.4   2.9   2.4   2.3   2.2   2.2
  240.  *    .3    .5    .4    .0    .0    .0    .0    .7    .7   1.8   1.4   1.0    .9    .9   3.4   2.8   2.2   2.4   2.5   2.1
  245.  *    .5    .7    .5    .0    .0    .0    .0    .7    .6   1.8   1.6   1.2   1.0   1.2   3.4   2.8   2.4   2.4   2.3   2.1
  250.  *    .7   1.1   1.0    .3    .0    .0    .0    .7    .7   1.8   1.7   1.6   1.5   1.6   3.1   2.4   2.1   2.1   2.2   2.0
  255.  *   1.1   1.6   1.4    .7    .0    .0    .0    .6    .6   1.8   2.3   2.3   2.3   2.4   2.7   2.0   1.7   1.8   1.8   1.8
  260.  *   1.4   2.1   2.0   1.0    .2    .0    .0    .6    .7   2.3   2.4   2.5   2.6   3.2   2.0   1.6   1.3   1.4   1.6   1.6
  265.  *   1.8   2.6   2.8   1.4    .3    .1    .0    .6    .7   2.5   2.5   2.6   3.0   3.2   1.3   1.2   1.0   1.1   1.1   1.3
  270.  *   2.0   3.1   3.1   1.9    .5    .3    .1    .7   1.1   2.6   2.8   2.5   2.9   3.3    .7    .9    .9    .8    .7    .9
  275.  *   2.2   3.5   3.6   2.2    .7    .3    .1    .9   1.3   2.8   2.7   2.7   2.9   3.0    .3    .2    .3    .3    .5    .8
  280.  *   2.2   3.8   3.5   2.5   1.0    .4    .3    .9   1.3   2.9   2.5   2.5   2.8   2.8    .2    .2    .1    .1    .3    .4
  285.  *   2.2   3.7   3.7   2.5   1.1    .5    .3   1.3   1.6   3.0   2.2   2.2   2.7   2.8    .2    .1    .1    .1    .2    .3
  290.  *   2.1   3.7   3.4   2.5   1.1    .6    .4   1.2   1.8   3.0   2.0   2.0   2.5   2.7    .1    .1    .1    .1    .1    .1
  295.  *   2.0   3.6   3.4   2.5   1.2    .8    .5   1.3   2.0   2.9   1.8   2.1   2.4   2.5    .1    .1    .1    .0    .1    .1
  300.  *   1.8   3.5   3.3   2.3   1.3    .8    .5   1.6   2.1   2.6   1.7   2.1   2.5   2.4    .1    .1    .1    .0    .1    .1
  305.  *   1.7   3.2   3.2   2.3   1.1    .8    .6   1.3   2.1   2.6   1.6   2.1   2.4   2.2    .1    .1    .0    .0    .1    .1
  310.  *   1.6   3.3   3.0   2.1   1.0    .8    .7   1.5   2.0   2.5   1.6   2.0   2.4   2.1    .1    .1    .0    .0    .0    .1
  315.  *   1.6   3.1   2.9   2.1   1.1    .7    .7   1.5   2.2   2.2   1.5   2.1   2.3   1.9    .1    .0    .0    .0    .0    .1
  320.  *   1.5   3.0   2.8   2.0   1.1    .8    .7   1.4   2.0   2.2   1.3   2.1   2.2   1.8    .0    .0    .0    .0    .0    .1
  325.  *   1.5   2.9   2.8   2.0   1.1    .9    .7   1.1   2.0   1.9   1.4   2.2   2.2   1.7    .0    .0    .0    .0    .0    .0
  330.  *   1.4   2.8   2.7   1.8   1.0   1.0    .9   1.2   2.1   1.7   1.3   2.2   2.2   1.6    .0    .0    .0    .0    .0    .0
  335.  *   1.3   2.8   2.7   1.8   1.1    .9   1.1   1.1   1.7   1.5   1.4   2.2   2.2   1.6    .0    .0    .0    .0    .0    .0
  340.  *   1.4   2.8   2.6   1.7   1.0   1.0   1.1   1.0   1.6   1.4   1.4   2.2   2.3   1.6    .0    .0    .0    .0    .0    .0
  345.  *   1.5   3.0   2.8   1.6   1.0   1.1   1.4    .8   1.3   1.2   1.5   2.2   2.3   1.6    .0    .0    .0    .0    .0    .0
  350.  *   1.4   3.0   2.9   1.5   1.1   1.5   1.7    .8   1.2   1.2   1.6   2.2   2.2   1.6    .0    .0    .0    .0    .0    .0
  355.  *   1.5   3.0   2.8   1.4   1.4   1.6   1.7    .7   1.0   1.1   1.6   2.2   2.2   1.5    .0    .0    .0    .0    .0    .0
  360.  *   1.5   3.0   2.7   1.3   1.3   1.8   1.8    .6    .8   1.1   1.7   2.2   2.2   1.5    .0    .0    .0    .0    .0    .0
  ------*------------------------------------------------------------------------------------------------------------------------
  MAX   *   4.1   4.4   3.7   2.7   2.6   2.3   1.8   1.6   2.2   3.0   2.8   2.7   3.0   3.3   3.5   3.3   3.2   3.0   2.5   2.5
  DEGR. *   65    60    60    60    50    20     0   300   315   285   270    50   265   270   230   210    95    90   240   130

1
                                                                                                                  PAGE  5
      JOB: Site 3 Existing PM - 3EXPM.DAT                       RUN: Site 3 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21
  ------*------
    0.  *    .0
    5.  *    .0
   10.  *    .0
   15.  *    .0
   20.  *    .0
   25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .1
  55.  *    .1
  60.  *    .2
  65.  *    .5
  70.  *   1.0
  75.  *   1.4
  80.  *   1.9
  85.  *   2.1
  90.  *   2.2
  95.  *   2.6
 100.  *   2.8
 105.  *   2.6
 110.  *   2.7
 115.  *   2.5
 120.  *   2.5
 125.  *   2.5
 130.  *   2.2
 135.  *   2.1
 140.  *   2.1
 145.  *   2.1
 150.  *   1.9
 155.  *   1.9
 160.  *   1.8
 165.  *   1.9
 170.  *   1.8
 175.  *   1.7
 180.  *   1.6
 185.  *   1.4
 190.  *   1.5
 195.  *   1.4
 200.  *   1.4
 205.  *   1.3
1
                                                                                                                            PAGE  6
      JOB: Site 3 Existing PM - 3EXPM.DAT                        RUN: Site 3 Existing PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   1.4
 215.  *   1.4
 220.  *   1.5
 225.  *   1.6
 230.  *   1.5
 235.  *   1.6
 240.  *   1.8
 245.  *   1.8
 250.  *   1.7
 255.  *   1.7
 260.  *   1.5
 265.  *   1.3
 270.  *   1.0
 275.  *    .7
 280.  *    .5
 285.  *    .3
 290.  *    .2
 295.  *    .1
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   2.8
 DEGR. *  100

 THE HIGHEST CONCENTRATION IS    4.40 PPM AT   60 DEGREES FROM REC2 .
 THE 2ND HIGHEST CONCENTRATION IS    4.10 PPM AT   65 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    3.70 PPM AT   60 DEGREES FROM REC3 .
```

```
Site 3 No Build 2014 AM - 3NBAM14.DAT   60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 No Build 2014 AM                  28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    129411.4   0  44   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    129411.4   0  44   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    129411.4   0  44   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    129411.4   0  44   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    129411.4   0  44   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    129411.4   0  44   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    129411.4   0  44   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    129411.4   0  44   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        62       2.0 1294  102.2 1394 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    122311.4   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    122311.4   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    122311.4   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    122311.4   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    122311.4   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    122311.4   0  44   30.
  1
```

```
SB        Rt8 departAG   791.  1427.   995.  1367.    122311.4   0  44   30.
  1
EB        Rt1 aprch AG  -757.  1920.  -322.  1944.    200711.4   0  56   30.
  1
EB        Rt1 aprch AG  -322.  1944.   -72.  1967.    200711.4   0  56   30.
  1
EB        Rt1 aprch AG   -72.  1967.   233.  2014.    200711.4   0  56   30.
  2
EB        Rt1 aprch AG   162.  2003.   -17.  1976.      0.   36   3
       120        66       2.0 2007  102.2 1610 1 3
  1
EB        Rt1 departAG   234.  2016.  1198.  2281.    275111.4   0  56   30.
  1
WB        Rt1 aprch AG  1187.  2341.   752.  2213.    319911.4   0  68   30.
  1
WB        Rt1 thru  AG   752.  2213.   221.  2064.    252611.4   0  44   30.
  1
WB        Rt1 thru  AG   221.  2064.    89.  2037.    252611.4   0  44   30.
  1
WB        Rt1 thru  AG    87.  2035.  -118.  2009.    252611.4   0  56   30.
  1
WB        Rt1 thru  AG  -118.  2009.  -758.  1962.    252611.4   0  56   30.
  1
WB        Rt1 left  AG   607.  2149.   205.  2045.     67311.4   0  44   30.
  2
EB        Rt1 left  AG   296.  2069.   549.  2134.      0.   24   2
       120        62       2.0  673  102.2 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

```
1                          CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 3 No Build 2014 AM - 3NBAM14.DAT                RUN: Site 3 No Build 2014 AM
      DATE: 05/06/2009   TIME: 08:54:38.79


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)        (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt8 aprch *  1039.0    1413.0     795.0    1471.0 *     251.   283. AG   1294.  11.4    .0 44.0
       2. NB        Rt8 aprch *   795.0    1471.0     635.0    1521.0 *     168.   287. AG   1294.  11.4    .0 44.0
       3. NB        Rt8 aprch *   635.0    1521.0     524.0    1584.0 *     128.   300. AG   1294.  11.4    .0 44.0
       4. NB        Rt8 aprch *   524.0    1584.0     431.0    1660.0 *     120.   309. AG   1294.  11.4    .0 44.0
       5. NB        Rt8 aprch *   431.0    1660.0     370.0    1736.0 *      97.   321. AG   1294.  11.4    .0 44.0
       6. NB        Rt8 aprch *   370.0    1736.0     312.0    1843.0 *     122.   332. AG   1294.  11.4    .0 44.0
       7. NB        Rt8 aprch *   312.0    1843.0     287.0    1905.0 *      67.   338. AG   1294.  11.4    .0 44.0
       8. NB        Rt8 aprch *   287.0    1905.0     266.0    2013.0 *     110.   349. AG   1294.  11.4    .0 44.0
       9. NB        Rt8 aprch *   273.0    1978.0     380.7    1446.8 *     542.   169. AG    283. 100.0    .0 24.0 1.03  27.5
      10. SB        Rt8 depart*   214.0    1996.0     274.0    1817.0 *     189.   161. AG   1223.  11.4    .0 44.0
      11. SB        Rt8 depart*   274.0    1817.0     331.0    1705.0 *     126.   153. AG   1223.  11.4    .0 44.0
      12. SB        Rt8 depart*   331.0    1705.0     388.0    1633.0 *      92.   142. AG   1223.  11.4    .0 44.0
      13. SB        Rt8 depart*   388.0    1633.0     482.0    1553.0 *     123.   130. AG   1223.  11.4    .0 44.0
      14. SB        Rt8 depart*   482.0    1553.0     612.0    1486.0 *     146.   117. AG   1223.  11.4    .0 44.0
      15. SB        Rt8 depart*   612.0    1486.0     791.0    1427.0 *     188.   108. AG   1223.  11.4    .0 44.0
      16. SB        Rt8 depart*   791.0    1427.0     995.0    1367.0 *     213.   106. AG   1223.  11.4    .0 44.0
      17. EB        Rt1 aprch *  -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   2007.  11.4    .0 56.0
      18. EB        Rt1 aprch *  -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   2007.  11.4    .0 56.0
      19. EB        Rt1 aprch *   -72.0    1967.0     233.0    2014.0 *     309.    81. AG   2007.  11.4    .0 56.0
      20. EB        Rt1 aprch *   162.0    2003.0    -199.2    1948.5 *     365.   261. AG    452. 100.0    .0 36.0 1.00  18.6
      21. EB        Rt1 depart*   234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   2751.  11.4    .0 56.0
      22. WB        Rt1 aprch *  1187.0    2341.0     752.0    2213.0 *     453.   254. AG   3199.  11.4    .0 68.0
      23. WB        Rt1 thru  *   752.0    2213.0     221.0    2064.0 *     552.   254. AG   2526.  11.4    .0 44.0
      24. WB        Rt1 thru  *   221.0    2064.0      89.0    2037.0 *     135.   258. AG   2526.  11.4    .0 44.0
      25. WB        Rt1 thru  *    87.0    2035.0    -118.0    2009.0 *     207.   263. AG   2526.  11.4    .0 56.0
      26. WB        Rt1 thru  *  -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   2526.  11.4    .0 56.0
      27. WB        Rt1 left  *   607.0    2149.0     205.0    2045.0 *     415.   255. AG    673.  11.4    .0 44.0
      28. EB        Rt1 left  *   296.0    2069.0     406.3    2097.3 *     114.    76. AG    283. 100.0    .0 24.0  .44   5.8
1
                                                                                                                     PAGE  2
      JOB: Site 3 No Build 2014 AM - 3NBAM14.DAT                RUN: Site 3 No Build 2014 AM
      DATE: 05/06/2009   TIME: 08:54:38.79

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     120       62       2.0      1294       1394     102.20      1        3
      20. EB        Rt1 aprch *     120       66       2.0      2007       1610     102.20      1        3
      28. EB        Rt1 left  *     120       62       2.0       673       1700     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z       *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0       5.0    *
      2. SW 164 W             *         8.0     1953.0       5.0    *
      3. SW 82 W              *        90.0     1961.0       5.0    *
      4. SW CNR               *       174.0     1953.0       5.0    *
      5. SW 82 S              *       218.0     1880.0       5.0    *
      6. SW 164 S             *       245.0     1804.0       5.0    *
      7. SW MID S             *       281.0     1726.0       5.0    *
      8. SE MID S             *       388.0     1751.0       5.0    *
      9. SE 164 S             *       338.0     1834.0       5.0    *
     10. SE 82 S              *       315.0     1914.0       5.0    *
     11. SE CNR               *       304.0     1995.0       5.0    *
     12. SE 82 E              *       376.0     2022.0       5.0    *
     13. SE 164 E             *       454.0     2045.0       5.0    *
     14. SE MID E             *       571.0     2079.0       5.0    *
     15. NE MID E             *       519.0     2169.0       5.0    *
     16. NE 164 E             *       374.0     2130.0       5.0    *
     17. NE 82 E              *       295.0     2110.0       5.0    *
     18. N CNR                *       215.0     2090.0       5.0    *
     19. NW 82 W              *       136.0     2072.0       5.0    *
     20. NW 164 W             *        54.0     2058.0       5.0    *
     21. NW MID W             *       -88.0     2040.0       5.0    *
1
                                                                                                                     PAGE  3
      JOB: Site 3 No Build 2014 AM - 3NBAM14.DAT                RUN: Site 3 No Build 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   2.7   2.6   2.4   1.1    .9   1.3   1.7    .6   1.1   1.1   1.5   1.9   1.5   1.5    .0    .0    .0    .0    .0    .0
   5.  *   2.7   2.5   2.4   1.1   1.3   1.4   1.9    .6    .7   1.1   1.6   1.9   1.5   1.5    .1    .0    .0    .0    .0    .0
  10.  *   2.6   2.6   2.4   1.0   1.3   1.6   1.9    .5    .7   1.0   1.7   1.8   1.5   1.6    .1    .1    .0    .0    .0    .0
```

```
 15.  *   2.7   2.6   2.5   1.0   1.4   1.8   1.9    .5    .7   1.0   1.8   1.9   1.6   1.6    .1    .1    .0    .0    .0    .0
 20.  *   2.6   2.6   2.5   1.1   1.6   1.8   1.9    .4    .7   1.0   1.8   1.8   1.6   1.6    .1    .1    .1    .0    .0    .0
 25.  *   2.8   2.8   2.4   1.2   1.7   1.7   1.7    .4    .6    .9   2.0   1.9   1.8   1.7    .1    .1    .1    .0    .1    .0
 30.  *   2.9   2.9   2.6   1.4   1.7   1.9   1.6    .4    .6   1.0   2.0   2.0   1.8   1.8    .1    .1    .1    .1    .1    .0
 35.  *   3.1   2.9   2.7   1.5   1.8   1.9   1.6    .4    .5   1.0   1.9   2.0   1.9   1.9    .1    .1    .1    .1    .1    .0
 40.  *   3.2   3.1   2.7   1.6   1.9   1.7   1.6    .4    .6    .9   2.0   2.0   1.9   2.0    .2    .2    .1    .1    .1    .0
 45.  *   3.4   3.3   2.9   1.8   2.0   1.7   1.6    .4    .5   1.0   1.9   2.1   2.0   2.0    .2    .2    .2    .1    .1    .0
 50.  *   3.6   3.5   3.1   2.0   2.1   1.7   1.6    .3    .5    .9   2.1   2.1   2.1   2.2    .4    .3    .2    .2    .2    .1
 55.  *   3.8   3.5   3.3   2.2   1.9   1.5   1.5    .3    .6    .9   2.1   2.2   2.2   2.3    .5    .5    .3    .3    .2    .3
 60.  *   3.9   4.0   3.1   2.1   1.8   1.4   1.4    .2    .3    .7   2.1   2.2   2.2   2.2    .9    .8    .7    .6    .6    .4
 65.  *   4.1   4.0   2.9   2.0   1.7   1.4   1.4    .1    .3    .7   2.0   2.1   2.3   2.2   1.2   1.2   1.0   1.1   1.1    .7
 70.  *   4.1   3.6   3.1   2.1   1.5   1.3   1.4    .0    .2    .5   1.6   1.9   1.9   1.9   1.5   1.7   1.6   1.5   1.4   1.3
 75.  *   3.8   3.3   2.7   2.0   1.4   1.1   1.3    .0    .1    .3   1.2   1.5   1.6   1.7   2.1   2.0   2.0   2.0   1.8   1.7
 80.  *   3.3   3.2   2.2   1.4   1.2   1.0   1.2    .0    .0    .1    .9   1.1   1.2   1.3   2.3   2.2   2.4   2.3   2.2   1.9
 85.  *   2.7   2.3   1.6   1.0   1.1   1.0   1.2    .0    .0    .1    .5    .8    .8    .9   2.5   2.5   2.6   2.6   2.5   2.3
 90.  *   2.0   1.7   1.1   1.0   1.0    .9   1.2    .0    .1    .0    .3    .4    .5    .5   2.6   2.5   2.8   2.7   2.5   2.4
 95.  *   1.4   1.1    .9    .9   1.0   1.0   1.3    .0    .1    .0    .2    .3    .3    .4   2.4   2.5   2.8   2.5   2.3   2.4
100.  *    .9    .8    .8    .8   1.1   1.0   1.3    .0    .1    .0    .1    .2    .2    .2   2.3   2.3   2.7   2.5   2.4   2.5
105.  *    .6    .6    .6    .8   1.1   1.1   1.4    .1    .1    .0    .0    .1    .1    .2   2.3   2.2   2.7   2.4   2.2   2.5
110.  *    .4    .6    .7    .8   1.1   1.2   1.4    .1    .1    .0    .0    .1    .1    .1   2.2   2.3   2.7   2.2   2.3   2.4
115.  *    .3    .4    .5    .8   1.1   1.2   1.4    .1    .1    .0    .0    .1    .1    .1   2.1   2.2   2.6   2.2   2.1   2.4
120.  *    .3    .4    .5    .9   1.2   1.3   1.5    .1    .1    .0    .0    .1    .1    .1   2.0   2.1   2.5   2.0   2.2   2.5
125.  *    .3    .3    .6   1.0   1.3   1.3   1.5    .4    .2    .0    .0    .1    .1    .1   1.9   2.1   2.4   1.9   1.9   2.6
130.  *    .2    .3    .6   1.0   1.3   1.4   1.5    .6    .2    .0    .0    .1    .1    .1   1.8   2.1   2.4   2.0   1.9   2.4
135.  *    .2    .3    .4   1.0   1.3   1.4   1.3    .7    .5    .0    .0    .0    .1    .1   1.8   2.1   2.3   1.9   2.2   2.4
140.  *    .2    .2    .3   1.0   1.3   1.2   1.1    .8    .5    .1    .0    .0    .0    .1   1.8   2.1   2.3   1.9   2.1   2.4
145.  *    .1    .2    .2    .8   1.3   1.0   1.0    .9    .6    .3    .0    .0    .0    .0   1.8   2.1   2.3   2.0   2.2   2.3
150.  *    .0    .1    .2    .7   1.0    .8    .8    .9    .9    .5    .1    .0    .0    .0   1.8   2.2   2.3   2.3   2.0   2.2
155.  *    .0    .0    .1    .5    .8    .7    .7    .8   1.1    .7    .3    .0    .0    .0   1.8   2.3   2.3   2.5   2.1   2.1
160.  *    .0    .0    .1    .4    .5    .4    .5    .8   1.2    .8    .5    .0    .0    .0   1.8   2.3   2.5   2.7   2.0   2.1
165.  *    .0    .0    .0    .2    .4    .4    .4   1.0   1.4   1.2    .8    .1    .0    .0   1.8   2.5   2.7   2.4   2.1   2.0
170.  *    .0    .0    .0    .1    .3    .2    .3   1.0   1.6   1.5   1.0    .1    .0    .0   1.8   2.5   2.7   2.2   2.1   2.1
175.  *    .0    .0    .0    .0    .1    .1    .2   1.0   1.6   1.5   1.3    .3    .1    .0   1.8   2.5   2.7   2.2   2.0   2.2
180.  *    .0    .0    .0    .0    .0    .1    .1   1.1   1.7   1.6   1.4    .3    .1    .0   1.8   2.5   2.7   1.9   2.0   2.1
185.  *    .0    .0    .0    .0    .0    .0    .0   1.3   1.8   1.7   1.5    .5    .1    .0   1.8   2.7   2.6   1.8   2.0   2.1
190.  *    .0    .0    .0    .0    .0    .0    .0   1.3   1.7   1.7   1.5    .5    .2    .2   1.9   2.6   2.5   1.6   2.0   2.0
195.  *    .0    .1    .0    .0    .0    .0    .0   1.2   1.6   1.6   1.6    .6    .4    .2   1.9   2.9   2.2   1.6   2.0   2.1
200.  *    .1    .1    .0    .0    .0    .0    .0   1.2   1.6   1.6   1.5    .9    .4    .2   2.1   2.9   2.3   1.7   2.1   2.1
205.  *    .1    .1    .0    .0    .0    .0    .0   1.2   1.6   1.6   1.4   1.0    .5    .2   2.1   2.9   2.1   1.8   2.2   2.2
1
                                                                                                                 PAGE  4
      JOB: Site 3 No Build 2014 AM - 3NBAM14.DAT                RUN: Site 3 No Build 2014 AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .1    .1    .1    .0    .0    .0    .0   1.2   1.5   1.5   1.3    .7    .5    .2   2.3   2.9   2.4   1.8   2.2   2.2
215.  *    .1    .1    .1    .0    .0    .0    .0   1.1   1.5   1.5   1.2    .7    .4    .3   2.3   3.0   2.2   1.9   2.4   2.2
220.  *    .1    .1    .1    .0    .0    .0    .0   1.2   1.5   1.5   1.2    .7    .5    .3   2.5   2.9   2.3   2.0   2.5   2.4
225.  *    .2    .1    .1    .0    .0    .0    .0   1.2   1.5   1.4   1.1    .6    .5    .4   2.5   3.1   2.4   2.2   2.5   2.4
230.  *    .2    .1    .1    .0    .0    .0    .0   1.2   1.3   1.4   1.1    .7    .6    .3   2.8   3.0   2.3   2.3   2.5   2.6
235.  *    .3    .2    .2    .0    .0    .0    .0   1.1   1.3   1.3   1.0    .7    .7    .5   2.8   2.8   2.4   2.5   2.7   2.6
240.  *    .3    .5    .2    .0    .0    .0    .0   1.3   1.4   1.3   1.1   1.0   1.0    .8   2.9   2.8   2.5   2.6   2.6   2.6
245.  *    .6    .6    .5    .1    .0    .0    .0   1.2   1.4   1.4   1.3   1.2   1.0   1.1   2.9   2.9   2.5   2.6   2.8   2.7
250.  *    .8   1.1   1.0    .4    .0    .0    .0   1.1   1.4   1.3   1.6   1.6   1.4   1.7   2.8   2.5   2.5   2.5   2.6   2.5
255.  *   1.1   1.6   1.4    .7    .0    .0    .0   1.1   1.3   1.5   2.1   2.1   2.2   2.2   2.5   2.5   2.2   2.1   2.2   2.2
260.  *   1.7   2.1   1.9   1.0    .2    .0    .0   1.1   1.4   1.7   2.4   2.3   2.6   2.4   2.1   1.9   1.8   1.7   1.9   1.9
265.  *   2.2   2.7   2.5   1.5    .4    .0    .0   1.1   1.5   2.0   2.7   2.7   2.6   2.5   1.6   1.3   1.4   1.3   1.6   1.6
270.  *   2.7   3.3   3.0   2.0    .6    .2    .0   1.3   1.8   2.3   2.7   2.8   2.8   2.8    .8    .8    .6    .9   1.1   1.3
275.  *   3.0   3.6   3.2   2.2    .8    .4    .2   1.4   1.8   2.5   2.9   2.6   2.5   2.7    .4    .4    .5    .4    .6    .8
280.  *   3.2   3.7   3.4   2.4    .9    .5    .2   1.5   2.2   2.6   2.7   2.3   2.6   2.3    .3    .2    .1    .3    .4    .6
285.  *   3.2   3.8   3.3   2.3   1.1    .6    .4   1.5   2.3   2.6   2.2   2.2   2.5   2.1    .2    .2    .1    .1    .2    .4
290.  *   3.4   3.5   3.3   2.3   1.2    .8    .5   1.9   2.3   2.5   2.2   2.1   2.4   2.1    .2    .1    .1    .1    .1    .2
295.  *   3.3   3.4   3.2   2.3   1.1    .8    .6   1.9   2.4   2.5   1.8   1.9   2.3   1.9    .1    .1    .1    .1    .1    .2
300.  *   3.2   3.2   2.9   2.1   1.2    .7    .6   1.9   2.4   2.3   1.9   1.9   2.2   1.8    .1    .1    .1    .1    .1    .1
305.  *   3.1   3.2   2.9   2.0   1.1   1.0    .6   1.9   2.5   2.3   1.7   1.9   2.1   1.8    .1    .1    .1    .1    .1    .1
310.  *   3.0   3.0   2.8   2.1   1.1    .9    .7   1.9   2.4   2.1   1.6   1.8   2.0   1.7    .1    .1    .1    .0    .1    .1
315.  *   2.9   2.9   2.5   1.9   1.1    .7    .5   2.0   2.3   2.1   1.6   1.9   1.9   1.7    .1    .1    .0    .0    .0    .1
320.  *   2.9   2.7   2.5   2.0    .9    .7    .5   1.8   2.2   2.0   1.4   1.9   1.7   1.7    .1    .0    .0    .0    .0    .1
325.  *   2.7   2.7   2.5   1.7   1.0    .8    .7   1.7   2.2   1.8   1.5   1.9   1.7   1.6    .0    .0    .0    .0    .0    .1
330.  *   2.6   2.5   2.5   1.7   1.0    .7    .7   1.5   2.0   1.7   1.5   1.9   1.6   1.6    .0    .0    .0    .0    .0    .1
335.  *   2.7   2.6   2.5   1.6    .8    .8    .9   1.4   1.8   1.5   1.4   1.9   1.7   1.7    .0    .0    .0    .0    .0    .0
340.  *   2.7   2.6   2.6   1.5    .8    .7    .8   1.1   1.7   1.5   1.5   2.0   1.6   1.7    .0    .0    .0    .0    .0    .0
345.  *   2.6   2.7   2.5   1.4    .8    .9   1.2    .8   1.4   1.3   1.5   2.0   1.6   1.8    .0    .0    .0    .0    .0    .0
350.  *   2.9   2.7   2.5   1.3   1.0   1.1   1.4    .7   1.3   1.2   1.6   2.0   1.6   1.7    .0    .0    .0    .0    .0    .0
355.  *   2.8   2.7   2.5   1.2    .9   1.0   1.5    .6   1.1   1.1   1.6   1.9   1.6   1.6    .0    .0    .0    .0    .0    .0
360.  *   2.7   2.6   2.4   1.1    .9   1.3   1.7    .6   1.1   1.1   1.5   1.9   1.5   1.5    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   4.1   4.0   3.4   2.4   2.1   1.9   1.9   2.0   2.5   2.6   2.9   2.8   2.8   2.8   2.9   3.1   2.8   2.7   2.8   2.7
DEGR. *   65    60    280   280   50    30     5    315   305   280   275   270   270   270   240   225   95    90    245   245

1
                                                                                                                 PAGE  5
      JOB: Site 3 No Build 2014 AM - 3NBAM14.DAT                RUN: Site 3 No Build 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21
------*------
  0.  *    .0
  5.  *    .0
 10.  *    .0
 15.  *    .1
 20.  *    .1
 25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .2
  55.  *    .2
  60.  *    .4
  65.  *    .7
  70.  *   1.1
  75.  *   1.4
  80.  *   2.0
  85.  *   2.4
  90.  *   2.6
  95.  *   2.4
 100.  *   2.6
 105.  *   2.6
 110.  *   2.8
 115.  *   2.7
 120.  *   2.6
 125.  *   2.5
 130.  *   2.3
 135.  *   2.2
 140.  *   2.2
 145.  *   2.1
 150.  *   2.1
 155.  *   2.0
 160.  *   2.0
 165.  *   2.0
 170.  *   2.1
 175.  *   2.1
 180.  *   2.0
 185.  *   2.1
 190.  *   2.0
 195.  *   2.1
 200.  *   2.0
 205.  *   2.1
1
                                                                                                                                PAGE  6
      JOB: Site 3 No Build 2014 AM - 3NBAM14.DAT                RUN: Site 3 No Build 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   2.2
 215.  *   2.4
 220.  *   2.2
 225.  *   2.3
 230.  *   2.1
 235.  *   2.2
 240.  *   2.2
 245.  *   2.1
 250.  *   2.2
 255.  *   2.1
 260.  *   1.7
 265.  *   1.6
 270.  *   1.2
 275.  *    .9
 280.  *    .6
 285.  *    .3
 290.  *    .2
 295.  *    .2
 300.  *    .1
 305.  *    .1
 310.  *    .1
 315.  *    .1
 320.  *    .1
 325.  *    .1
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   2.8
 DEGR. *  110

 THE HIGHEST CONCENTRATION IS    4.10 PPM AT   65 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    4.00 PPM AT   60 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS    3.40 PPM AT  280 DEGREES FROM REC3 .
```

```
Site 3 No Build 2030 AM - 3NBAM30.DAT   60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 No Build 2030 AM                  28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    1590 9.2   0  44   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    1590 9.2   0  44   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    1590 9.2   0  44   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    1590 9.2   0  44   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    1590 9.2   0  44   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    1590 9.2   0  44   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    1590 9.2   0  44   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    1590 9.2   0  44   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        65       2.0 1590   84.1 1394 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    1410 9.2   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    1410 9.2   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    1410 9.2   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    1410 9.2   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    1410 9.2   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    1410 9.2   0  44   30.
  1
```

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SB        Rt8 departAG   791.  1427.   995.  1367.    1410 9.2   0  44   30.
  1
EB        Rt1 aprch AG  -757.  1920.  -322.  1944.    2935 9.2   0  56   30.
  1
EB        Rt1 aprch AG  -322.  1944.   -72.  1967.    2935 9.2   0  56   30.
  1
EB        Rt1 aprch AG   -72.  1967.   233.  2014.    2935 9.2   0  56   30.
  2
EB        Rt1 aprch AG   162.  2003.   -17.  1976.      0.  36   3
       120        63       2.0 2935   84.1 1572 1 3
  1
EB        Rt1 departAG   234.  2016.  1198.  2281.    3280 9.2   0  56   30.
  1
WB        Rt1 aprch AG  1187.  2341.   752.  2213.    2730 9.2   0  68   30.
  1
WB        Rt1 thru  AG   752.  2213.   221.  2064.    2565 9.2   0  44   30.
  1
WB        Rt1 thru  AG   221.  2064.    89.  2037.    2565 9.2   0  44   30.
  1
WB        Rt1 thru  AG    87.  2035.  -118.  2009.    2565 9.2   0  56   30.
  1
WB        Rt1 thru  AG  -118.  2009.  -758.  1962.    2565 9.2   0  56   30.
  1
WB        Rt1 left  AG   607.  2149.   205.  2045.     165 9.2   0  44   30.
  2
EB        Rt1 left  AG   296.  2069.   549.  2134.      0.  24   2
       120        65       2.0  165   84.1 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 3 No Build 2030 AM - 3NBAM30.DAT                RUN: Site 3 No Build 2030 AM
      DATE: 05/06/2009   TIME: 08:54:17.64


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *     251.    283. AG  1590.   9.2    .0 44.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *     168.    287. AG  1590.   9.2    .0 44.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *     128.    300. AG  1590.   9.2    .0 44.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *     120.    309. AG  1590.   9.2    .0 44.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *      97.    321. AG  1590.   9.2    .0 44.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *     122.    332. AG  1590.   9.2    .0 44.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *      67.    338. AG  1590.   9.2    .0 44.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *     110.    349. AG  1590.   9.2    .0 44.0
       9. NB        Rt8 aprch *    273.0    1978.0     757.7    -413.0 *    2440.    169. AG   244. 100.0    .0 24.0 1.34 123.9
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *     189.    161. AG  1410.   9.2    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *     126.    153. AG  1410.   9.2    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *      92.    142. AG  1410.   9.2    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *     123.    130. AG  1410.   9.2    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *     146.    117. AG  1410.   9.2    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *     188.    108. AG  1410.   9.2    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *     213.    106. AG  1410.   9.2    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *     436.     87. AG  2935.   9.2    .0 56.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *     251.     85. AG  2935.   9.2    .0 56.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *     309.     81. AG  2935.   9.2    .0 56.0
      20. EB        Rt1 aprch *    162.0    2003.0   -3113.7    1508.9 *    3313.    261. AG   355. 100.0    .0 36.0 1.41 168.3
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *    1000.     75. AG  3280.   9.2    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *     453.    254. AG  2730.   9.2    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *     552.    254. AG  2565.   9.2    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *     135.    258. AG  2565.   9.2    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *     207.    263. AG  2565.   9.2    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *     642.    266. AG  2565.   9.2    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *     415.    255. AG   165.   9.2    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0     324.2    2076.3 *      29.     76. AG   244. 100.0    .0 24.0  .11   1.5
1
                                                                                                                 PAGE  2
      JOB: Site 3 No Build 2030 AM - 3NBAM30.DAT                RUN: Site 3 No Build 2030 AM
      DATE: 05/06/2009   TIME: 08:54:17.64

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*---------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     120       65       2.0      1590       1394      84.10      1        3
      20. EB        Rt1 aprch *     120       63       2.0      2935       1572      84.10      1        3
      28. EB        Rt1 left  *     120       65       2.0       165       1700      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0        5.0   *
      2. SW 164 W             *         8.0     1953.0        5.0   *
      3. SW 82 W              *        90.0     1961.0        5.0   *
      4. SW CNR               *       174.0     1953.0        5.0   *
      5. SW 82 S              *       218.0     1880.0        5.0   *
      6. SW 164 S             *       245.0     1804.0        5.0   *
      7. SW MID S             *       281.0     1726.0        5.0   *
      8. SE MID S             *       388.0     1751.0        5.0   *
      9. SE 164 S             *       338.0     1834.0        5.0   *
     10. SE 82 S              *       315.0     1914.0        5.0   *
     11. SE CNR               *       304.0     1995.0        5.0   *
     12. SE 82 E              *       376.0     2022.0        5.0   *
     13. SE 164 E             *       454.0     2045.0        5.0   *
     14. SE MID E             *       571.0     2079.0        5.0   *
     15. NE MID E             *       519.0     2169.0        5.0   *
     16. NE 164 E             *       374.0     2130.0        5.0   *
     17. NE 82 E              *       295.0     2110.0        5.0   *
     18. N CNR                *       215.0     2090.0        5.0   *
     19. NW 82 W              *       136.0     2072.0        5.0   *
     20. NW 164 W             *        54.0     2058.0        5.0   *
     21. NW MID W             *       -88.0     2040.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 3 No Build 2030 AM - 3NBAM30.DAT                RUN: Site 3 No Build 2030 AM

       MODEL RESULTS
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       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *   2.5   2.4   2.2   1.1    .8   1.1   1.5    .4    .9    .8   1.3   1.3   1.3   1.3    .0    .0    .0    .0    .0    .0
   5.  *   2.4   2.3   2.3   1.0   1.1   1.2   1.5    .4    .5    .8   1.4   1.3   1.3   1.3    .0    .0    .0    .0    .0    .0
  10.  *   2.4   2.3   2.2   1.1   1.1   1.3   1.6    .4    .5    .6   1.3   1.3   1.3   1.3    .1    .0    .0    .0    .0    .0
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  15.  *   2.4   2.3   2.2    .9   1.2   1.3   1.7    .4    .5    .6   1.4   1.3   1.3   1.4    .1    .1    .0    .0    .0    .0
  20.  *   2.4   2.4   2.1   1.1   1.3   1.5   1.6    .3    .5    .6   1.4   1.4   1.4   1.4    .1    .1    .0    .0    .0    .0
  25.  *   2.5   2.5   2.3   1.2   1.4   1.5   1.6    .3    .5    .6   1.4   1.4   1.4   1.5    .1    .1    .1    .0    .0    .0
  30.  *   2.6   2.7   2.3   1.2   1.4   1.6   1.5    .3    .5    .6   1.5   1.5   1.5   1.5    .1    .1    .1    .0    .1    .0
  35.  *   2.8   2.7   2.5   1.3   1.4   1.6   1.4    .4    .5    .7   1.4   1.5   1.5   1.7    .1    .1    .1    .0    .1    .0
  40.  *   2.9   2.9   2.6   1.4   1.5   1.4   1.5    .4    .5    .7   1.5   1.6   1.6   1.7    .1    .1    .1    .1    .1    .0
  45.  *   3.1   3.0   2.6   1.6   1.6   1.5   1.4    .3    .5    .8   1.5   1.6   1.8   1.7    .2    .2    .1    .1    .1    .0
  50.  *   3.3   3.1   2.7   1.7   1.7   1.6   1.4    .3    .5    .8   1.6   1.8   1.9   1.9    .3    .2    .2    .1    .1    .0
  55.  *   3.5   3.2   2.7   1.8   1.7   1.5   1.4    .3    .5    .8   1.8   1.9   1.9   2.0    .5    .3    .3    .2    .2    .3
  60.  *   3.7   3.2   2.8   1.7   1.6   1.3   1.3    .2    .3    .6   1.7   1.9   2.0   2.0    .7    .7    .6    .4    .4    .4
  65.  *   3.8   3.5   2.7   1.9   1.6   1.3   1.2    .1    .3    .6   1.6   1.9   1.9   1.9   1.0    .9    .8    .8    .7    .6
  70.  *   3.8   3.2   2.7   1.8   1.4   1.2   1.3    .0    .1    .4   1.4   1.6   1.8   1.7   1.3   1.3   1.2   1.1   1.1    .9
  75.  *   3.7   3.0   2.3   1.5   1.2   1.0   1.1    .0    .1    .3   1.1   1.4   1.4   1.5   1.7   1.7   1.5   1.4   1.4   1.2
  80.  *   2.9   2.8   2.1   1.4   1.1   1.0   1.0    .0    .0    .1    .8   1.1   1.2   1.1   1.9   1.9   1.7   1.7   1.7   1.6
  85.  *   2.6   2.1   1.5   1.0   1.0   1.0   1.0    .0    .0    .1    .4    .6    .8    .8   2.0   1.9   1.9   1.9   1.9   1.8
  90.  *   2.0   1.7   1.1    .9    .9    .9   1.1    .0    .1    .0    .3    .4    .5    .5   2.1   2.1   2.0   2.1   1.8   2.0
  95.  *   1.3   1.1    .8    .8    .9    .9   1.2    .0    .1    .0    .1    .3    .3    .3   2.0   2.0   1.9   1.9   1.7   1.9
 100.  *    .9    .8    .7    .8   1.0   1.0   1.2    .0    .1    .0    .1    .2    .2    .2   2.0   1.9   1.8   1.8   1.8   2.0
 105.  *    .6    .6    .5    .8   1.0   1.1   1.2    .1    .1    .0    .0    .1    .1    .2   1.8   1.8   1.7   1.8   1.8   2.3
 110.  *    .4    .4    .6    .8   1.1   1.1   1.3    .1    .1    .0    .0    .1    .1    .1   1.8   1.7   1.6   1.6   1.8   2.2
 115.  *    .3    .5    .5    .8   1.0   1.1   1.3    .1    .1    .0    .0    .1    .1    .1   1.6   1.6   1.6   1.6   1.7   2.2
 120.  *    .2    .4    .5    .9   1.2   1.1   1.3    .1    .1    .0    .0    .1    .1    .1   1.5   1.5   1.6   1.6   1.9   2.2
 125.  *    .2    .3    .6    .9   1.3   1.2   1.4    .4    .2    .0    .0    .1    .1    .1   1.5   1.5   1.5   1.5   1.7   2.2
 130.  *    .2    .3    .6    .9   1.2   1.3   1.3    .5    .2    .0    .0    .0    .1    .1   1.5   1.4   1.6   1.6   1.7   2.2
 135.  *    .2    .3    .5    .9   1.1   1.4   1.2    .6    .5    .0    .0    .0    .0    .1   1.4   1.4   1.6   1.5   1.8   2.1
 140.  *    .2    .3    .3    .8   1.2   1.1   1.0    .8    .5    .1    .0    .0    .0    .0   1.4   1.4   1.6   1.5   2.1   2.2
 145.  *    .2    .3    .2    .8   1.2   1.0    .9    .9    .6    .3    .0    .0    .0    .0   1.4   1.4   1.6   1.7   2.0   2.1
 150.  *    .2    .3    .3    .8   1.1    .8    .9    .9    .9    .5    .1    .0    .0    .0   1.4   1.4   1.7   2.0   1.9   2.1
 155.  *    .1    .2    .2    .6    .8    .8    .8    .9   1.2    .8    .3    .0    .0    .0   1.4   1.4   1.9   2.0   1.8   2.0
 160.  *    .1    .1    .2    .6    .7    .6    .7    .9   1.3    .9    .6    .1    .0    .0   1.4   1.5   2.0   2.4   2.0   2.1
 165.  *    .1    .1    .2    .3    .6    .5    .6   1.1   1.4   1.3    .8    .2    .1    .0   1.4   1.5   2.2   2.1   2.1   2.1
 170.  *    .0    .1    .1    .2    .4    .3    .5   1.2   1.7   1.6   1.1    .3    .1    .1   1.5   1.6   2.3   2.0   2.0   2.0
 175.  *    .0    .0    .1    .1    .2    .2    .3   1.3   1.7   1.6   1.3    .4    .2    .1   1.5   1.7   2.5   1.9   1.9   2.0
 180.  *    .0    .0    .0    .1    .1    .1    .2   1.3   1.8   1.6   1.4    .5    .2    .1   1.6   1.7   2.1   1.7   1.8   1.9
 185.  *    .0    .0    .0    .0    .0    .1    .1   1.4   1.8   1.6   1.5    .5    .2    .2   1.6   1.8   2.1   1.6   1.7   1.8
 190.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.6   1.6   1.5    .5    .2    .3   1.6   1.7   1.9   1.4   1.8   1.8
 195.  *    .0    .1    .0    .0    .0    .0    .0   1.3   1.5   1.5   1.5    .6    .4    .3   1.6   1.9   1.9   1.4   1.8   1.8
 200.  *    .1    .1    .0    .0    .0    .0    .0   1.1   1.5   1.5   1.4    .7    .4    .3   1.7   1.8   1.8   1.5   1.8   1.9
 205.  *    .1    .1    .1    .0    .0    .0    .0   1.1   1.5   1.4   1.3    .9    .4    .3   1.7   2.0   1.6   1.5   2.0   1.9
1
                                                                                                                 PAGE  4
      JOB: Site 3 No Build 2030 AM - 3NBAM30.DAT                RUN: Site 3 No Build 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .0    .0    .0    .0   1.1   1.3   1.4   1.2    .7    .4    .2   1.7   2.0   1.8   1.7   2.0   1.9
 215.  *    .1    .1    .1    .0    .0    .0    .0   1.0   1.3   1.3   1.1    .7    .4    .2   1.7   2.1   1.9   1.7   2.1   2.1
 220.  *    .1    .1    .1    .0    .0    .0    .0   1.2   1.3   1.4   1.1    .7    .4    .2   1.8   2.1   1.7   1.7   2.2   2.2
 225.  *    .2    .1    .1    .0    .0    .0    .0   1.1   1.3   1.3   1.0    .6    .5    .3   1.9   2.3   1.9   2.0   2.3   2.1
 230.  *    .3    .2    .1    .0    .0    .0    .0   1.1   1.3   1.3   1.0    .6    .6    .3   2.2   2.3   1.8   2.1   2.3   2.3
 235.  *    .4    .3    .2    .0    .0    .0    .0   1.1   1.3   1.2   1.0    .9    .6    .4   2.1   2.1   2.1   2.2   2.3   2.3
 240.  *    .5    .5    .4    .1    .0    .0    .0   1.2   1.3   1.2   1.1    .9    .9    .8   2.2   2.3   2.1   2.4   2.6   2.6
 245.  *    .9    .8    .6    .1    .0    .0    .0   1.1   1.4   1.3   1.3   1.2   1.1   1.2   2.4   2.5   2.4   2.4   2.5   2.6
 250.  *   1.4   1.5   1.1    .5    .1    .0    .0   1.1   1.4   1.3   1.7   1.6   1.5   1.5   2.6   2.5   2.3   2.4   2.6   2.6
 255.  *   2.0   2.0   1.7    .9    .2    .1    .1   1.2   1.3   1.5   2.3   2.3   2.4   2.1   2.3   2.2   2.1   2.2   2.3   2.6
 260.  *   2.7   2.7   2.2   1.2    .4    .2    .1   1.2   1.4   2.1   2.5   2.6   2.5   2.6   2.0   1.7   1.9   1.8   2.1   2.2
 265.  *   3.2   3.3   2.8   1.8    .7    .3    .2   1.3   1.7   2.1   2.8   2.7   2.5   2.6   1.5   1.4   1.4   1.5   1.6   1.7
 270.  *   3.6   3.7   3.2   2.1    .9    .5    .2   1.4   2.1   2.4   3.0   2.7   2.6   2.4    .8    .8    .8    .9   1.2   1.4
 275.  *   3.8   3.7   3.4   2.3   1.0    .7    .5   1.5   2.2   2.5   2.9   2.5   2.4   2.3    .4    .4    .5    .5    .5    .9
 280.  *   3.7   3.7   3.4   2.4   1.2    .7    .5   1.7   2.2   2.5   2.6   2.1   2.2   1.8    .2    .2    .1    .4    .4    .5
 285.  *   3.6   3.6   3.2   2.4   1.2    .9    .6   1.8   2.3   2.3   2.1   1.9   2.0   1.7    .2    .1    .1    .1    .2    .3
 290.  *   3.4   3.3   3.0   2.1   1.0    .8    .6   2.0   2.4   2.4   2.0   1.8   1.7   1.6    .1    .1    .1    .1    .1    .2
 295.  *   3.3   3.2   2.9   2.0   1.2    .7    .7   2.0   2.3   2.3   1.8   1.7   1.5   1.6    .1    .1    .1    .1    .1    .1
 300.  *   3.0   3.1   2.8   1.9   1.1    .8    .7   1.8   2.2   2.2   1.7   1.5   1.5   1.5    .1    .1    .1    .0    .1    .1
 305.  *   2.9   2.8   2.7   1.9    .9    .8    .6   1.8   2.2   2.2   1.5   1.5   1.4   1.4    .1    .1    .1    .0    .1    .1
 310.  *   2.8   2.7   2.5   1.8   1.0    .6    .6   1.9   2.2   2.0   1.5   1.5   1.4   1.4    .1    .1    .0    .0    .0    .1
 315.  *   2.7   2.6   2.4   1.8    .9    .6    .5   1.8   2.1   1.8   1.3   1.4   1.3   1.4    .1    .1    .0    .0    .0    .1
 320.  *   2.6   2.5   2.2   1.7    .8    .7    .5   1.7   2.1   1.8   1.3   1.4   1.3   1.3    .1    .0    .0    .0    .0    .1
 325.  *   2.4   2.4   2.2   1.6    .8    .7    .7   1.5   2.1   1.6   1.3   1.4   1.3   1.3    .0    .0    .0    .0    .0    .1
 330.  *   2.4   2.4   2.2   1.6   1.0    .7    .8   1.4   1.8   1.5   1.2   1.4   1.3   1.3    .0    .0    .0    .0    .0    .0
 335.  *   2.3   2.3   2.2   1.4    .8    .7    .7   1.3   1.7   1.4   1.1   1.3   1.3   1.3    .0    .0    .0    .0    .0    .0
 340.  *   2.4   2.4   2.3   1.4    .7    .6    .7   1.0   1.5   1.2   1.2   1.3   1.4   1.4    .0    .0    .0    .0    .0    .0
 345.  *   2.4   2.4   2.3   1.3    .8    .8   1.2    .7   1.1   1.1   1.3   1.4   1.4   1.4    .0    .0    .0    .0    .0    .0
 350.  *   2.5   2.4   2.3   1.2   1.0   1.2   1.2    .5   1.1    .9   1.3   1.3   1.4   1.4    .0    .0    .0    .0    .0    .0
 355.  *   2.4   2.4   2.3   1.1    .9   1.0   1.3    .4    .9    .9   1.3   1.3   1.3   1.3    .0    .0    .0    .0    .0    .0
 360.  *   2.5   2.4   2.2   1.1    .8   1.1   1.5    .4    .9    .8   1.3   1.3   1.3   1.3    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   3.8   3.7   3.4   2.4   1.7   1.6   1.7   2.0   2.4   2.5   3.0   2.7   2.6   2.6   2.6   2.5   2.5   2.4   2.6   2.6
 DEGR. *  275   270   275   280    50    30    15   295   290   275   270   265   270   260   250   245   175   160   250   245

1
                                                                                                                 PAGE  5
      JOB: Site 3 No Build 2030 AM - 3NBAM30.DAT                RUN: Site 3 No Build 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .1
  55.  *    .2
  60.  *    .2
  65.  *    .5
  70.  *    .9
  75.  *   1.2
  80.  *   1.6
  85.  *   2.0
  90.  *   2.1
  95.  *   2.1
 100.  *   2.4
 105.  *   2.4
 110.  *   2.5
 115.  *   2.3
 120.  *   2.2
 125.  *   2.1
 130.  *   2.1
 135.  *   2.0
 140.  *   2.1
 145.  *   2.1
 150.  *   2.0
 155.  *   1.9
 160.  *   1.9
 165.  *   2.0
 170.  *   1.9
 175.  *   1.9
 180.  *   1.9
 185.  *   1.9
 190.  *   1.8
 195.  *   1.9
 200.  *   1.9
 205.  *   2.0
1
                                                                                                                            PAGE  6
      JOB: Site 3 No Build 2030 AM - 3NBAM30.DAT                RUN: Site 3 No Build 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   1.9
 215.  *   2.0
 220.  *   2.1
 225.  *   2.2
 230.  *   2.3
 235.  *   2.4
 240.  *   2.6
 245.  *   2.6
 250.  *   2.6
 255.  *   2.5
 260.  *   2.3
 265.  *   1.8
 270.  *   1.3
 275.  *    .9
 280.  *    .5
 285.  *    .3
 290.  *    .2
 295.  *    .1
 300.  *    .1
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   2.6
 DEGR. *  240

 THE HIGHEST CONCENTRATION IS    3.80 PPM AT  275 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    3.70 PPM AT  270 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS    3.40 PPM AT  275 DEGREES FROM REC3 .
```

```
Site 3 No Build 2014 PM - 3NBPM14.DAT   60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 No Build 2014 PM                  28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    130611.4   0  44   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    130611.4   0  44   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    130611.4   0  44   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    130611.4   0  44   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    130611.4   0  44   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    130611.4   0  44   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    130611.4   0  44   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    130611.4   0  44   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        65       2.0 1306  102.2 1394 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    208711.4   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    208711.4   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    208711.4   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    208711.4   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    208711.4   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    208711.4   0  44   30.
  1
```

```
SB         Rt8 departAG   791.  1427.   995.  1367.    208711.4   0  44   30.
  1
EB         Rt1 aprch AG  -757.  1920.  -322.  1944.    228111.4   0  56   30.
  1
EB         Rt1 aprch AG  -322.  1944.   -72.  1967.    228111.4   0  56   30.
  1
EB         Rt1 aprch AG   -72.  1967.   233.  2014.    228111.4   0  56   30.
  2
EB         Rt1 aprch AG   162.  2003.   -17.  1976.       0.  36   3
       120        63       2.0 2281  102.2 1582 1 3
  1
EB         Rt1 departAG   234.  2016.  1198.  2281.    271011.4   0  56   30.
  1
WB         Rt1 aprch AG  1187.  2341.   752.  2213.    373311.4   0  68   30.
  1
WB         Rt1 thru  AG   752.  2213.   221.  2064.    252311.4   0  44   30.
  1
WB         Rt1 thru  AG   221.  2064.    89.  2037.    252311.4   0  44   30.
  1
WB         Rt1 thru  AG    87.  2035.  -118.  2009.    252311.4   0  56   30.
  1
WB         Rt1 thru  AG  -118.  2009.  -758.  1962.    252311.4   0  56   30.
  1
WB         Rt1 left  AG   607.  2149.   205.  2045.    121011.4   0  44   30.
  2
EB         Rt1 left  AG   296.  2069.   549.  2134.       0.  24   2
       120        63       2.0 1210  102.2 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 3 No Build 2014 PM - 3NBPM14.DAT                RUN: Site 3 No Build 2014 PM
      DATE: 05/06/2009   TIME: 08:53:43.26


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2    *     (FT)  (DEG)           (G/MI)  (FT) (FT)        (VEH)
      ------------------------*---------------------------------------*-----------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *     251.   283. AG   1306.  11.4    .0 44.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *     168.   287. AG   1306.  11.4    .0 44.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *     128.   300. AG   1306.  11.4    .0 44.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *     120.   309. AG   1306.  11.4    .0 44.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *      97.   321. AG   1306.  11.4    .0 44.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *     122.   332. AG   1306.  11.4    .0 44.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *      67.   338. AG   1306.  11.4    .0 44.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *     110.   349. AG   1306.  11.4    .0 44.0
       9. NB        Rt8 aprch *    273.0    1978.0     464.3    1034.1 *     963.   169. AG    297. 100.0    .0 24.0 1.10  48.9
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *     189.   161. AG   2087.  11.4    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *     126.   153. AG   2087.  11.4    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *      92.   142. AG   2087.  11.4    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *     123.   130. AG   2087.  11.4    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *     146.   117. AG   2087.  11.4    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *     188.   108. AG   2087.  11.4    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *     213.   106. AG   2087.  11.4    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   2281.  11.4    .0 56.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   2281.  11.4    .0 56.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *     309.    81. AG   2281.  11.4    .0 56.0
      20. EB        Rt1 aprch *    162.0    2003.0    -838.7    1852.1 *    1012.   261. AG    432. 100.0    .0 36.0 1.09  51.4
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   2710.  11.4    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *     453.   254. AG   3733.  11.4    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *     552.   254. AG   2523.  11.4    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *     135.   258. AG   2523.  11.4    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *     207.   263. AG   2523.  11.4    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   2523.  11.4    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *     415.   255. AG   1210.  11.4    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0     500.7    2121.6 *     211.    76. AG    288. 100.0    .0 24.0  .81  10.7
1
                                                                                                              PAGE  2
      JOB: Site 3 No Build 2014 PM - 3NBPM14.DAT                RUN: Site 3 No Build 2014 PM
      DATE: 05/06/2009   TIME: 08:53:43.26

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     120       65       2.0      1306       1394     102.20      1        3
      20. EB        Rt1 aprch *     120       63       2.0      2281       1582     102.20      1        3
      28. EB        Rt1 left  *     120       63       2.0      1210       1700     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0       5.0    *
      2. SW 164 W             *         8.0     1953.0       5.0    *
      3. SW 82 W              *        90.0     1961.0       5.0    *
      4. SW CNR               *       174.0     1953.0       5.0    *
      5. SW 82 S              *       218.0     1880.0       5.0    *
      6. SW 164 S             *       245.0     1804.0       5.0    *
      7. SW MID S             *       281.0     1726.0       5.0    *
      8. SE MID S             *       388.0     1751.0       5.0    *
      9. SE 164 S             *       338.0     1834.0       5.0    *
     10. SE 82 S              *       315.0     1914.0       5.0    *
     11. SE CNR               *       304.0     1995.0       5.0    *
     12. SE 82 E              *       376.0     2022.0       5.0    *
     13. SE 164 E             *       454.0     2045.0       5.0    *
     14. SE MID E             *       571.0     2079.0       5.0    *
     15. NE MID E             *       519.0     2169.0       5.0    *
     16. NE 164 E             *       374.0     2130.0       5.0    *
     17. NE 82 E              *       295.0     2110.0       5.0    *
     18. N CNR                *       215.0     2090.0       5.0    *
     19. NW 82 W              *       136.0     2072.0       5.0    *
     20. NW 164 W             *        54.0     2058.0       5.0    *
     21. NW MID W             *       -88.0     2040.0       5.0    *
1
                                                                                                              PAGE  3
      JOB: Site 3 No Build 2014 PM - 3NBPM14.DAT                RUN: Site 3 No Build 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
   0.  *   2.8   2.6   2.5   1.2   1.2   1.7   2.2    .7   1.1   1.1   1.6   2.1   2.1   1.7    .0    .0    .0    .0    .0    .0
   5.  *   2.7   2.6   2.5   1.2   1.6   1.9   2.3    .7    .8   1.1   1.7   2.1   2.1   1.7    .1    .0    .0    .0    .0    .0
  10.  *   2.6   2.6   2.5   1.2   1.7   1.9   2.4    .7    .8   1.0   1.7   2.1   2.1   1.6    .1    .1    .0    .0    .0    .0
```

```
  15.  *   2.7   2.6   2.5   1.2   1.7   2.1   2.4    .7    .8   1.0   1.9   2.1   2.2   1.7    .1    .1    .0    .0    .0    .0
  20.  *   2.8   2.6   2.5   1.3   1.9   2.1   2.4    .6    .7   1.0   1.9   2.2   2.2   1.7    .1    .1    .1    .0    .0    .0
  25.  *   2.8   2.9   2.5   1.3   2.0   2.1   2.3    .5    .7   1.0   2.0   2.2   2.2   1.8    .1    .1    .1    .0    .1    .0
  30.  *   2.9   2.9   2.7   1.6   2.1   2.2   2.2    .4    .7   1.0   2.2   2.3   2.2   1.8    .1    .1    .1    .1    .1    .0
  35.  *   3.2   3.1   2.8   1.8   2.2   2.3   2.2    .4    .8   1.1   2.2   2.3   2.2   1.9    .1    .1    .1    .1    .1    .0
  40.  *   3.3   3.1   2.9   1.9   2.2   2.2   1.8    .4    .7   1.2   2.3   2.4   2.3   2.1    .2    .1    .1    .1    .1    .0
  45.  *   3.5   3.4   3.1   2.1   2.5   2.2   1.8    .5    .5   1.1   2.3   2.6   2.3   2.1    .2    .2    .2    .1    .1    .0
  50.  *   3.6   3.6   3.2   2.4   2.4   2.1   1.8    .4    .6   1.0   2.5   2.6   2.4   2.1    .4    .3    .2    .2    .2    .1
  55.  *   3.9   3.8   3.5   2.5   2.4   1.9   1.7    .3    .6   1.1   2.4   2.6   2.3   2.2    .5    .5    .3    .3    .2    .3
  60.  *   4.1   4.0   3.3   2.5   2.4   1.7   1.7    .2    .4    .7   2.3   2.5   2.2   2.3    .9    .8    .7    .8    .7    .4
  65.  *   4.4   4.0   3.3   2.6   2.0   1.8   1.7    .2    .3    .7   2.1   2.3   2.2   2.3   1.2   1.3   1.2   1.1   1.0    .9
  70.  *   4.4   3.9   3.3   2.4   1.8   1.7   1.6    .0    .2    .5   1.7   2.0   2.0   2.0   1.6   1.8   1.7   1.8   1.5   1.3
  75.  *   4.1   3.5   2.9   2.2   1.7   1.4   1.5    .0    .1    .3   1.5   1.6   1.5   1.7   2.0   2.3   2.2   2.2   2.1   1.7
  80.  *   3.8   3.2   2.4   1.8   1.5   1.4   1.4    .0    .0    .2    .9   1.1   1.3   1.2   2.4   2.6   2.7   2.6   2.4   2.1
  85.  *   3.2   2.6   1.9   1.3   1.4   1.3   1.5    .0    .0    .1    .5    .7    .8    .9   2.6   2.9   3.0   2.9   2.6   2.5
  90.  *   2.2   1.8   1.3   1.2   1.3   1.4   1.5    .0    .1    .0    .3    .4    .5    .6   2.6   3.2   3.2   3.0   2.6   2.5
  95.  *   1.4   1.3   1.2   1.1   1.3   1.3   1.6    .0    .1    .0    .2    .3    .3    .4   2.5   3.1   3.2   2.9   2.5   2.5
 100.  *    .9   1.0    .9   1.0   1.4   1.4   1.6    .0    .1    .0    .1    .2    .2    .2   2.4   3.0   3.0   2.8   2.6   2.6
 105.  *    .7    .8    .7   1.0   1.4   1.5   1.7    .1    .1    .0    .0    .1    .1    .2   2.5   3.0   3.1   2.6   2.3   2.7
 110.  *    .6    .7    .8   1.0   1.5   1.5   1.8    .1    .1    .0    .0    .1    .1    .1   2.3   3.0   3.0   2.5   2.4   2.5
 115.  *    .4    .6    .8   1.2   1.4   1.7   2.0    .1    .1    .0    .0    .1    .1    .1   2.2   2.9   2.8   2.4   2.3   2.6
 120.  *    .3    .5    .7   1.3   1.6   1.9   2.1    .3    .1    .0    .0    .1    .1    .1   2.0   2.7   2.8   2.2   2.2   2.7
 125.  *    .3    .5    .8   1.4   1.8   2.0   2.1    .6    .2    .0    .0    .1    .1    .1   2.1   2.7   2.6   2.1   2.2   2.7
 130.  *    .2    .4    .8   1.2   1.8   1.9   2.0    .8    .3    .0    .0    .1    .1    .1   2.0   2.6   2.6   2.2   2.2   2.6
 135.  *    .2    .4    .7   1.2   1.9   2.0   1.7    .7    .7    .1    .0    .0    .1    .1   1.9   2.6   2.5   2.1   2.3   2.6
 140.  *    .2    .3    .5   1.4   1.8   1.7   1.5   1.0    .8    .2    .0    .0    .0    .1   1.9   2.5   2.5   2.1   2.4   2.7
 145.  *    .2    .3    .4   1.3   1.7   1.5   1.4   1.0    .9    .5    .1    .0    .0    .0   1.9   2.4   2.4   2.3   2.5   2.6
 150.  *    .2    .3    .3   1.2   1.5   1.2   1.2   1.0   1.1    .7    .1    .0    .0    .0   1.9   2.5   2.5   2.6   2.4   2.5
 155.  *    .0    .1    .2    .8   1.3   1.1   1.0   1.0   1.3   1.1    .4    .0    .0    .0   1.9   2.6   2.4   2.9   2.4   2.3
 160.  *    .0    .1    .2    .5    .9    .8    .8   1.1   1.5   1.2    .9    .2    .0    .0   1.9   2.7   2.6   3.1   2.4   2.2
 165.  *    .0    .0    .1    .5    .7    .5    .6   1.3   1.6   1.4   1.1    .2    .0    .0   1.9   2.7   3.1   2.7   2.3   2.2
 170.  *    .0    .0    .1    .2    .5    .4    .4   1.3   1.9   1.8   1.4    .3    .1    .0   1.9   2.8   3.1   2.8   2.3   2.3
 175.  *    .0    .0    .0    .1    .3    .2    .3   1.5   2.1   1.7   1.5    .6    .1    .0   2.0   2.6   3.0   2.6   2.3   2.2
 180.  *    .0    .0    .0    .0    .1    .1    .2   1.5   2.2   2.0   1.7    .6    .3    .1   2.0   2.8   3.1   2.4   2.0   2.1
 185.  *    .0    .0    .0    .0    .0    .0    .1   1.5   2.0   2.2   1.7    .7    .3    .1   2.0   3.0   2.9   2.0   2.1   2.1
 190.  *    .0    .0    .0    .0    .0    .0    .0   1.5   2.0   1.9   1.7    .7    .2    .2   2.3   3.0   2.8   1.9   2.1   2.1
 195.  *    .0    .1    .0    .0    .0    .0    .0   1.6   2.0   1.9   1.8    .8    .7    .3   2.4   3.2   2.6   1.8   2.1   2.1
 200.  *    .1    .1    .0    .0    .0    .0    .0   1.4   1.9   1.9   1.7    .9    .6    .3   2.6   3.2   2.6   1.8   2.2   2.1
 205.  *    .1    .1    .1    .0    .0    .0    .0   1.4   1.8   1.8   1.7   1.0    .6    .3   2.7   3.2   2.3   2.0   2.2   2.2
1
                                                                                                                             PAGE  4
       JOB: Site 3 No Build 2014 PM - 3NBPM14.DAT                RUN: Site 3 No Build 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .0    .0    .0    .0   1.4   1.7   1.7   1.5   1.0    .6    .3   3.0   3.2   2.7   1.9   2.2   2.3
 215.  *    .1    .1    .1    .0    .0    .0    .0   1.3   1.6   1.7   1.5    .9    .6    .4   3.0   3.3   2.6   2.1   2.4   2.4
 220.  *    .2    .1    .1    .0    .0    .0    .0   1.4   1.6   1.8   1.4    .8    .6    .4   3.1   3.2   2.5   2.1   2.5   2.5
 225.  *    .2    .1    .1    .0    .0    .0    .0   1.5   1.6   1.7   1.3    .7    .6    .6   3.2   3.4   2.6   2.3   2.5   2.4
 230.  *    .2    .2    .1    .0    .0    .0    .0   1.4   1.6   1.7   1.3    .8    .6    .5   3.5   3.2   2.7   2.4   2.6   2.8
 235.  *    .4    .3    .2    .0    .0    .0    .0   1.3   1.7   1.6   1.4   1.0    .7    .5   3.5   3.2   2.7   2.7   2.9   2.7
 240.  *    .5    .5    .4    .1    .0    .0    .0   1.4   1.7   1.6   1.4   1.1   1.1    .8   3.6   3.3   2.8   2.7   2.9   3.0
 245.  *    .9    .8    .6    .1    .0    .0    .0   1.3   1.6   1.7   1.6   1.4   1.1   1.2   3.7   3.2   2.9   2.8   3.0   3.0
 250.  *   1.3   1.5   1.2    .5    .1    .0    .0   1.4   1.7   1.8   1.9   1.9   1.6   1.8   3.3   2.8   2.6   2.7   2.8   2.8
 255.  *   2.0   2.0   1.7    .9    .1    .0    .0   1.3   1.7   1.9   2.5   2.4   2.5   2.5   2.9   2.8   2.5   2.4   2.6   2.8
 260.  *   2.7   2.8   2.3   1.3    .4    .1    .0   1.3   1.8   2.3   2.8   2.6   2.9   2.9   2.5   2.1   2.0   1.9   2.3   2.3
 265.  *   3.3   3.4   3.0   1.8    .6    .1    .1   1.4   2.0   2.4   3.1   3.0   2.9   3.1   1.7   1.6   1.5   1.5   1.8   1.9
 270.  *   3.8   3.8   3.4   2.2    .9    .4    .1   1.6   2.3   2.8   3.1   3.0   3.0   3.2   1.0    .9    .8   1.1   1.2   1.4
 275.  *   4.0   4.1   3.6   2.4   1.0    .6    .4   1.7   2.5   3.0   3.2   2.9   2.8   3.1    .5    .5    .6    .5    .7    .9
 280.  *   4.1   4.1   3.7   2.7   1.2    .8    .4   1.9   2.7   3.1   2.8   2.5   2.9   2.7    .3    .2    .1    .3    .4    .5
 285.  *   4.0   4.0   3.7   2.4   1.3    .9    .6   2.0   2.7   2.9   2.6   2.4   2.6   2.5    .2    .2    .1    .1    .2    .4
 290.  *   3.9   3.7   3.4   2.4   1.3   1.0    .7   2.3   2.7   3.0   2.4   2.2   2.5   2.5    .2    .1    .1    .1    .1    .2
 295.  *   3.6   3.5   3.2   2.4   1.3    .9    .8   2.2   2.7   2.9   1.9   2.2   2.3   2.3    .1    .1    .1    .1    .1    .2
 300.  *   3.4   3.3   3.1   2.2   1.2    .9    .7   2.3   2.7   2.5   2.0   2.1   2.4   2.2    .1    .1    .1    .1    .1    .1
 305.  *   3.2   3.2   2.9   2.1   1.1   1.0    .7   2.3   2.7   2.5   1.8   2.1   2.3   2.1    .1    .1    .1    .1    .1    .1
 310.  *   3.1   3.1   2.8   2.1   1.1    .9    .7   2.3   2.5   2.4   1.7   2.0   2.3   2.0    .1    .1    .1    .0    .1    .1
 315.  *   3.0   2.9   2.6   1.9   1.0    .7    .6   2.2   2.5   2.2   1.7   2.0   2.3   1.9    .1    .1    .0    .0    .0    .1
 320.  *   2.9   2.7   2.6   1.9    .9    .8    .7   2.2   2.3   2.2   1.5   2.1   2.2   1.8    .1    .0    .0    .0    .0    .1
 325.  *   2.8   2.7   2.5   1.8   1.1    .8    .8   1.8   2.5   1.9   1.6   2.1   2.1   1.7    .0    .0    .0    .0    .0    .1
 330.  *   2.6   2.6   2.5   1.7   1.0    .8    .9   1.8   2.1   1.9   1.6   2.1   2.1   1.7    .0    .0    .0    .0    .0    .1
 335.  *   2.7   2.6   2.5   1.7    .9    .9   1.2   1.5   1.9   1.6   1.4   2.1   2.1   1.8    .0    .0    .0    .0    .0    .0
 340.  *   2.8   2.6   2.6   1.6    .9    .8   1.0   1.3   1.8   1.5   1.6   2.2   2.2   1.8    .0    .0    .0    .0    .0    .0
 345.  *   2.7   2.7   2.5   1.5    .9   1.1   1.6    .9   1.4   1.3   1.6   2.2   2.2   1.8    .0    .0    .0    .0    .0    .0
 350.  *   2.9   2.7   2.5   1.4   1.2   1.5   1.8    .8   1.3   1.2   1.7   2.2   2.2   1.8    .0    .0    .0    .0    .0    .0
 355.  *   2.8   2.7   2.5   1.3   1.2   1.5   2.0    .7   1.1   1.1   1.6   2.1   2.1   1.8    .0    .0    .0    .0    .0    .0
 360.  *   2.8   2.6   2.5   1.2   1.2   1.7   2.2    .7   1.1   1.1   1.6   2.1   2.1   1.7    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   4.4   4.1   3.7   2.7   2.5   2.3   2.4   2.3   2.7   3.1   3.2   3.0   3.0   3.2   3.7   3.4   3.2   3.1   3.0   3.0
 DEGR. *   65    280   285   280   45    35    10    290   280   280   275   265   270   270   245   225    95   160   245   240

1
                                                                                                                             PAGE  5
       JOB: Site 3 No Build 2014 PM - 3NBPM14.DAT                RUN: Site 3 No Build 2014 PM

        MODEL RESULTS
        -------------

        REMARKS : In search of the angle corresponding to
                  the maximum concentration, only the first
                  angle, of the angles with same maximum
                  concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .2
  55.  *    .2
  60.  *    .4
  65.  *    .7
  70.  *   1.3
  75.  *   1.6
  80.  *   2.0
  85.  *   2.4
  90.  *   2.7
  95.  *   2.9
 100.  *   2.8
 105.  *   2.7
 110.  *   2.8
 115.  *   2.6
 120.  *   2.6
 125.  *   2.7
 130.  *   2.5
 135.  *   2.4
 140.  *   2.4
 145.  *   2.1
 150.  *   2.2
 155.  *   2.2
 160.  *   2.1
 165.  *   2.1
 170.  *   2.2
 175.  *   2.2
 180.  *   2.1
 185.  *   2.1
 190.  *   2.0
 195.  *   2.2
 200.  *   2.1
 205.  *   2.2
1
                                                                                                                            PAGE  6
      JOB: Site 3 No Build 2014 PM - 3NBPM14.DAT                RUN: Site 3 No Build 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   2.3
 215.  *   2.5
 220.  *   2.4
 225.  *   2.5
 230.  *   2.6
 235.  *   2.7
 240.  *   2.8
 245.  *   2.8
 250.  *   2.8
 255.  *   2.6
 260.  *   2.3
 265.  *   1.9
 270.  *   1.5
 275.  *   1.0
 280.  *    .6
 285.  *    .3
 290.  *    .2
 295.  *    .2
 300.  *    .1
 305.  *    .1
 310.  *    .1
 315.  *    .1
 320.  *    .1
 325.  *    .1
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   2.9
 DEGR. *   95

 THE HIGHEST CONCENTRATION IS    4.40 PPM AT   65 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    4.10 PPM AT  280 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS    3.70 PPM AT  285 DEGREES FROM REC3 .
```

```
Site 3 No Build 2030 PM - 3NBPM30.DAT   60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 No Build 2030 PM                  28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    1515 9.2   0  44   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    1515 9.2   0  44   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    1515 9.2   0  44   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    1515 9.2   0  44   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    1515 9.2   0  44   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    1515 9.2   0  44   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    1515 9.2   0  44   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    1515 9.2   0  44   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        89       2.0 1515   84.1 1394 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    2195 9.2   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    2195 9.2   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    2195 9.2   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    2195 9.2   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    2195 9.2   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    2195 9.2   0  44   30.
  1
```

```
SB        Rt8 departAG   791.  1427.   995.  1367.    2195 9.2   0  44   30.
  1
EB        Rt1 aprch AG  -757.  1920.  -322.  1944.    2740 9.2   0  56   30.
  1
EB        Rt1 aprch AG  -322.  1944.   -72.  1967.    2740 9.2   0  56   30.
  1
EB        Rt1 aprch AG   -72.  1967.   233.  2014.    2740 9.2   0  56   30.
  2
EB        Rt1 aprch AG   162.  2003.   -17.  1976.      0.  36   3
       120        39       2.0 2740   84.1 1563 1 3
  1
EB        Rt1 departAG   234.  2016.  1198.  2281.    2995 9.2   0  56   30.
  1
WB        Rt1 aprch AG  1187.  2341.   752.  2213.    3660 9.2   0  68   30.
  1
WB        Rt1 thru  AG   752.  2213.   221.  2064.    2725 9.2   0  44   30.
  1
WB        Rt1 thru  AG   221.  2064.    89.  2037.    2725 9.2   0  44   30.
  1
WB        Rt1 thru  AG    87.  2035.  -118.  2009.    2725 9.2   0  56   30.
  1
WB        Rt1 thru  AG  -118.  2009.  -758.  1962.    2725 9.2   0  56   30.
  1
WB        Rt1 left  AG   607.  2149.   205.  2045.     935 9.2   0  44   30.
  2
EB        Rt1 left  AG   296.  2069.   549.  2134.      0.  24   2
       120        89       2.0  935   84.1 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 3 No Build 2030 PM - 3NBPM30.DAT                RUN: Site 3 No Build 2030 PM
      DATE: 05/06/2009   TIME: 08:52:59.98


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *     251.   283. AG   1515.   9.2    .0 44.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *     168.   287. AG   1515.   9.2    .0 44.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *     128.   300. AG   1515.   9.2    .0 44.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *     120.   309. AG   1515.   9.2    .0 44.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *      97.   321. AG   1515.   9.2    .0 44.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *     122.   332. AG   1515.   9.2    .0 44.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *      67.   338. AG   1515.   9.2    .0 44.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *     110.   349. AG   1515.   9.2    .0 44.0
       9. NB        Rt8 aprch *    273.0    1978.0    1255.7   -2870.1 *    4947.   169. AG    335. 100.0    .0 24.0 2.42 251.3
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *     189.   161. AG   2195.   9.2    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *     126.   153. AG   2195.   9.2    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *      92.   142. AG   2195.   9.2    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *     123.   130. AG   2195.   9.2    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *     146.   117. AG   2195.   9.2    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *     188.   108. AG   2195.   9.2    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *     213.   106. AG   2195.   9.2    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   2740.   9.2    .0 56.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   2740.   9.2    .0 56.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *     309.    81. AG   2740.   9.2    .0 56.0
      20. EB        Rt1 aprch *    162.0    2003.0     -70.8    1967.9 *     235.   261. AG    220. 100.0    .0 36.0  .91  12.0
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   2995.   9.2    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *     453.   254. AG   3660.   9.2    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *     552.   254. AG   2725.   9.2    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *     135.   258. AG   2725.   9.2    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *     207.   263. AG   2725.   9.2    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   2725.   9.2    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *     415.   255. AG    935.   9.2    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0    1438.9    2362.6 *    1180.    76. AG    335. 100.0    .0 24.0 1.22  59.9
1
                                                                                                                 PAGE  2
      JOB: Site 3 No Build 2030 PM - 3NBPM30.DAT                RUN: Site 3 No Build 2030 PM
      DATE: 05/06/2009   TIME: 08:52:59.98

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       9. NB        Rt8 aprch *     120       89       2.0      1515       1394      84.10      1        3
      20. EB        Rt1 aprch *     120       39       2.0      2740       1563      84.10      1        3
      28. EB        Rt1 left  *     120       89       2.0       935       1700      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0        5.0   *
      2. SW 164 W             *         8.0     1953.0        5.0   *
      3. SW 82 W              *        90.0     1961.0        5.0   *
      4. SW CNR               *       174.0     1953.0        5.0   *
      5. SW 82 S              *       218.0     1880.0        5.0   *
      6. SW 164 S             *       245.0     1804.0        5.0   *
      7. SW MID S             *       281.0     1726.0        5.0   *
      8. SE MID S             *       388.0     1751.0        5.0   *
      9. SE 164 S             *       338.0     1834.0        5.0   *
     10. SE 82 S              *       315.0     1914.0        5.0   *
     11. SE CNR               *       304.0     1995.0        5.0   *
     12. SE 82 E              *       376.0     2022.0        5.0   *
     13. SE 164 E             *       454.0     2045.0        5.0   *
     14. SE MID E             *       571.0     2079.0        5.0   *
     15. NE MID E             *       519.0     2169.0        5.0   *
     16. NE 164 E             *       374.0     2130.0        5.0   *
     17. NE 82 E              *       295.0     2110.0        5.0   *
     18. N CNR                *       215.0     2090.0        5.0   *
     19. NW 82 W              *       136.0     2072.0        5.0   *
     20. NW 164 W             *        54.0     2058.0        5.0   *
     21. NW MID W             *       -88.0     2040.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 3 No Build 2030 PM - 3NBPM30.DAT                RUN: Site 3 No Build 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.3   2.0   1.8   1.0   1.1   1.4   2.0    .7   1.0   1.0   1.6   1.9   1.9   1.9    .0    .0    .0    .0    .0    .0
   5.  *   1.3   2.0   1.8   1.1   1.4   1.7   2.1    .7    .8   1.0   1.5   1.9   1.9   1.9    .0    .0    .0    .0    .0    .0
  10.  *   1.3   2.0   1.7   1.0   1.6   1.9   2.3    .6    .8   1.0   1.7   1.9   1.9   1.8    .1    .0    .0    .0    .0    .0
```

```
 15.  *   1.3   2.0   1.7   1.1   1.5   1.9   2.2    .5    .8   1.0   1.8   1.9   2.0   2.0    .1    .1    .0    .0    .0    .0
 20.  *   1.3   2.0   1.8   1.3   1.8   2.1   2.5    .5    .8   1.1   1.9   2.0   2.0   2.0    .1    .1    .1    .0    .0    .0
 25.  *   1.4   2.1   1.8   1.2   1.8   2.1   2.3    .5    .8   1.1   1.9   2.0   2.1   2.1    .1    .1    .1    .0    .0    .0
 30.  *   1.5   2.1   1.8   1.4   2.1   2.2   2.1    .6    .8   1.1   2.0   2.2   2.2   2.1    .1    .1    .1    .0    .1    .0
 35.  *   1.6   2.2   2.1   1.5   2.2   2.3   2.0    .6    .7   1.1   2.0   2.2   2.2   2.3    .1    .1    .1    .1    .1    .0
 40.  *   1.8   2.3   2.0   1.7   2.3   2.1   2.0    .6    .9   1.1   2.2   2.4   2.3   2.3    .2    .1    .1    .1    .1    .0
 45.  *   1.8   2.4   2.3   1.8   2.2   2.2   2.0    .6    .8   1.1   2.2   2.5   2.5   2.5    .2    .2    .1    .1    .1    .0
 50.  *   2.0   2.6   2.4   2.1   2.3   2.1   2.0    .5    .8   1.2   2.4   2.5   2.5   2.6    .3    .2    .2    .1    .2    .1
 55.  *   2.4   2.9   2.5   2.4   2.3   2.0   1.9    .4    .7   1.0   2.3   2.6   2.7   2.7    .6    .5    .4    .3    .3    .3
 60.  *   2.5   3.2   2.8   2.6   2.2   1.8   1.8    .3    .5   1.0   2.3   2.6   2.7   2.7    .9    .9    .8    .8    .6    .5
 65.  *   2.9   3.4   2.9   2.5   2.1   1.8   1.8    .2    .5    .8   2.3   2.5   2.5   2.5   1.3   1.2   1.2   1.1   1.0    .9
 70.  *   3.0   3.2   2.9   2.3   1.9   1.6   1.6    .0    .3    .6   2.0   2.2   2.2   2.3   1.8   1.9   1.8   1.6   1.5   1.5
 75.  *   2.9   3.0   2.6   2.2   1.7   1.5   1.5    .0    .2    .4   1.4   1.8   1.8   1.8   2.4   2.4   2.3   2.2   1.9   1.7
 80.  *   2.8   3.0   2.5   1.6   1.6   1.2   1.4    .0    .0    .2   1.1   1.3   1.4   1.4   2.6   2.9   2.9   2.6   2.4   2.3
 85.  *   2.4   2.0   1.7   1.3   1.3   1.3   1.5    .0    .0    .0    .7    .9    .9   1.0   3.0   3.2   3.1   2.9   2.5   2.5
 90.  *   1.7   1.5   1.3   1.2   1.3   1.3   1.5    .0    .0    .0    .3    .5    .5    .6   3.1   3.1   3.1   2.9   2.7   2.3
 95.  *   1.1   1.2    .9   1.0   1.3   1.2   1.6    .0    .1    .0    .1    .2    .3    .3   3.1   3.2   3.1   2.8   2.4   2.2
100.  *    .7    .8    .8   1.1   1.4   1.3   1.7    .0    .1    .0    .1    .2    .2    .2   2.9   3.0   3.0   2.5   2.2   2.3
105.  *    .7    .6    .6   1.1   1.4   1.3   1.6    .0    .1    .0    .0    .1    .1    .2   2.8   3.0   2.9   2.3   2.1   2.2
110.  *    .5    .5    .7   1.1   1.3   1.4   1.8    .1    .1    .0    .0    .1    .1    .1   2.7   2.8   2.8   2.2   2.1   2.3
115.  *    .3    .5    .6   1.1   1.4   1.4   1.9    .1    .1    .0    .0    .1    .1    .1   2.7   2.7   2.7   2.0   1.9   2.1
120.  *    .3    .5    .8   1.2   1.5   1.7   1.9    .1    .1    .0    .0    .1    .1    .1   2.6   2.6   2.5   2.0   2.0   2.2
125.  *    .3    .5    .8   1.3   1.6   1.9   2.1    .5    .1    .0    .0    .1    .1    .1   2.3   2.4   2.4   1.7   1.9   2.3
130.  *    .3    .4    .7   1.1   1.5   1.8   1.9    .7    .3    .0    .0    .0    .1    .1   2.3   2.3   2.3   1.9   2.0   2.2
135.  *    .3    .3    .6   1.2   1.8   1.7   1.7    .7    .6    .0    .0    .0    .0    .1   2.3   2.2   2.2   1.7   1.9   2.2
140.  *    .3    .4    .5   1.2   1.8   1.6   1.4    .9    .7    .1    .0    .0    .0    .0   2.2   2.2   2.2   1.8   2.2   2.2
145.  *    .3    .4    .4   1.1   1.6   1.3   1.3   1.0    .9    .3    .1    .0    .0    .0   2.2   2.2   2.2   1.8   2.3   2.2
150.  *    .3    .3    .4   1.0   1.6   1.2   1.3    .9   1.1    .7    .2    .0    .0    .0   2.2   2.2   2.3   2.3   2.3   2.1
155.  *    .2    .3    .4    .8   1.2   1.1   1.1   1.0   1.3   1.1    .4    .1    .0    .0   2.3   2.3   2.3   2.6   2.2   2.0
160.  *    .2    .3    .3    .7   1.2   1.0   1.1   1.3   1.5   1.4    .8    .2    .1    .0   2.4   2.4   2.6   2.8   2.3   2.0
165.  *    .1    .2    .3    .7    .8    .8    .9   1.4   1.8   1.7   1.4    .3    .2    .1   2.4   2.5   2.7   2.7   2.0   2.0
170.  *    .1    .1    .2    .4    .7    .6    .7   1.5   2.0   2.0   1.5    .4    .3    .2   2.5   2.7   3.1   2.7   2.0   1.9
175.  *    .0    .1    .1    .2    .4    .4    .5   1.7   2.3   2.0   1.8    .6    .3    .2   2.4   2.6   3.0   2.5   1.8   1.8
180.  *    .0    .0    .1    .1    .2    .2    .3   1.6   2.1   2.1   1.7    .7    .4    .2   2.5   2.7   2.8   2.1   1.7   1.7
185.  *    .0    .0    .0    .0    .1    .1    .2   1.6   2.1   2.3   1.9    .7    .4    .2   2.5   2.8   2.9   1.8   1.6   1.7
190.  *    .0    .0    .0    .0    .0    .0    .1   1.7   2.0   2.0   1.9    .7    .3    .2   2.5   2.8   2.5   1.5   1.6   1.7
195.  *    .0    .1    .0    .0    .0    .0    .0   1.5   2.0   1.9   1.8    .9    .5    .3   2.5   3.0   2.3   1.5   1.7   1.7
200.  *    .1    .1    .0    .0    .0    .0    .0   1.4   1.8   2.0   1.8    .8    .6    .3   2.5   2.9   2.2   1.5   1.7   1.7
205.  *    .1    .1    .0    .0    .0    .0    .0   1.4   1.8   1.7   1.7    .9    .6    .3   2.7   2.8   2.1   1.7   1.8   1.7
1
                                                                                                                       PAGE  4
      JOB: Site 3 No Build 2030 PM - 3NBPM30.DAT                RUN: Site 3 No Build 2030 PM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .1    .1    .1    .0    .0    .0    .0   1.3   1.8   1.8   1.5    .9    .6    .3   2.7   2.8   2.0   1.7   1.8   1.8
215.  *    .1    .1    .1    .0    .0    .0    .0   1.3   1.7   1.8   1.4    .9    .6    .3   3.1   3.0   1.9   1.7   1.9   1.9
220.  *    .1    .1    .1    .0    .0    .0    .0   1.4   1.7   1.7   1.4    .9    .6    .4   3.1   2.9   1.9   1.7   1.9   1.7
225.  *    .1    .1    .1    .0    .0    .0    .0   1.3   1.7   1.7   1.3    .7    .4    .4   3.1   2.9   2.0   1.8   2.0   1.8
230.  *    .1    .1    .1    .0    .0    .0    .0   1.3   1.7   1.7   1.2    .7    .6    .5   3.2   2.8   2.0   1.8   2.1   1.9
235.  *    .2    .2    .1    .0    .0    .0    .0   1.3   1.6   1.7   1.2   1.0    .6    .6   3.1   2.6   2.2   2.1   1.9   1.9
240.  *    .2    .3    .2    .0    .0    .0    .0   1.3   1.7   1.7   1.2    .9    .8    .6   3.2   2.5   2.0   2.0   2.1   2.0
245.  *    .4    .5    .4    .0    .0    .0    .0   1.4   1.7   1.8   1.4   1.2   1.1    .9   2.9   2.5   2.1   2.2   2.1   2.0
250.  *    .5    .9    .7    .2    .0    .0    .0   1.3   1.6   1.7   1.6   1.3   1.2   1.4   2.7   2.2   2.0   2.0   2.0   1.9
255.  *    .9   1.1   1.1    .5    .0    .0    .0   1.3   1.6   1.6   2.1   1.8   2.0   2.1   2.4   2.1   1.7   1.7   1.9   1.8
260.  *   1.2   1.6   1.4    .6    .1    .0    .0   1.3   1.5   2.1   2.0   2.0   2.4   2.5   2.0   1.5   1.5   1.4   1.5   1.6
265.  *   1.5   1.9   1.8   1.1    .3    .0    .0   1.3   1.8   2.1   2.4   2.2   2.3   2.8   1.3   1.2   1.2   1.2   1.3   1.3
270.  *   1.7   2.3   2.1   1.3    .4    .2    .0   1.3   2.0   2.3   2.5   2.3   2.4   2.7    .7    .7    .5    .9    .9   1.1
275.  *   1.9   2.5   2.4   1.6    .6    .3    .2   1.5   2.1   2.5   2.4   2.3   2.3   2.8    .4    .4    .4    .4    .4    .7
280.  *   1.8   2.5   2.6   1.7    .7    .3    .2   1.6   2.2   2.8   2.2   2.1   2.4   2.4    .3    .2    .1    .3    .3    .4
285.  *   1.9   2.6   2.7   1.8    .8    .5    .3   1.7   2.4   2.6   2.0   2.1   2.3   2.4    .2    .1    .1    .1    .2    .3
290.  *   1.8   2.5   2.4   1.7    .8    .7    .3   2.0   2.4   2.5   2.0   1.9   2.3   2.4    .1    .1    .1    .1    .1    .2
295.  *   1.8   2.4   2.4   1.6    .9    .5    .3   2.0   2.4   2.4   1.9   1.8   2.1   2.4    .1    .1    .1    .1    .1    .1
300.  *   1.6   2.4   2.2   1.6    .9    .6    .5   2.0   2.4   2.2   1.6   1.9   2.1   2.2    .1    .1    .1    .0    .1    .1
305.  *   1.5   2.2   2.1   1.6    .7    .6    .5   1.9   2.4   2.5   1.5   1.8   2.0   2.2    .1    .1    .1    .0    .1    .1
310.  *   1.4   2.2   2.1   1.5    .8    .5    .5   2.0   2.5   2.3   1.4   1.9   2.0   2.1    .1    .1    .0    .0    .1    .1
315.  *   1.4   2.1   1.9   1.4    .8    .5    .3   1.9   2.4   2.0   1.4   1.8   2.0   2.1    .1    .1    .0    .0    .0    .1
320.  *   1.4   2.0   1.9   1.3    .7    .6    .5   1.8   2.3   2.0   1.3   1.9   1.9   1.9    .1    .0    .0    .0    .0    .1
325.  *   1.3   2.0   1.9   1.4    .7    .6    .7   1.7   2.2   1.8   1.3   1.9   1.9   1.9    .0    .0    .0    .0    .0    .1
330.  *   1.3   1.9   1.7   1.4    .9    .6    .8   1.5   2.0   1.7   1.2   1.9   1.9   1.9    .0    .0    .0    .0    .0    .0
335.  *   1.2   1.9   1.7   1.2    .7    .6    .8   1.3   1.9   1.6   1.3   1.9   1.9   2.0    .0    .0    .0    .0    .0    .0
340.  *   1.3   2.0   1.9   1.2    .8    .7    .9   1.1   1.9   1.4   1.4   2.0   2.0   2.0    .0    .0    .0    .0    .0    .0
345.  *   1.3   2.0   1.9   1.1    .9   1.0   1.3    .9   1.3   1.2   1.4   2.0   2.0   2.0    .0    .0    .0    .0    .0    .0
350.  *   1.3   2.0   1.8   1.1   1.1   1.3   1.6    .6   1.1   1.1   1.5   2.0   2.0   2.0    .0    .0    .0    .0    .0    .0
355.  *   1.3   2.0   1.9   1.0   1.1   1.2   1.8    .6   1.0   1.1   1.6   1.9   1.9   2.0    .0    .0    .0    .0    .0    .0
360.  *   1.3   2.0   1.8   1.0   1.1   1.4   2.0    .7   1.0   1.0   1.6   1.9   1.9   1.9    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   3.0   3.4   2.9   2.6   2.3   2.3   2.5   2.0   2.5   2.8   2.5   2.6   2.7   2.8   3.2   3.2   3.1   2.9   2.7   2.5
DEGR. *   70    65    65    60    40    35    20   290   310   280   270    55    55   275   240    85   170    85    90    85

1
                                                                                                                       PAGE  5
      JOB: Site 3 No Build 2030 PM - 3NBPM30.DAT                RUN: Site 3 No Build 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21
------*------
  0.  *    .0
  5.  *    .0
 10.  *    .0
 15.  *    .0
 20.  *    .1
 25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .1
  55.  *    .2
  60.  *    .4
  65.  *    .7
  70.  *   1.0
  75.  *   1.6
  80.  *   2.0
  85.  *   2.4
  90.  *   2.4
  95.  *   2.4
 100.  *   2.5
 105.  *   2.3
 110.  *   2.4
 115.  *   2.2
 120.  *   2.2
 125.  *   2.2
 130.  *   2.0
 135.  *   2.0
 140.  *   1.7
 145.  *   1.7
 150.  *   1.8
 155.  *   1.8
 160.  *   1.7
 165.  *   1.7
 170.  *   1.5
 175.  *   1.5
 180.  *   1.4
 185.  *   1.3
 190.  *   1.2
 195.  *   1.3
 200.  *   1.3
 205.  *   1.4
1
                                                                                                                              PAGE  6
      JOB: Site 3 No Build 2030 PM - 3NBPM30.DAT                RUN: Site 3 No Build 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   1.4
 215.  *   1.5
 220.  *   1.5
 225.  *   1.6
 230.  *   1.7
 235.  *   1.7
 240.  *   1.7
 245.  *   1.9
 250.  *   1.8
 255.  *   1.7
 260.  *   1.7
 265.  *   1.4
 270.  *   1.2
 275.  *    .8
 280.  *    .4
 285.  *    .3
 290.  *    .2
 295.  *    .2
 300.  *    .1
 305.  *    .1
 310.  *    .0
 315.  *    .0
 320.  *    .1
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   2.5
 DEGR. *  100

 THE HIGHEST CONCENTRATION IS    3.40 PPM AT   65 DEGREES FROM REC2 .
 THE 2ND HIGHEST CONCENTRATION IS    3.20 PPM AT  240 DEGREES FROM REC15.
 THE 3RD HIGHEST CONCENTRATION IS    3.20 PPM AT   85 DEGREES FROM REC16.
```

```
Site 3 Opt 1/2 2014 AM - 3B1AM14.DAT    60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 Opt 1/2 2014 AM                   28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    259311.4   0  66   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    259311.4   0  66   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    259311.4   0  66   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    259311.4   0  66   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    259311.4   0  66   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    259311.4   0  66   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    259311.4   0  66   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    259311.4   0  66   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        92       2.0 2593  102.2 1555 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    162511.4   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    162511.4   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    162511.4   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    162511.4   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    162511.4   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    162511.4   0  44   30.
  1
```

```
SB        Rt8 departAG   791.  1427.   995.  1367.    162511.4   0  44   30.
  1
EB        Rt1 aprch AG  -757.  1920.  -322.  1944.    318311.4   0  68   30.
  1
EB        Rt1 aprch AG  -322.  1944.   -72.  1967.    318311.4   0  68   30.
  1
EB        Rt1 aprch AG   -72.  1967.   233.  2014.    318311.4   0  68   30.
  2
EB        Rt1 aprch AG   162.  2003.   -17.  1976.      0.  36   3
       120        72       2.0 3183  102.2 1478 1 3
  1
EB        Rt1 departAG   234.  2016.  1198.  2281.    334211.4   0  56   30.
  1
WB        Rt1 aprch AG  1187.  2341.   752.  2213.    287511.4   0  68   30.
  1
WB        Rt1 thru  AG   752.  2213.   221.  2064.    264711.4   0  44   30.
  1
WB        Rt1 thru  AG   221.  2064.    89.  2037.    264711.4   0  44   30.
  1
WB        Rt1 thru  AG    87.  2035.  -118.  2009.    264711.4   0  56   30.
  1
WB        Rt1 thru  AG  -118.  2009.  -758.  1962.    264711.4   0  56   30.
  1
WB        Rt1 left  AG   607.  2149.   205.  2045.     22811.4   0  44   30.
  2
EB        Rt1 left  AG   296.  2069.   549.  2134.      0.  24   2
       120        86       2.0  228  102.2 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

```
1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 3 Opt 1/2 2014 AM - 3B1AM14.DAT                 RUN: Site 3 Opt 1/2 2014 AM
      DATE: 05/06/2009   TIME: 09:52:30.30


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *    251.   283. AG   2593.  11.4    .0 66.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *    168.   287. AG   2593.  11.4    .0 66.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *    128.   300. AG   2593.  11.4    .0 66.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *    120.   309. AG   2593.  11.4    .0 66.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *     97.   321. AG   2593.  11.4    .0 66.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *    122.   332. AG   2593.  11.4    .0 66.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *     67.   338. AG   2593.  11.4    .0 66.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *    110.   349. AG   2593.  11.4    .0 66.0
       9. NB        Rt8 aprch *    273.0    1978.0    2401.6   -8523.3 *   *****   169. AG    420. 100.0    .0 24.0 4.18 544.3
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *    189.   161. AG   1625.  11.4    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *    126.   153. AG   1625.  11.4    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *     92.   142. AG   1625.  11.4    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *    123.   130. AG   1625.  11.4    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *    146.   117. AG   1625.  11.4    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *    188.   108. AG   1625.  11.4    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *    213.   106. AG   1625.  11.4    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *    436.    87. AG   3183.  11.4    .0 68.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *    251.    85. AG   3183.  11.4    .0 68.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *    309.    81. AG   3183.  11.4    .0 68.0
      20. EB        Rt1 aprch *    162.0    2003.0   -5531.3    1144.2 *   5758.   261. AG    493. 100.0    .0 36.0 1.96 292.5
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *   1000.    75. AG   3342.  11.4    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *    453.   254. AG   2875.  11.4    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *    552.   254. AG   2647.  11.4    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *    135.   258. AG   2647.  11.4    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *    207.   263. AG   2647.  11.4    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *    642.   266. AG   2647.  11.4    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *    415.   255. AG    228.  11.4    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0     347.9    2082.3 *     54.    76. AG    393. 100.0    .0 24.0  .27   2.7
1
                                                                                                                     PAGE  2
      JOB: Site 3 Opt 1/2 2014 AM - 3B1AM14.DAT                 RUN: Site 3 Opt 1/2 2014 AM
      DATE: 05/06/2009   TIME: 09:52:30.30

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------

       9. NB        Rt8 aprch *     120       92       2.0       2593       1555     102.20      1        3
      20. EB        Rt1 aprch *     120       72       2.0       3183       1478     102.20      1        3
      28. EB        Rt1 left  *     120       86       2.0        228       1700     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z       *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0       5.0    *
      2. SW 164 W             *         8.0     1953.0       5.0    *
      3. SW 82 W              *        90.0     1961.0       5.0    *
      4. SW CNR               *       174.0     1953.0       5.0    *
      5. SW 82 S              *       218.0     1880.0       5.0    *
      6. SW 164 S             *       245.0     1804.0       5.0    *
      7. SW MID S             *       281.0     1726.0       5.0    *
      8. SE MID S             *       388.0     1751.0       5.0    *
      9. SE 164 S             *       338.0     1834.0       5.0    *
     10. SE 82 S              *       315.0     1914.0       5.0    *
     11. SE CNR               *       304.0     1995.0       5.0    *
     12. SE 82 E              *       376.0     2022.0       5.0    *
     13. SE 164 E             *       454.0     2045.0       5.0    *
     14. SE MID E             *       571.0     2079.0       5.0    *
     15. NE MID E             *       519.0     2169.0       5.0    *
     16. NE 164 E             *       374.0     2130.0       5.0    *
     17. NE 82 E              *       295.0     2110.0       5.0    *
     18. N CNR                *       215.0     2090.0       5.0    *
     19. NW 82 W              *       136.0     2072.0       5.0    *
     20. NW 164 W             *        54.0     2058.0       5.0    *
     21. NW MID W             *       -88.0     2040.0       5.0    *
1
                                                                                                                     PAGE  3
      JOB: Site 3 Opt 1/2 2014 AM - 3B1AM14.DAT                 RUN: Site 3 Opt 1/2 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*----------------------------------------------------------------------------------------------------------------------
   0.  *   3.2   3.2   3.1   1.5   1.3   1.8   2.3    .8   1.3   1.6   1.9   1.6   1.7   1.7    .0    .0    .0    .0    .0    .0
   5.  *   3.2   3.2   2.9   1.6   1.5   2.1   2.5    .8   1.1   1.4   1.9   1.6   1.7   1.6    .1    .0    .0    .0    .0    .0
  10.  *   3.1   3.2   2.9   1.3   1.7   2.3   2.6    .7   1.0   1.2   1.9   1.6   1.7   1.7    .1    .1    .0    .0    .0    .0
```

```
  15. *   3.2   3.2   3.0   1.4   1.7   2.2   2.7    .7    .8   1.1   2.0   1.7   1.8   1.7    .1    .1    .0    .0    .0    .0
  20. *   3.4   3.3   3.0   1.5   2.1   2.4   2.8    .7    .8   1.1   1.9   1.7   1.8   1.8    .1    .1    .1    .0    .0    .0
  25. *   3.3   3.4   3.1   1.6   2.3   2.6   2.5    .7    .8   1.1   2.0   1.9   1.9   1.8    .1    .1    .1    .0    .1    .0
  30. *   3.5   3.4   3.3   1.7   2.3   2.4   2.5    .7    .6   1.0   2.0   1.9   2.0   1.9    .1    .1    .1    .1    .1    .0
  35. *   3.8   3.6   3.3   1.9   2.4   2.4   2.5    .6    .7   1.0   2.0   2.0   2.0   2.1    .2    .1    .1    .1    .1    .0
  40. *   4.0   3.8   3.4   2.1   2.5   2.5   2.4    .6    .8   1.0   2.0   2.1   2.1   2.2    .2    .2    .1    .1    .1    .0
  45. *   4.2   4.0   3.5   2.1   2.5   2.5   2.4    .6    .8   1.1   2.0   2.2   2.2   2.3    .2    .2    .2    .1    .1    .1
  50. *   4.4   4.2   3.7   2.4   2.6   2.4   2.3    .4    .8   1.1   2.1   2.3   2.3   2.5    .3    .3    .2    .2    .2    .1
  55. *   4.7   4.3   3.8   2.6   2.6   2.4   2.1    .5    .7   1.0   2.2   2.4   2.5   2.5    .6    .5    .3    .3    .2    .3
  60. *   4.9   4.5   3.9   2.7   2.5   2.2   2.1    .4    .7    .8   2.1   2.5   2.5   2.6    .9    .8    .7    .6    .5    .4
  65. *   5.3   4.8   3.8   2.7   2.2   2.0   2.1    .3    .6    .7   2.0   2.3   2.4   2.5   1.3   1.1   1.1   1.0   1.0    .8
  70. *   5.0   4.6   3.7   2.8   2.2   2.0   1.9    .1    .5    .6   1.8   2.1   2.2   2.2   1.7   1.6   1.5   1.4   1.4   1.2
  75. *   4.9   4.3   3.4   2.3   1.9   1.8   1.9    .1    .4    .3   1.4   1.9   1.8   1.9   2.0   2.1   2.0   1.9   1.8   1.7
  80. *   4.6   3.7   2.8   2.0   1.8   1.8   1.8    .1    .3    .1   1.0   1.3   1.4   1.5   2.3   2.3   2.3   2.4   2.2   2.2
  85. *   3.8   3.0   2.3   1.6   1.7   1.6   2.0    .2    .2    .2    .6    .9   1.0   1.0   2.5   2.7   2.5   2.6   2.5   2.4
  90. *   2.9   2.4   1.8   1.4   1.7   1.7   1.9    .2    .2    .1    .3    .5    .6    .6   2.6   2.7   2.7   2.8   2.7   2.6
  95. *   2.2   1.8   1.5   1.4   1.6   1.6   2.0    .2    .2    .1    .2    .3    .4    .4   2.6   2.6   2.7   2.7   2.6   2.7
 100. *   1.9   1.5   1.3   1.3   1.6   1.8   2.0    .2    .2    .1    .1    .2    .3    .3   2.5   2.5   2.6   2.6   2.5   2.8
 105. *   1.2   1.2   1.2   1.3   1.7   1.8   2.4    .2    .2    .1    .2    .1    .2    .2   2.4   2.4   2.5   2.5   2.4   2.7
 110. *    .8   1.2   1.0   1.5   1.9   2.2   2.4    .4    .3    .1    .1    .1    .1    .2   2.3   2.2   2.5   2.3   2.4   3.1
 115. *    .8   1.0   1.0   1.4   2.1   2.3   2.5    .7    .4    .1    .1    .1    .1    .1   2.2   2.1   2.5   2.3   2.4   3.2
 120. *    .5    .9   1.2   1.4   2.3   2.3   2.6    .8    .6    .2    .1    .1    .1    .1   2.1   2.1   2.5   2.2   2.6   3.3
 125. *    .5   1.0   1.2   1.6   2.4   2.4   2.4   1.1   1.0    .3    .2    .1    .1    .1   2.0   1.9   2.5   2.1   2.7   3.4
 130. *    .4    .7   1.1   1.9   2.3   2.4   2.3   1.5   1.1    .5    .2    .2    .1    .1   1.9   1.9   2.5   2.2   2.8   3.3
 135. *    .4    .5   1.0   1.9   2.4   2.1   2.0   1.7   1.4    .8    .3    .1    .2    .1   1.8   1.8   2.5   2.2   2.8   3.6
 140. *    .3    .5    .9   1.6   2.3   2.0   1.8   1.8   1.5    .9    .3    .2    .1    .1   1.8   1.9   2.5   2.5   3.2   3.3
 145. *    .4    .4    .6   1.5   2.1   1.7   1.5   1.9   1.9   1.0    .7    .2    .1    .1   1.9   1.9   2.6   2.9   3.4   3.1
 150. *    .4    .5    .6   1.3   1.8   1.5   1.4   1.8   2.1   1.3    .9    .2    .2    .1   1.9   1.8   2.6   3.2   3.1   3.0
 155. *    .4    .5    .6   1.1   1.6   1.3   1.3   1.9   2.3   1.9   1.2    .4    .2    .1   1.9   1.9   3.1   3.7   3.1   2.9
 160. *    .4    .5    .5    .9   1.4   1.2   1.4   2.2   2.4   2.4   1.5    .5    .3    .3   2.0   2.0   3.5   3.6   3.1   3.0
 165. *    .3    .4    .4    .8   1.0   1.0   1.2   2.2   2.8   2.9   2.1    .8    .5    .3   2.2   2.4   3.7   3.7   2.9   2.9
 170. *    .2    .3    .3    .5    .9    .8   1.0   2.5   3.1   3.1   2.5    .9    .6    .3   2.2   2.6   3.9   3.5   2.9   2.8
 175. *    .2    .2    .2    .3    .4    .5    .7   2.6   3.2   3.2   2.8   1.0    .7    .5   2.1   2.7   4.0   3.3   2.7   2.7
 180. *    .1    .2    .1    .2    .2    .3    .4   2.5   3.1   3.3   2.9   1.1    .7    .4   2.3   2.7   3.6   2.4   2.6   2.6
 185. *    .1    .1    .0    .1    .1    .1    .2   2.2   3.1   3.1   2.9   1.2    .8    .5   2.3   3.0   3.5   2.1   2.5   2.5
 190. *    .1    .1    .1    .0    .0    .1    .1   2.3   3.0   3.0   2.8   1.1    .7    .5   2.2   2.9   3.3   2.1   2.4   2.4
 195. *    .1    .1    .1    .0    .0    .0    .0   2.3   2.7   2.8   2.7   1.0    .7    .6   2.4   3.0   3.0   1.8   2.4   2.4
 200. *    .1    .2    .1    .0    .0    .0    .0   2.2   2.6   2.9   2.7   1.4    .8    .6   2.3   3.1   2.7   2.0   2.6   2.5
 205. *    .2    .2    .1    .0    .0    .0    .0   2.0   2.4   2.7   2.4   1.2    .8    .6   2.5   2.9   2.6   2.1   2.6   2.6
1
                                                                                                                   PAGE  4
      JOB: Site 3 Opt 1/2 2014 AM - 3B1AM14.DAT                RUN: Site 3 Opt 1/2 2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210. *    .2    .2    .1    .0    .0    .0    .0   2.0   2.4   2.6   2.3   1.3    .8    .6   2.5   3.2   2.7   2.2   2.7   2.8
 215. *    .3    .2    .2    .0    .0    .0    .0   2.1   2.3   2.6   2.2   1.2    .8    .4   2.8   3.0   2.4   2.4   2.9   2.8
 220. *    .3    .2    .2    .0    .0    .0    .0   2.0   2.2   2.4   2.0   1.2    .9    .5   2.8   3.3   2.5   2.6   3.0   2.8
 225. *    .3    .2    .2    .0    .0    .0    .0   1.8   2.2   2.4   2.0   1.1    .9    .6   2.9   3.3   2.5   2.7   3.0   3.1
 230. *    .4    .4    .2    .0    .0    .0    .0   2.0   2.2   2.3   2.0   1.3    .8    .9   3.0   3.3   2.8   2.8   3.1   3.2
 235. *    .5    .6    .4    .0    .0    .0    .0   1.9   2.1   2.3   2.0   1.4   1.2   1.0   3.1   3.4   2.7   3.0   3.3   3.3
 240. *    .8    .8    .7    .1    .0    .0    .0   1.8   2.2   2.4   2.1   1.5   1.2   1.3   3.3   3.5   3.1   3.2   3.4   3.5
 245. *   1.4   1.4   1.0    .3    .1    .0    .0   1.9   2.1   2.4   2.3   1.7   1.6   1.6   3.4   3.4   3.1   3.5   3.6   3.5
 250. *   2.1   2.1   1.8    .7    .2    .1    .0   1.9   2.1   2.5   2.9   2.5   2.5   2.3   3.2   3.2   3.2   3.2   3.5   3.6
 255. *   2.9   3.0   2.5   1.3    .3    .2    .1   2.0   2.4   2.7   3.4   3.0   3.1   3.1   3.0   3.1   2.9   2.9   3.4   3.4
 260. *   3.8   3.8   3.4   2.1    .8    .3    .2   2.1   2.4   3.3   4.1   3.4   3.4   3.4   2.4   2.5   2.4   2.6   2.8   3.2
 265. *   4.6   4.6   4.1   2.7    .9    .5    .3   2.2   3.0   3.5   4.4   3.8   3.4   3.6   1.9   1.8   1.8   2.0   2.3   2.4
 270. *   4.9   5.0   4.6   3.1   1.3    .8    .5   2.6   3.4   3.8   4.5   3.8   3.6   3.5   1.0   1.2   1.3   1.4   1.6   1.7
 275. *   5.1   5.0   4.8   3.2   1.5    .8    .6   2.7   3.4   4.1   4.0   3.3   3.2   3.2    .5    .7    .7    .7   1.1   1.2
 280. *   5.0   5.1   4.6   3.3   1.5    .9    .7   2.6   3.6   4.2   3.8   2.9   2.9   2.7    .3    .3    .4    .4    .5    .7
 285. *   4.8   4.8   4.3   3.2   1.6   1.1    .7   2.8   3.7   4.3   3.3   2.6   2.6   2.3    .2    .2    .1    .1    .3    .4
 290. *   4.7   4.4   4.1   3.0   1.8   1.2    .8   3.0   3.8   4.0   2.8   2.5   2.4   2.1    .2    .1    .1    .1    .2    .2
 295. *   4.4   4.2   3.9   3.0   1.4   1.3    .9   3.2   3.7   3.9   2.4   2.2   2.2   2.1    .2    .1    .1    .1    .1    .2
 300. *   4.1   3.8   3.9   2.8   1.5    .9    .9   3.2   3.9   3.6   2.3   2.2   2.0   2.0    .1    .1    .1    .1    .1    .1
 305. *   3.8   3.7   3.5   2.5   1.5   1.1    .8   3.2   3.6   3.5   2.2   2.4   2.0   1.9    .1    .1    .1    .1    .1    .1
 310. *   3.6   3.5   3.3   2.6   1.4   1.1    .8   3.1   3.6   3.4   2.0   2.1   1.9   1.9    .1    .1    .1    .0    .1    .1
 315. *   3.5   3.6   3.3   2.4   1.3    .9    .7   3.1   3.5   3.3   2.0   2.1   1.8   1.8    .1    .1    .0    .0    .0    .1
 320. *   3.4   3.2   3.1   2.3   1.3    .9    .7   2.9   3.4   3.1   1.9   2.0   1.7   1.8    .1    .0    .0    .0    .0    .1
 325. *   3.4   3.2   3.1   2.2   1.2    .9   1.0   2.9   3.2   2.9   1.9   2.0   1.7   1.8    .0    .0    .0    .0    .0    .1
 330. *   3.1   3.2   3.0   2.2   1.2    .9    .8   2.5   3.2   2.5   1.8   1.9   1.7   1.8    .0    .0    .0    .0    .0    .1
 335. *   3.2   3.2   3.0   2.0   1.1    .9   1.1   2.3   2.7   2.3   1.8   1.9   1.8   1.8    .0    .0    .0    .0    .0    .0
 340. *   3.2   3.2   3.1   2.0   1.1   1.1   1.4   1.9   2.8   2.2   1.9   1.9   1.8   1.8    .0    .0    .0    .0    .0    .0
 345. *   3.2   3.2   3.0   1.8   1.0   1.3   1.7   1.5   2.2   2.0   2.1   1.9   1.7   1.9    .0    .0    .0    .0    .0    .0
 350. *   3.3   3.2   3.1   1.7   1.2   1.3   1.9   1.3   2.0   1.9   2.0   1.8   1.8   1.8    .0    .0    .0    .0    .0    .0
 355. *   3.3   3.2   3.0   1.6   1.4   1.6   2.3   1.1   1.6   1.6   1.9   1.7   1.8   1.8    .0    .0    .0    .0    .0    .0
 360. *   3.2   3.2   3.1   1.5   1.3   1.8   2.3    .8   1.3   1.6   1.9   1.6   1.7   1.7    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   5.3   5.1   4.8   3.3   2.6   2.6   2.8   3.2   3.9   4.3   4.5   3.8   3.6   3.6   3.4   3.5   4.0   3.7   3.6   3.6
 DEGR. *   65    280   275   280   55    25    20    295   300   285   270   265   270   265   245   240   175   155   245   250

1
                                                                                                                   PAGE  5
      JOB: Site 3 Opt 1/2 2014 AM - 3B1AM14.DAT                RUN: Site 3 Opt 1/2 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0. *    .0
   5. *    .0
  10. *    .0
  15. *    .1
  20. *    .1
  25. *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .2
  55.  *    .2
  60.  *    .4
  65.  *    .7
  70.  *   1.2
  75.  *   1.6
  80.  *   2.1
  85.  *   2.4
  90.  *   2.8
  95.  *   3.0
 100.  *   3.3
 105.  *   3.3
 110.  *   3.5
 115.  *   3.3
 120.  *   3.3
 125.  *   3.2
 130.  *   2.8
 135.  *   2.9
 140.  *   2.8
 145.  *   2.8
 150.  *   2.7
 155.  *   2.7
 160.  *   2.7
 165.  *   2.8
 170.  *   2.7
 175.  *   2.6
 180.  *   2.5
 185.  *   2.5
 190.  *   2.4
 195.  *   2.5
 200.  *   2.5
 205.  *   2.6
1
                                                                                                                              PAGE  6
      JOB: Site 3 Opt 1/2 2014 AM - 3B1AM14.DAT                 RUN: Site 3 Opt 1/2 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   2.6
 215.  *   2.9
 220.  *   3.0
 225.  *   3.0
 230.  *   3.2
 235.  *   3.2
 240.  *   3.5
 245.  *   3.6
 250.  *   3.5
 255.  *   3.5
 260.  *   3.0
 265.  *   2.6
 270.  *   1.8
 275.  *   1.1
 280.  *    .8
 285.  *    .3
 290.  *    .2
 295.  *    .2
 300.  *    .1
 305.  *    .1
 310.  *    .1
 315.  *    .1
 320.  *    .1
 325.  *    .1
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   3.6
 DEGR. *  245

 THE HIGHEST CONCENTRATION IS    5.30 PPM AT   65 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    5.10 PPM AT  280 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS    4.80 PPM AT  275 DEGREES FROM REC3 .
```

```
Site 3 Opt 1/2 2030 AM - 3B1AM30.DAT    60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 Opt 1/2 2030 AM                    28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    2475 9.2   0  66   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    2475 9.2   0  66   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    2475 9.2   0  66   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    2475 9.2   0  66   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    2475 9.2   0  66   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    2475 9.2   0  66   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    2475 9.2   0  66   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    2475 9.2   0  66   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        89       2.0 2475   84.1 1555 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    1575 9.2   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    1575 9.2   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    1575 9.2   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    1575 9.2   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    1575 9.2   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    1575 9.2   0  44   30.
  1
```

```
SB         Rt8 departAG   791.  1427.   995.  1367.    1575 9.2   0  44   30.
  1
EB         Rt1 aprch AG  -757.  1920.  -322.  1944.    3050 9.2   0  68   30.
  1
EB         Rt1 aprch AG  -322.  1944.   -72.  1967.    3050 9.2   0  68   30.
  1
EB         Rt1 aprch AG   -72.  1967.   233.  2014.    3050 9.2   0  68   30.
  2
EB         Rt1 aprch AG   162.  2003.   -17.  1976.      0.  36   3
       120        72       2.0 3050   84.1 1651 1 3
  1
EB         Rt1 departAG   234.  2016.  1198.  2281.    3175 9.2   0  56   30.
  1
WB         Rt1 aprch AG  1187.  2341.   752.  2213.    2835 9.2   0  68   30.
  1
WB         Rt1 thru  AG   752.  2213.   221.  2064.    2620 9.2   0  44   30.
  1
WB         Rt1 thru  AG   221.  2064.    89.  2037.    2620 9.2   0  44   30.
  1
WB         Rt1 thru  AG    87.  2035.  -118.  2009.    2620 9.2   0  56   30.
  1
WB         Rt1 thru  AG  -118.  2009.  -758.  1962.    2620 9.2   0  56   30.
  1
WB         Rt1 left  AG   607.  2149.   205.  2045.     215 9.2   0  44   30.
  2
EB         Rt1 left  AG   296.  2069.   549.  2134.      0.  24   2
       120        92       2.0  215   84.1 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 3 Opt 1/2 2030 AM - 3B1AM30.DAT                RUN: Site 3 Opt 1/2 2030 AM
      DATE: 05/06/2009   TIME: 09:54:56.79


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH     EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *     251.   283. AG   2475.   9.2    .0 66.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *     168.   287. AG   2475.   9.2    .0 66.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *     128.   300. AG   2475.   9.2    .0 66.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *     120.   309. AG   2475.   9.2    .0 66.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *      97.   321. AG   2475.   9.2    .0 66.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *     122.   332. AG   2475.   9.2    .0 66.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *      67.   338. AG   2475.   9.2    .0 66.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *     110.   349. AG   2475.   9.2    .0 66.0
       9. NB        Rt8 aprch *    273.0    1978.0    2192.9   -7493.6 *    9664.   169. AG    335. 100.0    .0 24.0 3.54 490.9
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *     189.   161. AG   1575.   9.2    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *     126.   153. AG   1575.   9.2    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *      92.   142. AG   1575.   9.2    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *     123.   130. AG   1575.   9.2    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *     146.   117. AG   1575.   9.2    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *     188.   108. AG   1575.   9.2    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *     213.   106. AG   1575.   9.2    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   3050.   9.2    .0 68.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   3050.   9.2    .0 68.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *     309.    81. AG   3050.   9.2    .0 68.0
      20. EB        Rt1 aprch *    162.0    2003.0   -4432.1    1310.0 *    4646.   261. AG    406. 100.0    .0 36.0 1.68 236.0
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   3175.   9.2    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *     453.   254. AG   2835.   9.2    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *     552.   254. AG   2620.   9.2    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *     135.   258. AG   2620.   9.2    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *     207.   263. AG   2620.   9.2    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   2620.   9.2    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *     415.   255. AG    215.   9.2    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0     348.1    2082.4 *      54.    76. AG    346. 100.0    .0 24.0  .31   2.7
1
                                                                                                                 PAGE  2
      JOB: Site 3 Opt 1/2 2030 AM - 3B1AM30.DAT                RUN: Site 3 Opt 1/2 2030 AM
      DATE: 05/06/2009   TIME: 09:54:56.79

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     120       89       2.0      2475       1555      84.10      1        3
      20. EB        Rt1 aprch *     120       72       2.0      3050       1651      84.10      1        3
      28. EB        Rt1 left  *     120       92       2.0       215       1700      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0        5.0   *
      2. SW 164 W             *         8.0     1953.0        5.0   *
      3. SW 82 W              *        90.0     1961.0        5.0   *
      4. SW CNR               *       174.0     1953.0        5.0   *
      5. SW 82 S              *       218.0     1880.0        5.0   *
      6. SW 164 S             *       245.0     1804.0        5.0   *
      7. SW MID S             *       281.0     1726.0        5.0   *
      8. SE MID S             *       388.0     1751.0        5.0   *
      9. SE 164 S             *       338.0     1834.0        5.0   *
     10. SE 82 S              *       315.0     1914.0        5.0   *
     11. SE CNR               *       304.0     1995.0        5.0   *
     12. SE 82 E              *       376.0     2022.0        5.0   *
     13. SE 164 E             *       454.0     2045.0        5.0   *
     14. SE MID E             *       571.0     2079.0        5.0   *
     15. NE MID E             *       519.0     2169.0        5.0   *
     16. NE 164 E             *       374.0     2130.0        5.0   *
     17. NE 82 E              *       295.0     2110.0        5.0   *
     18. N CNR                *       215.0     2090.0        5.0   *
     19. NW 82 W              *       136.0     2072.0        5.0   *
     20. NW 164 W             *        54.0     2058.0        5.0   *
     21. NW MID W             *       -88.0     2040.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 3 Opt 1/2 2030 AM - 3B1AM30.DAT                RUN: Site 3 Opt 1/2 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
   0.  *   2.7   2.6   2.4   1.2   1.0   1.4   1.9    .6   1.1   1.1   1.6   1.3   1.3   1.3    .0    .0    .0    .0    .0    .0
   5.  *   2.5   2.5   2.4   1.1   1.1   1.5   2.1    .5   1.0   1.0   1.5   1.2   1.3   1.3    .0    .0    .0    .0    .0    .0
  10.  *   2.6   2.6   2.3   1.1   1.4   1.7   2.0    .5    .8    .9   1.5   1.3   1.3   1.3    .1    .0    .0    .0    .0    .0
```

```
  15.  *   2.6   2.5   2.3    .9   1.4   1.8   2.1    .5    .7    .9   1.5   1.3   1.3   1.3    .1    .1    .0    .0    .0    .0
  20.  *   2.6   2.5   2.3   1.2   1.7   2.0   2.0    .4    .7    .8   1.6   1.3   1.4   1.4    .1    .1    .0    .0    .0    .0
  25.  *   2.6   2.7   2.5   1.2   1.6   2.0   1.9    .4    .5    .8   1.6   1.4   1.4   1.4    .1    .1    .1    .0    .0    .0
  30.  *   2.8   2.7   2.5   1.3   1.8   1.9   2.0    .4    .5    .8   1.5   1.4   1.4   1.5    .1    .1    .1    .0    .1    .0
  35.  *   3.1   2.9   2.7   1.5   1.8   1.9   1.8    .5    .5    .8   1.6   1.5   1.5   1.6    .1    .1    .1    .1    .1    .0
  40.  *   3.2   2.9   2.7   1.6   1.9   1.9   1.9    .5    .7    .7   1.5   1.5   1.6   1.7    .2    .1    .1    .1    .1    .0
  45.  *   3.3   3.3   2.9   1.8   1.8   1.8   1.9    .4    .6    .9   1.6   1.6   1.7   1.7    .2    .2    .1    .1    .1    .0
  50.  *   3.6   3.3   2.9   1.8   2.0   1.8   1.9    .4    .6    .9   1.6   1.8   1.8   1.9    .3    .2    .2    .1    .2    .0
  55.  *   3.7   3.4   3.0   2.1   2.0   1.8   1.8    .4    .7    .9   1.7   1.9   1.9   2.0    .5    .3    .3    .2    .2    .3
  60.  *   3.9   3.5   3.1   2.2   1.8   1.7   1.7    .3    .5    .6   1.6   1.8   2.0   2.0    .7    .7    .6    .4    .4    .4
  65.  *   4.1   3.6   3.1   2.2   1.9   1.7   1.7    .3    .5    .6   1.6   1.9   1.8   1.9   1.0    .9    .8    .7    .7    .7
  70.  *   4.0   3.6   3.0   1.9   1.8   1.4   1.5    .1    .3    .4   1.3   1.6   1.8   1.7   1.3   1.2   1.2   1.2   1.1   1.1
  75.  *   3.9   3.2   2.6   1.7   1.7   1.4   1.5    .1    .3    .3   1.0   1.3   1.4   1.4   1.6   1.7   1.5   1.5   1.5   1.3
  80.  *   3.5   3.1   2.2   1.6   1.4   1.4   1.5    .1    .2    .1    .8   1.1   1.1   1.1   2.0   1.9   1.7   1.9   1.8   1.7
  85.  *   3.1   2.3   1.8   1.2   1.3   1.3   1.5    .1    .1    .1    .4    .6    .8    .8   2.0   2.0   1.9   2.2   2.0   1.9
  90.  *   2.4   1.8   1.4   1.1   1.4   1.3   1.7    .1    .1    .1    .2    .4    .4    .5   2.0   2.2   2.2   2.2   1.9   2.1
  95.  *   1.8   1.4   1.2   1.1   1.3   1.3   1.6    .1    .2    .1    .1    .3    .3    .3   2.0   2.1   2.1   2.2   2.0   2.2
 100.  *   1.2   1.3   1.0   1.1   1.3   1.4   1.6    .2    .2    .1    .1    .2    .2    .2   2.0   2.0   2.1   2.2   1.9   2.1
 105.  *   1.1   1.1    .8   1.1   1.4   1.4   1.8    .2    .2    .1    .0    .1    .1    .2   1.8   1.9   2.0   1.9   2.1   2.3
 110.  *    .8    .9   1.0   1.0   1.4   1.5   2.0    .3    .2    .1    .1    .1    .1    .1   1.7   1.8   2.0   1.8   1.9   2.4
 115.  *    .6    .6   1.0   1.1   1.4   1.7   2.0    .6    .2    .1    .1    .1    .1    .1   1.6   1.7   2.1   1.8   1.8   2.4
 120.  *    .5    .6    .7   1.1   1.6   2.1   2.0    .7    .4    .1    .1    .1    .1    .1   1.5   1.6   2.1   1.8   2.1   2.6
 125.  *    .3    .5    .9   1.1   1.7   1.9   2.1    .8    .7    .2    .1    .1    .1    .1   1.6   1.6   2.1   1.8   2.0   2.5
 130.  *    .3    .4    .8   1.2   1.7   1.9   1.7   1.1    .9    .2    .1    .0    .1    .1   1.6   1.6   2.1   1.6   2.2   2.8
 135.  *    .3    .3    .8   1.4   1.8   1.6   1.6   1.2    .9    .4    .1    .0    .0    .1   1.5   1.5   2.1   1.7   2.4   2.6
 140.  *    .3    .4    .6   1.3   1.6   1.6   1.3   1.3   1.1    .7    .1    .0    .0    .0   1.4   1.5   2.1   1.8   2.5   2.5
 145.  *    .3    .4    .4   1.1   1.6   1.4   1.3   1.3   1.4    .9    .3    .0    .1    .0   1.4   1.5   2.0   2.1   2.2   2.5
 150.  *    .3    .4    .5   1.0   1.4   1.1   1.2   1.5   1.5   1.0    .7    .0    .0    .1   1.4   1.5   2.2   2.4   2.5   2.4
 155.  *    .3    .4    .4    .9   1.3   1.1   1.1   1.5   1.6   1.3    .9    .1    .0    .1   1.4   1.6   2.2   2.4   2.4   2.4
 160.  *    .3    .4    .4    .8    .9    .9   1.0   1.6   1.8   1.9   1.3    .3    .1    .1   1.6   1.6   2.6   2.8   2.2   2.5
 165.  *    .2    .2    .3    .5    .8    .8    .9   1.8   2.3   2.2   1.7    .5    .2    .1   1.6   1.8   2.8   2.9   2.4   2.4
 170.  *    .1    .3    .2    .4    .6    .6    .8   1.8   2.4   2.5   2.0    .7    .4    .2   1.6   1.8   3.0   2.7   2.4   2.3
 175.  *    .2    .1    .1    .3    .4    .4    .6   1.9   2.3   2.5   2.3    .8    .5    .2   1.7   2.0   2.9   2.4   2.1   2.2
 180.  *    .1    .0    .1    .1    .2    .2    .3   1.9   2.5   2.6   2.3    .7    .6    .3   1.7   2.0   2.8   1.9   2.1   2.2
 185.  *    .1    .1    .0    .1    .1    .1    .2   1.9   2.5   2.5   2.2    .9    .7    .3   1.7   2.4   2.7   1.9   1.9   2.1
 190.  *    .1    .1    .1    .0    .0    .0    .1   1.8   2.2   2.4   2.2    .8    .5    .4   1.7   2.3   2.5   1.5   1.9   2.0
 195.  *    .1    .1    .1    .0    .0    .0    .0   1.6   2.1   2.3   2.3    .8    .6    .4   1.7   2.5   2.2   1.5   2.0   2.1
 200.  *    .1    .1    .1    .0    .0    .0    .0   1.6   2.0   2.1   1.9    .9    .5    .3   1.9   2.5   2.1   1.6   2.1   2.1
 205.  *    .1    .1    .1    .0    .0    .0    .0   1.6   2.0   2.1   1.9   1.0    .6    .4   1.9   2.6   2.1   1.5   2.2   2.1
1
                                                                                                                        PAGE  4
      JOB: Site 3 Opt 1/2 2030 AM - 3B1AM30.DAT                RUN: Site 3 Opt 1/2 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .0    .0    .0    .0   1.5   2.0   2.1   1.8    .9    .7    .4   2.0   2.6   2.0   1.8   2.2   2.1
 215.  *    .1    .2    .1    .0    .0    .0    .0   1.5   1.8   2.0   1.6    .9    .6    .4   2.0   2.6   2.0   1.9   2.3   2.3
 220.  *    .2    .2    .1    .0    .0    .0    .0   1.6   1.8   1.8   1.6    .9    .8    .4   2.2   2.5   2.0   2.0   2.3   2.3
 225.  *    .3    .2    .1    .0    .0    .0    .0   1.5   1.8   1.9   1.5    .9    .6    .5   2.2   2.7   2.0   2.2   2.5   2.5
 230.  *    .3    .3    .2    .0    .0    .0    .0   1.4   1.8   2.0   1.4    .9    .7    .5   2.5   2.7   1.9   2.2   2.5   2.5
 235.  *    .5    .5    .3    .0    .0    .0    .0   1.5   1.7   1.9   1.6   1.1    .8    .7   2.5   2.6   2.3   2.3   2.4   2.7
 240.  *    .6    .7    .5    .1    .0    .0    .0   1.4   1.8   1.9   1.5   1.0   1.0   1.0   2.5   2.6   2.3   2.6   2.9   2.7
 245.  *   1.1   1.1    .9    .3    .0    .0    .0   1.5   1.7   2.1   1.8   1.4   1.3   1.3   2.8   2.7   2.5   2.7   2.7   2.7
 250.  *   1.6   1.8   1.4    .6    .1    .1    .0   1.5   1.8   2.0   2.2   1.8   1.8   1.7   2.7   2.6   2.4   2.8   2.8   2.8
 255.  *   2.4   2.4   2.1   1.1    .2    .1    .1   1.5   1.7   2.1   2.8   2.4   2.5   2.5   2.5   2.4   2.4   2.4   2.5   2.7
 260.  *   3.1   3.1   2.7   1.6    .6    .2    .2   1.6   2.0   2.7   3.0   2.8   2.8   2.9   2.1   1.9   2.0   2.1   2.3   2.6
 265.  *   3.6   3.6   3.3   2.1    .8    .4    .2   1.9   2.4   2.8   3.3   2.9   2.8   2.8   1.5   1.5   1.5   1.6   1.7   1.9
 270.  *   4.0   4.1   3.6   2.4   1.0    .6    .3   2.0   2.7   3.3   3.4   2.8   2.8   2.6    .8   1.1   1.0   1.2   1.2   1.5
 275.  *   4.1   4.1   3.8   2.6   1.2    .7    .5   2.0   2.8   3.3   3.4   2.6   2.5   2.3    .4    .5    .5    .6    .7   1.0
 280.  *   4.2   3.9   3.8   2.7   1.4    .7    .6   2.2   2.8   3.2   2.8   2.3   2.3   2.0    .2    .2    .2    .4    .4    .5
 285.  *   3.9   3.8   3.5   2.6   1.4    .9    .6   2.2   2.9   3.3   2.4   2.2   2.1   1.6    .2    .1    .1    .1    .2    .3
 290.  *   3.6   3.6   3.3   2.3   1.3   1.0    .6   2.5   2.9   3.2   2.2   1.8   1.7   1.6    .1    .1    .1    .1    .1    .2
 295.  *   3.5   3.5   3.1   2.2   1.2    .8    .7   2.5   3.0   3.0   2.0   1.7   1.6   1.5    .1    .1    .1    .1    .1    .1
 300.  *   3.3   3.3   3.1   2.2   1.3    .9    .7   2.7   3.0   2.8   1.8   1.8   1.5   1.5    .1    .1    .1    .0    .1    .1
 305.  *   3.1   2.9   2.8   2.1   1.1    .9    .7   2.2   2.9   2.9   1.8   1.7   1.5   1.4    .1    .1    .1    .0    .1    .1
 310.  *   2.9   2.9   2.8   2.0   1.2    .6    .8   2.5   2.8   2.7   1.6   1.7   1.4   1.4    .1    .1    .0    .0    .1    .1
 315.  *   2.9   2.8   2.6   1.9   1.1    .7    .6   2.5   2.7   2.4   1.5   1.7   1.3   1.3    .1    .1    .0    .0    .0    .1
 320.  *   2.7   2.7   2.6   1.8   1.0    .8    .5   2.3   2.5   2.5   1.5   1.7   1.3   1.3    .1    .0    .0    .0    .0    .1
 325.  *   2.7   2.6   2.3   1.8    .9    .9    .7   2.1   2.6   2.1   1.5   1.5   1.3   1.3    .0    .0    .0    .0    .0    .1
 330.  *   2.5   2.6   2.3   1.8   1.1    .8    .8   2.1   2.3   1.9   1.4   1.5   1.3   1.3    .0    .0    .0    .0    .0    .0
 335.  *   2.6   2.6   2.3   1.6    .9    .7    .8   1.7   2.3   1.9   1.4   1.6   1.3   1.3    .0    .0    .0    .0    .0    .0
 340.  *   2.7   2.5   2.4   1.5    .9    .6   1.0   1.3   2.2   1.7   1.5   1.5   1.3   1.4    .0    .0    .0    .0    .0    .0
 345.  *   2.6   2.6   2.4   1.4    .8    .9   1.3   1.2   1.6   1.5   1.5   1.4   1.4   1.4    .0    .0    .0    .0    .0    .0
 350.  *   2.7   2.6   2.4   1.4   1.1   1.2   1.4   1.0   1.5   1.4   1.6   1.4   1.3   1.3    .0    .0    .0    .0    .0    .0
 355.  *   2.6   2.6   2.5   1.3   1.0   1.2   1.6    .6   1.4   1.3   1.5   1.4   1.3   1.3    .0    .0    .0    .0    .0    .0
 360.  *   2.7   2.6   2.4   1.2   1.0   1.4   1.9    .6   1.1   1.1   1.6   1.3   1.3   1.3    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   4.2   4.1   3.8   2.7   2.0   2.1   2.1   2.7   3.0   3.3   3.4   2.9   2.8   2.9   2.8   2.7   3.0   2.9   2.9   2.8
 DEGR. *  280   270   275   280    50   120     5   300   295   275   275   265   260   260   245   225   170   165   240   130

1
                                                                                                                        PAGE  5
      JOB: Site 3 Opt 1/2 2030 AM - 3B1AM30.DAT                RUN: Site 3 Opt 1/2 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
```

```
   30.  *    .1
   35.  *    .1
   40.  *    .1
   45.  *    .1
   50.  *    .1
   55.  *    .2
   60.  *    .2
   65.  *    .5
   70.  *    .8
   75.  *   1.3
   80.  *   1.7
   85.  *   2.0
   90.  *   2.2
   95.  *   2.4
  100.  *   2.7
  105.  *   2.7
  110.  *   2.7
  115.  *   2.6
  120.  *   2.6
  125.  *   2.4
  130.  *   2.4
  135.  *   2.2
  140.  *   2.2
  145.  *   2.3
  150.  *   2.3
  155.  *   2.0
  160.  *   2.3
  165.  *   2.2
  170.  *   2.1
  175.  *   2.2
  180.  *   2.0
  185.  *   2.1
  190.  *   2.0
  195.  *   2.0
  200.  *   2.0
  205.  *   2.2
1
                                                                                                                  PAGE  6
       JOB: Site 3 Opt 1/2 2030 AM - 3B1AM30.DAT                 RUN: Site 3 Opt 1/2 2030 AM

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21
  ------*------
  210.  *   2.2
  215.  *   2.2
  220.  *   2.3
  225.  *   2.4
  230.  *   2.5
  235.  *   2.6
  240.  *   2.8
  245.  *   2.7
  250.  *   2.9
  255.  *   2.8
  260.  *   2.5
  265.  *   1.9
  270.  *   1.6
  275.  *   1.0
  280.  *    .5
  285.  *    .3
  290.  *    .2
  295.  *    .2
  300.  *    .1
  305.  *    .1
  310.  *    .0
  315.  *    .0
  320.  *    .0
  325.  *    .0
  330.  *    .0
  335.  *    .0
  340.  *    .0
  345.  *    .0
  350.  *    .0
  355.  *    .0
  360.  *    .0
  ------*------
  MAX   *   2.9
  DEGR. *  250

  THE HIGHEST CONCENTRATION IS    4.20 PPM AT  280 DEGREES FROM REC1 .
  THE 2ND HIGHEST CONCENTRATION IS    4.10 PPM AT  270 DEGREES FROM REC2 .
  THE 3RD HIGHEST CONCENTRATION IS    3.80 PPM AT  275 DEGREES FROM REC3 .
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Site 3 Opt 1/2 2014 PM - 3B1PM14.DAT    60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 Opt 1/2 2014 PM                   28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    219411.4   0  66   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    219411.4   0  66   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    219411.4   0  66   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    219411.4   0  66   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    219411.4   0  66   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    219411.4   0  66   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    219411.4   0  66   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    219411.4   0  66   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        93       2.0 2194  102.2 1555 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    279311.4   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    279311.4   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    279311.4   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    279311.4   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    279311.4   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    279311.4   0  44   30.
  1
```

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SB        Rt8 departAG   791.  1427.   995.  1367.    279311.4   0  44   30.
  1
EB        Rt1 aprch AG  -757.  1920.  -322.  1944.    304611.4   0  68   30.
  1
EB        Rt1 aprch AG  -322.  1944.   -72.  1967.    304611.4   0  68   30.
  1
EB        Rt1 aprch AG   -72.  1967.   233.  2014.    304611.4   0  68   30.
  2
EB        Rt1 aprch AG   162.  2003.   -17.  1976.       0.  36   3
       120        74       2.0 3046  102.2 1462 1 3
  1
EB        Rt1 departAG   234.  2016.  1198.  2281.    273811.4   0  56   30.
  1
WB        Rt1 aprch AG  1187.  2341.   752.  2213.    430311.4   0  68   30.
  1
WB        Rt1 thru  AG   752.  2213.   221.  2064.    313411.4   0  44   30.
  1
WB        Rt1 thru  AG   221.  2064.    89.  2037.    313411.4   0  44   30.
  1
WB        Rt1 thru  AG    87.  2035.  -118.  2009.    313411.4   0  56   30.
  1
WB        Rt1 thru  AG  -118.  2009.  -758.  1962.    313411.4   0  56   30.
  1
WB        Rt1 left  AG   607.  2149.   205.  2045.    116911.4   0  44   30.
  2
EB        Rt1 left  AG   296.  2069.   549.  2134.       0.  24   2
       120        83       2.0 1169  102.2 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 3 Opt 1/2 2014 PM - 3B1PM14.DAT                 RUN: Site 3 Opt 1/2 2014 PM
      DATE: 05/06/2009   TIME: 09:53:18.96


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *     251.   283. AG   2194.  11.4    .0 66.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *     168.   287. AG   2194.  11.4    .0 66.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *     128.   300. AG   2194.  11.4    .0 66.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *     120.   309. AG   2194.  11.4    .0 66.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *      97.   321. AG   2194.  11.4    .0 66.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *     122.   332. AG   2194.  11.4    .0 66.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *      67.   338. AG   2194.  11.4    .0 66.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *     110.   349. AG   2194.  11.4    .0 66.0
       9. NB        Rt8 aprch *    273.0    1978.0    2007.6   -6579.2 *    8731.   169. AG    425. 100.0    .0 24.0 3.68 443.5
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *     189.   161. AG   2793.  11.4    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *     126.   153. AG   2793.  11.4    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *      92.   142. AG   2793.  11.4    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *     123.   130. AG   2793.  11.4    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *     146.   117. AG   2793.  11.4    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *     188.   108. AG   2793.  11.4    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *     213.   106. AG   2793.  11.4    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   3046.  11.4    .0 68.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   3046.  11.4    .0 68.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *     309.    81. AG   3046.  11.4    .0 68.0
      20. EB        Rt1 aprch *    162.0    2003.0   -5365.2    1169.3 *    5590.   261. AG    507. 100.0    .0 36.0 1.99 284.0
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   2738.  11.4    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *     453.   254. AG   4303.  11.4    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *     552.   254. AG   3134.  11.4    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *     135.   258. AG   3134.  11.4    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *     207.   263. AG   3134.  11.4    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   3134.  11.4    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *     415.   255. AG   1169.  11.4    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0    1795.3    2454.2 *    1548.    76. AG    379. 100.0    .0 24.0 1.25  78.6
1
                                                                                                                 PAGE  2
      JOB: Site 3 Opt 1/2 2014 PM - 3B1PM14.DAT                 RUN: Site 3 Opt 1/2 2014 PM
      DATE: 05/06/2009   TIME: 09:53:18.96

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     120       93       2.0      2194       1555     102.20      1        3
      20. EB        Rt1 aprch *     120       74       2.0      3046       1462     102.20      1        3
      28. EB        Rt1 left  *     120       83       2.0      1169       1700     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0        5.0   *
      2. SW 164 W             *         8.0     1953.0        5.0   *
      3. SW 82 W              *        90.0     1961.0        5.0   *
      4. SW CNR               *       174.0     1953.0        5.0   *
      5. SW 82 S              *       218.0     1880.0        5.0   *
      6. SW 164 S             *       245.0     1804.0        5.0   *
      7. SW MID S             *       281.0     1726.0        5.0   *
      8. SE MID S             *       388.0     1751.0        5.0   *
      9. SE 164 S             *       338.0     1834.0        5.0   *
     10. SE 82 S              *       315.0     1914.0        5.0   *
     11. SE CNR               *       304.0     1995.0        5.0   *
     12. SE 82 E              *       376.0     2022.0        5.0   *
     13. SE 164 E             *       454.0     2045.0        5.0   *
     14. SE MID E             *       571.0     2079.0        5.0   *
     15. NE MID E             *       519.0     2169.0        5.0   *
     16. NE 164 E             *       374.0     2130.0        5.0   *
     17. NE 82 E              *       295.0     2110.0        5.0   *
     18. N CNR                *       215.0     2090.0        5.0   *
     19. NW 82 W              *       136.0     2072.0        5.0   *
     20. NW 164 W             *        54.0     2058.0        5.0   *
     21. NW MID W             *       -88.0     2040.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 3 Opt 1/2 2014 PM - 3B1PM14.DAT                 RUN: Site 3 Opt 1/2 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   3.4   3.3   3.1   1.5   1.8   2.5   3.1   1.0   1.5   1.5   1.9   2.4   2.4   2.4    .0    .0    .0    .0    .0    .0
   5.  *   3.3   3.3   3.0   1.5   1.8   2.7   3.1    .9   1.3   1.4   1.9   2.4   2.4   2.3    .1    .0    .0    .0    .0    .0
  10.  *   3.3   3.3   3.0   1.5   2.2   2.8   3.1    .9   1.1   1.4   2.0   2.4   2.4   2.4    .1    .1    .0    .0    .0    .0
```

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  15.  *   3.3   3.3   3.0   1.7   2.4   3.0   3.4    .9   1.1   1.4   2.1   2.5   2.5   2.4    .1    .1    .1    .0    .0    .0
  20.  *   3.4   3.5   3.1   1.6   2.4   2.9   3.2    .9   1.2   1.3   2.2   2.5   2.5   2.4    .1    .1    .1    .0    .1    .1
  25.  *   3.4   3.4   3.1   1.7   2.8   3.1   3.2    .8   1.1   1.3   2.3   2.5   2.6   2.6    .1    .1    .1    .1    .1    .1
  30.  *   3.6   3.6   3.4   2.0   2.9   3.1   3.1    .8   1.0   1.5   2.5   2.6   2.7   2.6    .2    .1    .1    .1    .1    .0
  35.  *   3.9   3.7   3.4   2.1   3.0   3.1   3.1    .7   1.1   1.5   2.5   2.8   2.8   2.7    .2    .2    .1    .1    .1    .0
  40.  *   4.1   4.0   3.7   2.5   3.1   3.1   2.9    .8   1.1   1.6   2.6   2.8   3.0   2.9    .2    .2    .1    .1    .1    .1
  45.  *   4.3   4.1   3.8   2.6   3.3   3.1   2.7    .8   1.1   1.5   2.8   3.0   2.9   3.1    .3    .2    .2    .1    .1    .1
  50.  *   4.6   4.6   4.1   3.0   3.3   2.9   2.9    .7   1.0   1.6   2.8   3.1   3.2   3.0    .5    .3    .3    .2    .2    .1
  55.  *   4.8   4.8   4.3   3.3   3.5   3.0   2.8    .7   1.1   1.5   3.0   3.3   3.3   3.3    .7    .7    .6    .4    .4    .4
  60.  *   5.4   5.1   4.4   3.4   3.2   2.7   2.5    .6   1.0   1.3   2.9   3.3   3.2   3.2   1.2   1.1   1.0   1.0    .9    .7
  65.  *   5.6   5.0   4.4   3.5   3.0   2.5   2.6    .5    .7   1.1   2.7   3.1   3.1   3.1   1.8   1.9   1.8   1.5   1.4   1.2
  70.  *   5.6   5.2   4.2   3.3   2.7   2.4   2.4    .2    .7    .9   2.3   2.8   2.7   2.8   2.5   2.6   2.4   2.3   2.0   1.7
  75.  *   5.2   4.7   3.8   2.9   2.5   2.3   2.2    .1    .5    .5   1.9   2.2   2.2   2.3   3.2   3.3   3.2   2.9   2.8   2.3
  80.  *   5.0   4.0   3.2   2.6   2.2   2.2   2.2    .1    .3    .3   1.2   1.6   1.7   1.6   3.7   3.7   3.6   3.5   3.2   2.9
  85.  *   4.0   3.4   2.7   2.1   2.2   2.0   2.1    .1    .1    .2    .8   1.0   1.0   1.1   3.9   4.2   4.0   3.8   3.3   3.2
  90.  *   3.0   2.4   2.0   1.8   2.1   2.1   2.3    .1    .2    .1    .4    .5    .7    .7   4.0   4.2   4.1   3.8   3.3   3.3
  95.  *   2.3   1.9   1.8   1.6   2.0   2.1   2.3    .2    .2    .1    .2    .3    .3    .5   4.0   4.1   4.0   3.7   3.2   3.3
 100.  *   1.5   1.5   1.5   1.6   2.0   2.3   2.4    .2    .2    .1    .1    .2    .2    .2   3.7   3.9   3.8   3.3   3.1   3.2
 105.  *   1.3   1.3   1.3   1.6   2.0   2.1   2.7    .2    .2    .1    .0    .1    .1    .2   3.8   3.8   3.7   3.1   2.9   3.2
 110.  *   1.0   1.3   1.2   1.6   2.2   2.3   3.1    .3    .2    .1    .1    .1    .1    .1   3.5   3.6   3.5   2.9   2.9   3.4
 115.  *    .9   1.1   1.2   1.7   2.4   2.7   3.3    .8    .3    .1    .1    .1    .1    .1   3.4   3.5   3.4   2.7   3.0   3.2
 120.  *    .6    .8   1.2   1.9   2.4   3.1   3.1   1.0    .5    .1    .1    .1    .1    .1   3.3   3.3   3.2   2.6   2.8   3.7
 125.  *    .5   1.0   1.3   1.8   3.0   3.0   3.1   1.3   1.1    .2    .1    .1    .1    .1   3.1   3.2   3.2   2.5   2.9   3.7
 130.  *    .4   1.0   1.4   2.2   3.1   3.0   2.8   1.4   1.3    .7    .1    .1    .1    .1   3.0   3.1   3.0   2.5   3.1   3.7
 135.  *    .3    .8   1.2   2.5   3.0   2.8   2.6   1.6   1.3    .8    .1    .1    .1    .1   2.9   3.0   2.9   2.4   3.3   3.7
 140.  *    .3    .6   1.0   2.2   2.6   2.4   2.1   1.7   1.5    .9    .2    .2    .1    .1   2.9   2.9   2.8   2.7   3.3   3.5
 145.  *    .4    .4    .9   2.0   2.5   2.2   1.8   1.7   1.7   1.2    .7    .2    .2    .1   2.9   2.9   2.8   3.0   3.4   3.4
 150.  *    .4    .5    .7   1.8   2.2   1.8   1.7   1.8   2.0   1.6   1.2    .2    .3    .2   2.9   2.9   2.8   3.6   3.6   3.3
 155.  *    .4    .5    .6   1.5   2.0   1.7   1.6   2.0   2.1   1.9   1.2    .5    .3    .2   2.9   3.1   3.3   4.0   3.6   3.3
 160.  *    .4    .5    .5   1.1   1.7   1.4   1.4   2.1   2.6   2.3   1.9    .6    .2    .3   3.1   3.1   3.7   4.2   3.3   3.0
 165.  *    .2    .4    .4    .8   1.3   1.2   1.3   2.3   2.7   2.8   2.3    .9    .5    .3   3.3   3.5   4.0   4.1   3.3   3.1
 170.  *    .1    .3    .3    .7    .9    .8   1.0   2.5   3.0   3.0   2.8   1.2    .7    .4   3.2   3.6   4.4   3.9   3.1   3.0
 175.  *    .2    .2    .2    .3    .6    .6    .7   2.7   3.2   3.2   2.9   1.3    .7    .5   3.2   3.9   4.0   3.6   3.0   2.9
 180.  *    .1    .2    .1    .2    .2    .3    .4   2.5   3.2   3.3   3.0   1.2    .9    .5   3.3   3.8   4.1   3.1   2.6   2.8
 185.  *    .1    .1    .0    .1    .1    .1    .2   2.4   3.2   3.3   2.9   1.4   1.0    .5   3.3   4.0   3.9   2.6   2.7   2.6
 190.  *    .1    .1    .1    .0    .0    .1    .1   2.2   3.0   3.2   2.8   1.2    .9    .7   3.2   3.9   3.5   2.4   2.6   2.6
 195.  *    .1    .1    .1    .0    .0    .0    .0   2.3   2.7   2.9   2.8   1.3    .9    .6   3.3   3.9   3.5   2.3   2.6   2.6
 200.  *    .1    .1    .1    .0    .0    .0    .0   2.3   2.8   2.9   2.7   1.3    .9    .6   3.6   4.2   3.1   2.2   2.7   2.7
 205.  *    .2    .2    .1    .0    .0    .0    .0   2.0   2.6   2.8   2.6   1.2    .9    .7   3.7   4.0   3.1   2.4   2.8   2.8
1
                                                                                                                   PAGE  4
      JOB: Site 3 Opt 1/2 2014 PM - 3B1PM14.DAT                RUN: Site 3 Opt 1/2 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .2    .2    .1    .0    .0    .0    .0   2.2   2.5   2.9   2.4   1.2    .9    .8   3.8   4.1   3.0   2.5   3.0   2.8
 215.  *    .3    .2    .2    .0    .0    .0    .0   2.1   2.5   2.7   2.4   1.3    .8    .6   4.1   4.0   2.8   2.6   3.0   3.0
 220.  *    .3    .2    .2    .0    .0    .0    .0   2.0   2.4   2.6   2.1   1.2    .9    .5   4.0   3.9   3.0   2.9   3.1   3.1
 225.  *    .3    .2    .2    .0    .0    .0    .0   2.1   2.3   2.4   2.1   1.2   1.0    .7   4.1   4.0   3.0   2.8   3.3   3.2
 230.  *    .4    .4    .2    .0    .0    .0    .0   2.0   2.3   2.5   1.9   1.2    .9    .8   4.2   3.9   3.1   3.2   3.3   3.5
 235.  *    .5    .6    .4    .0    .0    .0    .0   1.9   2.3   2.5   2.0   1.4   1.2    .9   4.4   4.0   3.4   3.3   3.6   3.6
 240.  *    .8    .8    .6    .1    .0    .0    .0   2.0   2.3   2.5   2.1   1.5   1.2   1.1   4.5   4.0   3.5   3.4   3.7   3.7
 245.  *   1.4   1.4   1.0    .3    .1    .0    .0   1.9   2.3   2.6   2.3   1.7   1.6   1.5   4.4   3.9   3.5   3.8   3.9   3.8
 250.  *   2.1   2.1   1.8    .9    .2    .1    .0   2.1   2.4   2.7   2.9   2.5   2.4   2.5   4.2   3.9   3.5   3.5   3.8   3.9
 255.  *   2.9   3.2   2.6   1.3    .3    .2    .1   2.1   2.4   2.9   3.4   3.0   3.1   3.2   3.7   3.4   3.1   3.4   3.7   3.7
 260.  *   3.9   3.9   3.6   2.1    .8    .3    .2   2.1   2.5   3.5   4.1   3.3   3.4   3.7   2.9   2.9   2.6   2.8   3.2   3.4
 265.  *   4.7   4.6   4.2   2.6   1.0    .6    .3   2.2   3.3   3.7   4.3   3.8   3.6   3.7   2.3   2.1   2.0   2.1   2.5   2.7
 270.  *   5.0   5.1   4.6   3.2   1.4    .8    .5   2.6   3.4   4.0   4.3   3.5   3.7   3.9   1.4   1.3   1.5   1.5   1.6   1.9
 275.  *   5.2   5.1   4.9   3.2   1.5   1.0    .6   2.7   3.7   4.2   4.1   3.5   3.4   3.6    .7    .9    .7    .8   1.1   1.3
 280.  *   5.2   5.2   4.7   3.4   1.7    .9    .7   2.8   3.8   4.3   3.7   3.2   3.1   3.3    .4    .4    .5    .5    .5    .8
 285.  *   5.0   4.8   4.6   3.4   1.8   1.1    .8   3.0   3.8   4.4   3.2   2.6   3.0   3.0    .3    .2    .1    .1    .3    .4
 290.  *   4.6   4.7   4.4   3.1   1.7   1.2    .8   3.2   3.9   4.0   3.0   2.4   2.7   2.9    .2    .2    .1    .1    .2    .2
 295.  *   4.5   4.4   4.0   3.0   1.7   1.3   1.0   3.4   3.8   4.0   2.5   2.4   2.7   2.8    .2    .1    .1    .1    .1    .2
 300.  *   4.2   4.1   3.9   2.8   1.5   1.2   1.0   3.2   4.0   3.8   2.5   2.3   2.6   2.7    .2    .1    .1    .1    .1    .2
 305.  *   4.0   3.9   3.6   2.7   1.6   1.1    .8   3.3   3.8   3.5   2.1   2.3   2.6   2.7    .1    .1    .1    .1    .1    .1
 310.  *   3.7   3.6   3.5   2.5   1.5   1.1    .8   3.1   3.8   3.5   2.1   2.2   2.5   2.5    .1    .1    .1    .1    .1    .1
 315.  *   3.6   3.6   3.3   2.5   1.3   1.0    .8   3.1   3.6   3.4   2.0   2.3   2.5   2.5    .1    .1    .1    .0    .1    .1
 320.  *   3.6   3.4   3.3   2.4   1.4   1.1    .9   2.9   3.7   3.0   2.0   2.3   2.4   2.5    .1    .1    .0    .0    .0    .1
 325.  *   3.4   3.3   3.1   2.3   1.3    .9   1.0   2.7   3.4   2.6   1.9   2.3   2.4   2.4    .1    .0    .0    .0    .0    .1
 330.  *   3.3   3.3   3.0   2.1   1.3   1.0   1.1   2.5   3.1   2.5   1.9   2.3   2.4   2.4    .0    .0    .0    .0    .0    .1
 335.  *   3.4   3.3   3.0   2.2   1.4   1.2   1.2   2.1   2.6   2.1   1.9   2.4   2.5   2.5    .0    .0    .0    .0    .0    .0
 340.  *   3.4   3.3   3.1   2.0   1.2   1.2   1.6   2.1   2.6   2.3   1.9   2.4   2.5   2.5    .0    .0    .0    .0    .0    .0
 345.  *   3.4   3.3   3.1   2.0   1.2   1.7   2.1   1.7   2.4   1.9   2.0   2.4   2.5   2.6    .0    .0    .0    .0    .0    .0
 350.  *   3.3   3.3   3.1   1.8   1.6   1.8   2.2   1.3   1.8   1.7   2.0   2.5   2.5   2.5    .0    .0    .0    .0    .0    .0
 355.  *   3.4   3.3   3.1   1.7   1.8   2.0   2.8   1.1   1.7   1.6   2.0   2.4   2.4   2.5    .0    .0    .0    .0    .0    .0
 360.  *   3.4   3.3   3.1   1.5   1.8   2.5   3.1   1.0   1.5   1.5   1.9   2.4   2.4   2.4    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   5.6   5.2   4.9   3.5   3.5   3.1   3.4   3.4   4.0   4.4   4.3   3.8   3.7   3.9   4.5   4.2   4.4   4.2   3.9   3.9
 DEGR. *   70    70    275   65    55    25    15    295   300   285   270   265   270   270   240   200   170   160   245   250

1
                                                                                                                   PAGE  5
      JOB: Site 3 Opt 1/2 2014 PM - 3B1PM14.DAT                RUN: Site 3 Opt 1/2 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .2
  50.  *    .2
  55.  *    .2
  60.  *    .5
  65.  *    .9
  70.  *   1.6
  75.  *   2.2
  80.  *   2.6
  85.  *   3.0
  90.  *   3.5
  95.  *   3.7
 100.  *   3.7
 105.  *   3.6
 110.  *   3.6
 115.  *   3.6
 120.  *   3.5
 125.  *   3.5
 130.  *   3.3
 135.  *   3.1
 140.  *   2.9
 145.  *   3.0
 150.  *   2.9
 155.  *   2.9
 160.  *   2.8
 165.  *   2.9
 170.  *   2.9
 175.  *   2.8
 180.  *   2.7
 185.  *   2.6
 190.  *   2.7
 195.  *   2.6
 200.  *   2.8
 205.  *   2.8
1
                                                                                                                 PAGE  6
      JOB: Site 3 Opt 1/2 2014 PM - 3B1PM14.DAT                 RUN: Site 3 Opt 1/2 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   3.0
 215.  *   2.9
 220.  *   3.0
 225.  *   3.2
 230.  *   3.4
 235.  *   3.4
 240.  *   3.6
 245.  *   3.9
 250.  *   3.8
 255.  *   3.6
 260.  *   3.2
 265.  *   2.8
 270.  *   2.1
 275.  *   1.3
 280.  *    .9
 285.  *    .5
 290.  *    .3
 295.  *    .2
 300.  *    .1
 305.  *    .1
 310.  *    .1
 315.  *    .1
 320.  *    .1
 325.  *    .1
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   3.9
 DEGR. *  245

 THE HIGHEST CONCENTRATION IS    5.60 PPM AT   70 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    5.20 PPM AT   70 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS    4.90 PPM AT  275 DEGREES FROM REC3 .
```

```
Site 3 Opt 1/2 2030 PM - 3B1PM30.DAT    60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 Opt 1/2 2030 PM                   28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    2015 9.2   0  66   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    2015 9.2   0  66   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    2015 9.2   0  66   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    2015 9.2   0  66   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    2015 9.2   0  66   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    2015 9.2   0  66   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    2015 9.2   0  66   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    2015 9.2   0  66   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        94       2.0 2015   84.1 1555 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    2335 9.2   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    2335 9.2   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    2335 9.2   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    2335 9.2   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    2335 9.2   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    2335 9.2   0  44   30.
  1
```

```
SB        Rt8 departAG   791.  1427.   995.  1367.    2335 9.2   0  44   30.
  1
EB        Rt1 aprch AG  -757.  1920.  -322.  1944.    2870 9.2   0  68   30.
  1
EB        Rt1 aprch AG  -322.  1944.   -72.  1967.    2870 9.2   0  68   30.
  1
EB        Rt1 aprch AG   -72.  1967.   233.  2014.    2870 9.2   0  68   30.
  2
EB        Rt1 aprch AG   162.  2003.   -17.  1976.      0.  36   3
       120        72       2.0 2870   84.1 1472 1 3
  1
EB        Rt1 departAG   234.  2016.  1198.  2281.    2755 9.2   0  56   30.
  1
WB        Rt1 aprch AG  1187.  2341.   752.  2213.    4085 9.2   0  68   30.
  1
WB        Rt1 thru  AG   752.  2213.   221.  2064.    3100 9.2   0  44   30.
  1
WB        Rt1 thru  AG   221.  2064.    89.  2037.    3100 9.2   0  44   30.
  1
WB        Rt1 thru  AG    87.  2035.  -118.  2009.    3100 9.2   0  56   30.
  1
WB        Rt1 thru  AG  -118.  2009.  -758.  1962.    3100 9.2   0  56   30.
  1
WB        Rt1 left  AG   607.  2149.   205.  2045.     985 9.2   0  44   30.
  2
EB        Rt1 left  AG   296.  2069.   549.  2134.      0.  24   2
       120        86       2.0  985   84.1 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 3 Opt 1/2 2030 PM - 3B1PM30.DAT                 RUN: Site 3 Opt 1/2 2030 PM
      DATE: 05/06/2009   TIME: 09:55:20.79


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)           *   LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *    (FT)  (DEG)            (G/MI)  (FT) (FT)        (VEH)
      ------------------------*-----------------------------------------*----------------------------------------------------------
       1. NB        Rt8 aprch *    1039.0    1413.0     795.0    1471.0 *     251.   283. AG   2015.   9.2    .0 66.0
       2. NB        Rt8 aprch *     795.0    1471.0     635.0    1521.0 *     168.   287. AG   2015.   9.2    .0 66.0
       3. NB        Rt8 aprch *     635.0    1521.0     524.0    1584.0 *     128.   300. AG   2015.   9.2    .0 66.0
       4. NB        Rt8 aprch *     524.0    1584.0     431.0    1660.0 *     120.   309. AG   2015.   9.2    .0 66.0
       5. NB        Rt8 aprch *     431.0    1660.0     370.0    1736.0 *      97.   321. AG   2015.   9.2    .0 66.0
       6. NB        Rt8 aprch *     370.0    1736.0     312.0    1843.0 *     122.   332. AG   2015.   9.2    .0 66.0
       7. NB        Rt8 aprch *     312.0    1843.0     287.0    1905.0 *      67.   338. AG   2015.   9.2    .0 66.0
       8. NB        Rt8 aprch *     287.0    1905.0     266.0    2013.0 *     110.   349. AG   2015.   9.2    .0 66.0
       9. NB        Rt8 aprch *     273.0    1978.0    1845.3   -5778.5 *    7914.   169. AG    353. 100.0    .0 24.0 3.53 402.0
      10. SB        Rt8 depart*     214.0    1996.0     274.0    1817.0 *     189.   161. AG   2335.   9.2    .0 44.0
      11. SB        Rt8 depart*     274.0    1817.0     331.0    1705.0 *     126.   153. AG   2335.   9.2    .0 44.0
      12. SB        Rt8 depart*     331.0    1705.0     388.0    1633.0 *      92.   142. AG   2335.   9.2    .0 44.0
      13. SB        Rt8 depart*     388.0    1633.0     482.0    1553.0 *     123.   130. AG   2335.   9.2    .0 44.0
      14. SB        Rt8 depart*     482.0    1553.0     612.0    1486.0 *     146.   117. AG   2335.   9.2    .0 44.0
      15. SB        Rt8 depart*     612.0    1486.0     791.0    1427.0 *     188.   108. AG   2335.   9.2    .0 44.0
      16. SB        Rt8 depart*     791.0    1427.0     995.0    1367.0 *     213.   106. AG   2335.   9.2    .0 44.0
      17. EB        Rt1 aprch *    -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   2870.   9.2    .0 68.0
      18. EB        Rt1 aprch *    -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   2870.   9.2    .0 68.0
      19. EB        Rt1 aprch *     -72.0    1967.0     233.0    2014.0 *     309.    81. AG   2870.   9.2    .0 68.0
      20. EB        Rt1 aprch *     162.0    2003.0   -4466.6    1304.8 *    4681.   261. AG    406. 100.0    .0 36.0 1.77 237.8
      21. EB        Rt1 depart*     234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   2755.   9.2    .0 56.0
      22. WB        Rt1 aprch *    1187.0    2341.0     752.0    2213.0 *     453.   254. AG   4085.   9.2    .0 68.0
      23. WB        Rt1 thru  *     752.0    2213.0     221.0    2064.0 *     552.   254. AG   3100.   9.2    .0 44.0
      24. WB        Rt1 thru  *     221.0    2064.0      89.0    2037.0 *     135.   258. AG   3100.   9.2    .0 44.0
      25. WB        Rt1 thru  *      87.0    2035.0    -118.0    2009.0 *     207.   263. AG   3100.   9.2    .0 56.0
      26. WB        Rt1 thru  *    -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   3100.   9.2    .0 56.0
      27. WB        Rt1 left  *     607.0    2149.0     205.0    2045.0 *     415.   255. AG    985.   9.2    .0 44.0
      28. EB        Rt1 left  *     296.0    2069.0    1271.2    2319.5 *    1007.    76. AG    323. 100.0    .0 24.0 1.16  51.1
1
                                                                                                                 PAGE  2
      JOB: Site 3 Opt 1/2 2030 PM - 3B1PM30.DAT                 RUN: Site 3 Opt 1/2 2030 PM
      DATE: 05/06/2009   TIME: 09:55:20.79

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*---------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     120       94       2.0      2015       1555      84.10      1        3
      20. EB        Rt1 aprch *     120       72       2.0      2870       1472      84.10      1        3
      28. EB        Rt1 left  *     120       86       2.0       985       1700      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -114.0     1937.0        5.0   *
      2. SW 164 W             *          8.0     1953.0        5.0   *
      3. SW 82 W              *         90.0     1961.0        5.0   *
      4. SW CNR               *        174.0     1953.0        5.0   *
      5. SW 82 S              *        218.0     1880.0        5.0   *
      6. SW 164 S             *        245.0     1804.0        5.0   *
      7. SW MID S             *        281.0     1726.0        5.0   *
      8. SE MID S             *        388.0     1751.0        5.0   *
      9. SE 164 S             *        338.0     1834.0        5.0   *
     10. SE 82 S              *        315.0     1914.0        5.0   *
     11. SE CNR               *        304.0     1995.0        5.0   *
     12. SE 82 E              *        376.0     2022.0        5.0   *
     13. SE 164 E             *        454.0     2045.0        5.0   *
     14. SE MID E             *        571.0     2079.0        5.0   *
     15. NE MID E             *        519.0     2169.0        5.0   *
     16. NE 164 E             *        374.0     2130.0        5.0   *
     17. NE 82 E              *        295.0     2110.0        5.0   *
     18. N CNR                *        215.0     2090.0        5.0   *
     19. NW 82 W              *        136.0     2072.0        5.0   *
     20. NW 164 W             *         54.0     2058.0        5.0   *
     21. NW MID W             *        -88.0     2040.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 3 Opt 1/2 2030 PM - 3B1PM30.DAT                 RUN: Site 3 Opt 1/2 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *    2.6   2.5   2.4   1.2   1.3   1.6   2.0    .8   1.2   1.2   1.7   1.9   2.0   2.0    .0    .0    .0    .0    .0    .0
   5.  *    2.7   2.5   2.4   1.2   1.4   2.1   2.3    .9   1.1   1.1   1.6   1.9   1.9   2.0    .0    .0    .0    .0    .0    .0
  10.  *    2.6   2.5   2.3   1.1   1.7   2.0   2.6    .8    .9   1.1   1.7   1.9   2.0   2.0    .1    .1    .0    .0    .0    .0
```

```
  15.  *   2.7   2.5   2.4   1.2   1.7   2.2   2.5    .7    .9   1.1   1.7   2.0   2.0   1.9    .1    .1    .0    .0    .0    .0
  20.  *   2.7   2.5   2.4   1.3   1.9   2.3   2.5    .7    .9   1.1   1.7   2.0   2.0   1.9    .1    .1    .1    .0    .0    .0
  25.  *   2.6   2.8   2.4   1.3   2.1   2.4   2.5    .7    .7   1.2   2.0   2.0   2.1   2.1    .1    .1    .1    .0    .1    .0
  30.  *   2.9   2.8   2.6   1.5   2.2   2.2   2.4    .7    .8   1.2   2.0   2.1   2.2   2.1    .1    .1    .1    .1    .1    .0
  35.  *   3.1   2.9   2.7   1.6   2.2   2.5   2.3    .7    .9   1.2   2.0   2.2   2.3   2.3    .1    .1    .1    .1    .1    .0
  40.  *   3.2   3.0   2.7   1.9   2.4   2.6   2.2    .7    .9   1.2   2.1   2.3   2.3   2.2    .2    .1    .1    .1    .1    .0
  45.  *   3.4   3.2   3.1   2.0   2.5   2.3   2.2    .7    .8   1.3   2.2   2.4   2.5   2.3    .2    .2    .1    .1    .1    .0
  50.  *   3.6   3.5   3.0   2.3   2.6   2.2   2.2    .6    .8   1.2   2.4   2.5   2.4   2.6    .4    .3    .2    .2    .2    .1
  55.  *   3.9   3.7   3.3   2.6   2.6   2.1   1.9    .3    .8   1.1   2.5   2.7   2.5   2.7    .6    .6    .4    .4    .3    .3
  60.  *   3.9   4.0   3.3   2.7   2.5   2.1   1.9    .4    .7   1.0   2.4   2.5   2.6   2.5   1.0    .9    .8    .7    .7    .4
  65.  *   4.4   4.1   3.5   2.5   2.1   1.8   2.0    .5    .5    .8   2.1   2.4   2.6   2.4   1.4   1.4   1.3   1.2   1.0    .9
  70.  *   4.3   3.9   3.3   2.4   2.1   1.8   1.7    .1    .5    .6   1.8   2.1   2.2   2.1   2.0   1.9   1.9   1.7   1.5   1.4
  75.  *   4.1   3.8   2.9   2.3   1.8   1.7   1.6    .1    .3    .4   1.3   1.7   1.7   1.9   2.4   2.5   2.4   2.3   2.0   1.9
  80.  *   3.8   3.3   2.6   1.9   1.6   1.4   1.6    .1    .2    .2    .9   1.2   1.3   1.4   2.9   2.9   2.9   2.8   2.5   2.2
  85.  *   3.1   2.6   2.0   1.5   1.5   1.4   1.7    .1    .1    .0    .6    .8    .9    .9   3.1   3.2   3.1   2.9   2.7   2.4
  90.  *   2.2   1.9   1.5   1.3   1.4   1.4   1.6    .1    .1    .0    .3    .4    .5    .5   3.2   3.3   3.4   3.1   2.6   2.5
  95.  *   1.6   1.5   1.1   1.2   1.5   1.5   1.7    .1    .1    .1    .1    .2    .3    .3   3.2   3.4   3.3   2.8   2.5   2.4
 100.  *   1.2   1.3   1.0   1.2   1.5   1.6   1.8    .1    .1    .1    .1    .1    .2    .2   3.1   3.2   3.1   2.7   2.4   2.6
 105.  *   1.0    .8    .9   1.2   1.5   1.6   1.7    .1    .1    .1    .0    .1    .1    .1   3.0   3.0   3.0   2.5   2.4   2.6
 110.  *    .7    .8   1.0   1.2   1.5   1.7   1.9    .2    .2    .1    .0    .1    .1    .1   2.9   3.0   2.8   2.2   2.2   2.5
 115.  *    .6    .7    .9   1.3   1.6   1.8   2.2    .3    .2    .1    .0    .1    .1    .1   2.7   2.8   2.7   2.1   2.2   2.6
 120.  *    .5    .7    .9   1.2   1.7   1.8   2.3    .7    .2    .1    .1    .1    .1    .1   2.5   2.7   2.7   2.0   2.1   2.7
 125.  *    .3    .7    .9   1.3   1.9   2.2   2.2    .9    .3    .1    .1    .1    .1    .1   2.5   2.6   2.5   2.0   2.2   2.6
 130.  *    .3    .4    .7   1.4   2.0   2.1   2.1   1.1    .9    .1    .1    .0    .1    .1   2.4   2.4   2.4   2.0   2.2   3.0
 135.  *    .3    .5    .7   1.3   2.2   2.0   1.9   1.1   1.0    .2    .1    .0    .0    .1   2.4   2.4   2.3   1.8   2.4   2.9
 140.  *    .3    .4    .6   1.4   2.1   2.0   1.5   1.3   1.1    .5    .1    .0    .0    .0   2.3   2.3   2.3   1.9   2.7   2.8
 145.  *    .3    .4    .6   1.4   1.8   1.5   1.3   1.2   1.3    .7    .2    .0    .0    .0   2.3   2.3   2.3   2.3   2.6   2.6
 150.  *    .3    .4    .6   1.1   1.7   1.4   1.4   1.3   1.6   1.1    .4    .0    .0    .0   2.3   2.3   2.3   2.6   2.7   2.7
 155.  *    .3    .4    .4   1.0   1.5   1.3   1.2   1.3   1.6   1.4    .8    .1    .0    .0   2.4   2.4   2.4   2.9   2.6   2.5
 160.  *    .3    .4    .4    .8   1.2   1.1   1.1   1.5   1.9   1.9   1.3    .2    .1    .1   2.5   2.6   2.9   3.3   2.5   2.5
 165.  *    .2    .3    .3    .7    .9    .8   1.0   1.8   2.1   2.1   1.8    .4    .2    .1   2.4   2.7   3.0   3.1   2.5   2.4
 170.  *    .1    .3    .3    .4    .7    .7    .8   1.9   2.2   2.4   1.9    .9    .3    .2   2.6   2.8   3.3   3.1   2.5   2.4
 175.  *    .2    .1    .2    .3    .5    .4    .6   1.9   2.6   2.5   2.2    .8    .4    .2   2.7   2.9   3.4   2.6   2.1   2.3
 180.  *    .0    .0    .1    .1    .2    .2    .3   1.9   2.4   2.5   2.1   1.0    .4    .3   2.6   2.9   3.2   2.4   2.1   2.2
 185.  *    .1    .1    .0    .1    .1    .1    .2   1.9   2.5   2.5   2.3    .8    .5    .3   2.5   3.0   3.1   2.2   2.0   2.1
 190.  *    .1    .1    .0    .0    .0    .0    .1   1.8   2.3   2.3   2.2    .8    .6    .3   2.7   3.2   2.7   1.9   2.0   2.1
 195.  *    .1    .1    .1    .0    .0    .0    .0   1.8   2.2   2.3   2.1    .9    .5    .3   2.7   3.3   2.4   1.7   2.1   2.1
 200.  *    .1    .1    .1    .0    .0    .0    .0   1.6   2.1   2.2   2.1    .9    .6    .3   2.6   3.1   2.4   1.8   2.2   2.1
 205.  *    .1    .1    .1    .0    .0    .0    .0   1.6   1.9   2.2   1.9   1.0    .6    .3   2.8   3.0   2.2   1.9   2.2   2.3
1
                                                                                                                       PAGE  4
      JOB: Site 3 Opt 1/2 2030 PM - 3B1PM30.DAT                 RUN: Site 3 Opt 1/2 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .0    .0    .0    .0   1.5   1.9   2.1   1.9   1.0    .7    .4   2.8   3.1   2.3   1.9   2.2   2.3
 215.  *    .1    .1    .1    .0    .0    .0    .0   1.6   1.9   2.0   1.7   1.0    .8    .5   3.0   3.2   2.3   2.0   2.4   2.3
 220.  *    .2    .2    .1    .0    .0    .0    .0   1.6   1.8   2.0   1.6   1.0    .8    .5   3.3   3.0   2.2   2.1   2.4   2.5
 225.  *    .3    .2    .1    .0    .0    .0    .0   1.4   1.7   1.9   1.5   1.0    .7    .5   3.3   3.3   2.4   2.4   2.7   2.5
 230.  *    .3    .3    .2    .0    .0    .0    .0   1.5   1.7   1.9   1.5    .8    .6    .5   3.4   3.2   2.5   2.3   2.6   2.7
 235.  *    .5    .4    .3    .0    .0    .0    .0   1.5   1.7   1.9   1.5   1.0    .8    .6   3.5   3.2   2.5   2.6   2.8   2.8
 240.  *    .6    .7    .5    .1    .0    .0    .0   1.5   1.7   1.9   1.4   1.0    .9    .9   3.5   3.1   2.7   2.8   2.9   3.0
 245.  *   1.0   1.1    .9    .3    .0    .0    .0   1.5   1.7   2.0   1.8   1.4   1.1   1.2   3.4   3.0   2.9   2.9   3.0   2.9
 250.  *   1.6   1.7   1.4    .6    .1    .1    .0   1.5   1.8   2.0   2.3   1.9   1.6   1.9   3.3   2.9   2.7   2.9   3.0   2.9
 255.  *   2.3   2.3   2.0   1.1    .2    .1    .1   1.5   1.8   2.2   2.7   2.4   2.4   2.6   2.9   2.7   2.5   2.5   2.8   3.0
 260.  *   3.0   3.0   2.8   1.6    .6    .2    .2   1.7   2.1   2.7   3.0   2.7   2.8   2.9   2.4   2.3   2.2   2.2   2.5   2.7
 265.  *   3.6   3.5   3.4   2.1    .8    .3    .2   1.8   2.4   2.9   3.4   3.0   2.9   2.9   1.7   1.6   1.7   1.6   2.0   2.1
 270.  *   4.0   3.9   3.6   2.5   1.1    .6    .3   1.8   2.6   3.3   3.2   3.0   2.7   2.9   1.0   1.0   1.0   1.2   1.3   1.6
 275.  *   4.1   4.1   3.8   2.6   1.1    .7    .5   2.1   2.8   3.3   3.1   2.7   2.6   2.9    .5    .5    .6    .6    .8   1.0
 280.  *   4.1   4.0   3.6   2.8   1.3    .8    .5   2.3   3.1   3.3   2.8   2.3   2.6   2.5    .3    .2    .2    .4    .4    .6
 285.  *   3.9   3.9   3.6   2.6   1.3    .9    .6   2.3   2.9   3.3   2.4   2.2   2.3   2.4    .2    .2    .1    .1    .2    .4
 290.  *   3.7   3.6   3.3   2.4   1.3   1.0    .7   2.4   2.8   3.3   2.3   2.1   2.3   2.3    .2    .1    .1    .1    .1    .2
 295.  *   3.5   3.4   3.1   2.4   1.2    .9    .8   2.4   2.9   3.1   1.9   1.9   2.1   2.3    .1    .1    .1    .1    .1    .2
 300.  *   3.3   3.2   3.0   2.3   1.2    .9    .7   2.6   3.0   2.9   1.8   1.9   2.1   2.2    .1    .1    .1    .1    .1    .1
 305.  *   3.1   3.0   2.8   2.0   1.2   1.0    .7   2.5   2.9   2.8   1.8   1.8   2.1   2.2    .1    .1    .1    .1    .1    .1
 310.  *   2.9   2.9   2.8   2.1   1.2    .8    .7   2.4   2.7   2.6   1.6   1.8   2.0   2.0    .1    .1    .1    .0    .1    .1
 315.  *   2.9   2.7   2.6   1.9   1.0    .7    .6   2.4   2.8   2.5   1.7   1.8   2.0   2.0    .1    .1    .0    .0    .0    .1
 320.  *   2.8   2.6   2.5   2.0    .9    .8    .6   2.1   2.6   2.5   1.4   1.8   2.0   2.0    .1    .0    .0    .0    .0    .1
 325.  *   2.7   2.5   2.4   1.8    .9    .8    .8   2.1   2.5   2.2   1.6   1.9   1.9   2.0    .0    .0    .0    .0    .0    .1
 330.  *   2.5   2.5   2.4   1.7   1.0    .8    .9   1.9   2.2   2.0   1.6   1.9   1.9   2.0    .0    .0    .0    .0    .0    .1
 335.  *   2.7   2.5   2.4   1.6    .8    .9   1.0   1.6   2.0   1.8   1.6   2.0   2.0   2.0    .0    .0    .0    .0    .0    .0
 340.  *   2.7   2.5   2.4   1.5    .9    .8   1.0   1.3   2.1   1.7   1.6   2.0   2.0   2.0    .0    .0    .0    .0    .0    .0
 345.  *   2.6   2.5   2.4   1.5    .9   1.1   1.5   1.2   1.7   1.4   1.6   2.0   2.0   2.1    .0    .0    .0    .0    .0    .0
 350.  *   2.6   2.5   2.4   1.5   1.1   1.4   1.7   1.1   1.6   1.4   1.6   2.0   2.0   2.0    .0    .0    .0    .0    .0    .0
 355.  *   2.6   2.5   2.4   1.4   1.2   1.3   2.0   1.0   1.3   1.4   1.6   2.0   2.0   2.0    .0    .0    .0    .0    .0    .0
 360.  *   2.6   2.5   2.4   1.2   1.3   1.6   2.0    .8   1.2   1.2   1.7   1.9   2.0   2.0    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   4.4   4.1   3.8   2.8   2.6   2.6   2.6   2.6   3.1   3.3   3.4   3.0   2.9   2.9   3.5   3.4   3.4   3.3   3.0   3.0
 DEGR. *   65   275   275   280    50    40    10   300   280   270   265   270   265   270   235    95   175   160   245   240

1
                                                                                                                       PAGE  5
      JOB: Site 3 Opt 1/2 2030 PM - 3B1PM30.DAT                 RUN: Site 3 Opt 1/2 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .2
  55.  *    .2
  60.  *    .4
  65.  *    .8
  70.  *   1.2
  75.  *   1.7
  80.  *   2.0
  85.  *   2.5
  90.  *   2.7
  95.  *   2.9
 100.  *   2.9
 105.  *   2.8
 110.  *   2.8
 115.  *   2.8
 120.  *   2.7
 125.  *   2.7
 130.  *   2.4
 135.  *   2.4
 140.  *   2.4
 145.  *   2.4
 150.  *   2.4
 155.  *   2.3
 160.  *   2.3
 165.  *   2.3
 170.  *   2.3
 175.  *   2.3
 180.  *   2.1
 185.  *   2.1
 190.  *   2.1
 195.  *   2.2
 200.  *   2.1
 205.  *   2.2
1
                                                                                                                                PAGE  6
      JOB: Site 3 Opt 1/2 2030 PM - 3B1PM30.DAT                 RUN: Site 3 Opt 1/2 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   2.3
 215.  *   2.4
 220.  *   2.4
 225.  *   2.6
 230.  *   2.7
 235.  *   2.7
 240.  *   2.9
 245.  *   2.9
 250.  *   2.9
 255.  *   3.1
 260.  *   2.5
 265.  *   2.1
 270.  *   1.6
 275.  *   1.1
 280.  *    .7
 285.  *    .3
 290.  *    .2
 295.  *    .2
 300.  *    .1
 305.  *    .1
 310.  *    .1
 315.  *    .1
 320.  *    .1
 325.  *    .1
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   3.1
 DEGR. *  255

 THE HIGHEST CONCENTRATION IS    4.40 PPM AT   65 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    4.10 PPM AT  275 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS    3.80 PPM AT  275 DEGREES FROM REC3 .
```

```
Site 3 Opt 3 2014 AM - 3B3AM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 Opt 3 2014 AM                     28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    268011.4   0  66   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    268011.4   0  66   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    268011.4   0  66   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    268011.4   0  66   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    268011.4   0  66   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    268011.4   0  66   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    268011.4   0  66   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    268011.4   0  66   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        89       2.0 2680  102.2 1555 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    165611.4   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    165611.4   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    165611.4   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    165611.4   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    165611.4   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    165611.4   0  44   30.
  1
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SB        Rt8 departAG   791.  1427.   995.  1367.    165611.4   0  44   30.
  1
EB        Rt1 aprch AG  -757.  1920.  -322.  1944.    316311.4   0  68   30.
  1
EB        Rt1 aprch AG  -322.  1944.   -72.  1967.    316311.4   0  68   30.
  1
EB        Rt1 aprch AG   -72.  1967.   233.  2014.    316311.4   0  68   30.
  2
EB        Rt1 aprch AG   162.  2003.   -17.  1976.      0.  36   3
       120        70       2.0 3163  102.2 1472 1 3
  1
EB        Rt1 departAG   234.  2016.  1198.  2281.    327611.4   0  56   30.
  1
WB        Rt1 aprch AG  1187.  2341.   752.  2213.    286411.4   0  68   30.
  1
WB        Rt1 thru  AG   752.  2213.   221.  2064.    270311.4   0  44   30.
  1
WB        Rt1 thru  AG   221.  2064.    89.  2037.    270311.4   0  44   30.
  1
WB        Rt1 thru  AG    87.  2035.  -118.  2009.    270311.4   0  56   30.
  1
WB        Rt1 thru  AG  -118.  2009.  -758.  1962.    270311.4   0  56   30.
  1
WB        Rt1 left  AG   607.  2149.   205.  2045.     16111.4   0  44   30.
  2
EB        Rt1 left  AG   296.  2069.   549.  2134.      0.  24   2
       120        91       2.0  161  102.2 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 3 Opt 3 2014 AM - 3B3AM14.DAT                   RUN: Site 3 Opt 3 2014 AM
      DATE: 05/06/2009   TIME: 09:47:52.38


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
        1. NB        Rt8 aprch *  1039.0    1413.0     795.0    1471.0 *     251.   283. AG   2680.  11.4    .0 66.0
        2. NB        Rt8 aprch *   795.0    1471.0     635.0    1521.0 *     168.   287. AG   2680.  11.4    .0 66.0
        3. NB        Rt8 aprch *   635.0    1521.0     524.0    1584.0 *     128.   300. AG   2680.  11.4    .0 66.0
        4. NB        Rt8 aprch *   524.0    1584.0     431.0    1660.0 *     120.   309. AG   2680.  11.4    .0 66.0
        5. NB        Rt8 aprch *   431.0    1660.0     370.0    1736.0 *      97.   321. AG   2680.  11.4    .0 66.0
        6. NB        Rt8 aprch *   370.0    1736.0     312.0    1843.0 *     122.   332. AG   2680.  11.4    .0 66.0
        7. NB        Rt8 aprch *   312.0    1843.0     287.0    1905.0 *      67.   338. AG   2680.  11.4    .0 66.0
        8. NB        Rt8 aprch *   287.0    1905.0     266.0    2013.0 *     110.   349. AG   2680.  11.4    .0 66.0
        9. NB        Rt8 aprch *   273.0    1978.0    2409.6   -8562.6 *    *****   169. AG    407. 100.0    .0 24.0 3.84 546.4
       10. SB        Rt8 depart*   214.0    1996.0     274.0    1817.0 *     189.   161. AG   1656.  11.4    .0 44.0
       11. SB        Rt8 depart*   274.0    1817.0     331.0    1705.0 *     126.   153. AG   1656.  11.4    .0 44.0
       12. SB        Rt8 depart*   331.0    1705.0     388.0    1633.0 *      92.   142. AG   1656.  11.4    .0 44.0
       13. SB        Rt8 depart*   388.0    1633.0     482.0    1553.0 *     123.   130. AG   1656.  11.4    .0 44.0
       14. SB        Rt8 depart*   482.0    1553.0     612.0    1486.0 *     146.   117. AG   1656.  11.4    .0 44.0
       15. SB        Rt8 depart*   612.0    1486.0     791.0    1427.0 *     188.   108. AG   1656.  11.4    .0 44.0
       16. SB        Rt8 depart*   791.0    1427.0     995.0    1367.0 *     213.   106. AG   1656.  11.4    .0 44.0
       17. EB        Rt1 aprch *  -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   3163.  11.4    .0 68.0
       18. EB        Rt1 aprch *  -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   3163.  11.4    .0 68.0
       19. EB        Rt1 aprch *   -72.0    1967.0     233.0    2014.0 *     309.    81. AG   3163.  11.4    .0 68.0
       20. EB        Rt1 aprch *   162.0    2003.0   -5219.3    1191.3 *    5442.   261. AG    480. 100.0    .0 36.0 1.87 276.5
       21. EB        Rt1 depart*   234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   3276.  11.4    .0 56.0
       22. WB        Rt1 aprch *  1187.0    2341.0     752.0    2213.0 *     453.   254. AG   2864.  11.4    .0 68.0
       23. WB        Rt1 thru  *   752.0    2213.0     221.0    2064.0 *     552.   254. AG   2703.  11.4    .0 44.0
       24. WB        Rt1 thru  *   221.0    2064.0      89.0    2037.0 *     135.   258. AG   2703.  11.4    .0 44.0
       25. WB        Rt1 thru  *    87.0    2035.0    -118.0    2009.0 *     207.   263. AG   2703.  11.4    .0 56.0
       26. WB        Rt1 thru  *  -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   2703.  11.4    .0 56.0
       27. WB        Rt1 left  *   607.0    2149.0     205.0    2045.0 *     415.   255. AG    161.  11.4    .0 44.0
       28. EB        Rt1 left  *   296.0    2069.0     334.6    2078.9 *      40.    76. AG    416. 100.0    .0 24.0  .23   2.0
1
                                                                                                                 PAGE  2
      JOB: Site 3 Opt 3 2014 AM - 3B3AM14.DAT                   RUN: Site 3 Opt 3 2014 AM
      DATE: 05/06/2009   TIME: 09:47:52.38

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *   LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
        9. NB        Rt8 aprch *      120       89       2.0      2680       1555     102.20      1        3
       20. EB        Rt1 aprch *      120       70       2.0      3163       1472     102.20      1        3
       28. EB        Rt1 left  *      120       91       2.0       161       1700     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)         *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0       5.0   *
      2. SW 164 W             *         8.0     1953.0       5.0   *
      3. SW 82 W              *        90.0     1961.0       5.0   *
      4. SW CNR               *       174.0     1953.0       5.0   *
      5. SW 82 S              *       218.0     1880.0       5.0   *
      6. SW 164 S             *       245.0     1804.0       5.0   *
      7. SW MID S             *       281.0     1726.0       5.0   *
      8. SE MID S             *       388.0     1751.0       5.0   *
      9. SE 164 S             *       338.0     1834.0       5.0   *
     10. SE 82 S              *       315.0     1914.0       5.0   *
     11. SE CNR               *       304.0     1995.0       5.0   *
     12. SE 82 E              *       376.0     2022.0       5.0   *
     13. SE 164 E             *       454.0     2045.0       5.0   *
     14. SE MID E             *       571.0     2079.0       5.0   *
     15. NE MID E             *       519.0     2169.0       5.0   *
     16. NE 164 E             *       374.0     2130.0       5.0   *
     17. NE 82 E              *       295.0     2110.0       5.0   *
     18. N CNR                *       215.0     2090.0       5.0   *
     19. NW 82 W              *       136.0     2072.0       5.0   *
     20. NW 164 W             *        54.0     2058.0       5.0   *
     21. NW MID W             *       -88.0     2040.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 3 Opt 3 2014 AM - 3B3AM14.DAT                   RUN: Site 3 Opt 3 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *   3.2   3.1   3.0   1.5   1.4   1.8   2.5    .8   1.3   1.4   1.9   1.6   1.6   1.6    .0    .0    .0    .0    .0    .0
   5.  *   3.2   3.1   2.9   1.6   1.5   2.0   2.5    .8   1.1   1.3   1.9   1.6   1.6   1.6    .1    .0    .0    .0    .0    .0
  10.  *   3.2   3.1   2.9   1.4   1.8   2.3   2.5    .7    .9   1.2   1.8   1.6   1.6   1.6    .1    .1    .0    .0    .0    .0
```

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  15.  *   3.2   3.1   2.9   1.4   1.8   2.3   2.6    .7    .8   1.1   1.9   1.6   1.7   1.7    .1    .1    .0    .0    .0    .0
  20.  *   3.3   3.2   3.0   1.5   2.1   2.4   2.8    .7    .8   1.1   1.9   1.7   1.7   1.7    .1    .1    .1    .0    .0    .0
  25.  *   3.4   3.3   3.0   1.6   2.3   2.5   2.5    .7    .8   1.0   1.8   1.8   1.8   1.8    .1    .1    .1    .0    .1    .0
  30.  *   3.5   3.4   3.2   1.6   2.3   2.5   2.5    .8    .6    .9   1.9   1.8   1.8   1.9    .1    .1    .1    .1    .1    .0
  35.  *   3.7   3.5   3.2   1.9   2.4   2.4   2.5    .6    .7   1.0   1.8   2.0   1.9   2.1    .2    .1    .1    .1    .1    .0
  40.  *   3.9   3.6   3.5   2.1   2.5   2.5   2.3    .6    .8   1.0   1.9   2.1   2.0   2.1    .2    .2    .1    .1    .1    .0
  45.  *   4.1   4.1   3.5   2.1   2.4   2.5   2.3    .6    .8   1.1   1.9   2.1   2.2   2.2    .2    .2    .2    .1    .1    .1
  50.  *   4.4   4.1   3.6   2.3   2.6   2.4   2.3    .4    .8   1.1   2.0   2.2   2.3   2.4    .3    .3    .2    .2    .2    .1
  55.  *   4.7   4.3   3.8   2.6   2.5   2.2   2.1    .5    .7   1.0   2.1   2.4   2.4   2.5    .6    .5    .3    .3    .2    .3
  60.  *   4.9   4.5   3.9   2.7   2.4   2.2   2.1    .4    .7    .8   2.1   2.4   2.5   2.5    .9    .8    .7    .6    .5    .4
  65.  *   5.1   4.6   3.9   2.7   2.3   2.1   2.1    .3    .6    .6   2.0   2.3   2.3   2.4   1.3   1.2   1.1   1.0   1.0    .9
  70.  *   5.0   4.4   3.6   2.6   2.2   1.9   1.9    .1    .5    .5   1.7   2.1   2.1   2.2   1.7   1.6   1.4   1.4   1.3   1.2
  75.  *   4.8   4.3   3.3   2.3   1.9   1.9   1.9    .1    .4    .3   1.4   1.8   1.8   1.9   2.0   2.1   2.0   1.9   1.8   1.6
  80.  *   4.4   3.7   2.7   2.0   1.8   1.7   1.8    .1    .3    .1   1.0   1.3   1.4   1.5   2.4   2.3   2.3   2.2   2.2   2.2
  85.  *   3.8   2.9   2.3   1.6   1.7   1.6   2.0    .2    .2    .2    .6    .9    .9   1.0   2.6   2.6   2.5   2.6   2.4   2.4
  90.  *   2.8   2.4   1.8   1.4   1.8   1.8   2.0    .2    .2    .1    .3    .5    .6    .6   2.6   2.5   2.6   2.7   2.6   2.8
  95.  *   2.1   1.8   1.5   1.4   1.7   1.8   2.0    .2    .2    .1    .2    .3    .4    .4   2.5   2.7   2.6   2.5   2.5   2.7
 100.  *   1.8   1.5   1.3   1.3   1.7   1.8   2.0    .2    .2    .1    .1    .2    .2    .3   2.5   2.5   2.4   2.5   2.4   2.8
 105.  *   1.2   1.2   1.2   1.3   1.8   1.8   2.4    .2    .2    .1    .2    .1    .2    .2   2.2   2.3   2.4   2.4   2.4   2.6
 110.  *    .9   1.1   1.0   1.5   1.9   2.2   2.5    .4    .3    .1    .1    .1    .1    .2   2.2   2.3   2.4   2.3   2.4   3.0
 115.  *    .8   1.0   1.0   1.4   2.1   2.3   2.4    .7    .4    .1    .1    .1    .1    .1   2.1   2.2   2.4   2.3   2.5   3.1
 120.  *    .5    .9   1.2   1.5   2.4   2.4   2.6    .8    .6    .2    .1    .1    .1    .1   2.0   2.1   2.4   2.2   2.5   3.2
 125.  *    .5   1.0   1.2   1.8   2.4   2.4   2.5   1.2   1.0    .3    .2    .1    .1    .1   1.9   1.9   2.3   2.1   2.7   3.4
 130.  *    .4    .8   1.1   1.9   2.5   2.3   2.2   1.6   1.1    .5    .2    .2    .1    .1   1.8   1.8   2.3   2.1   2.9   3.4
 135.  *    .4    .5   1.0   1.9   2.4   2.3   2.0   1.7   1.4    .8    .3    .1    .2    .1   1.8   1.7   2.4   2.1   2.8   3.5
 140.  *    .3    .5   1.0   1.6   2.3   2.0   1.8   1.9   1.7    .9    .3    .2    .1    .1   1.7   1.8   2.4   2.3   3.2   3.5
 145.  *    .4    .4    .6   1.6   2.1   1.7   1.5   1.9   2.0   1.1    .7    .2    .2    .1   1.8   1.8   2.4   2.9   3.4   3.1
 150.  *    .4    .4    .5   1.3   1.8   1.5   1.4   1.8   2.2   1.4    .9    .2    .2    .1   1.8   1.8   2.5   3.1   3.1   3.0
 155.  *    .4    .5    .6   1.1   1.5   1.2   1.3   1.9   2.4   2.0   1.2    .4    .2    .1   1.8   1.8   3.0   3.6   3.2   2.8
 160.  *    .4    .5    .5   1.0   1.4   1.2   1.3   2.4   2.4   2.5   1.6    .5    .3    .3   2.0   2.0   3.4   3.5   3.1   2.9
 165.  *    .3    .4    .4    .8   1.0   1.0   1.1   2.4   2.8   2.9   2.1    .8    .4    .3   2.1   2.3   3.7   3.5   2.9   2.9
 170.  *    .2    .3    .3    .5    .8    .8    .9   2.6   3.0   3.1   2.6    .9    .6    .3   2.1   2.6   3.9   3.6   2.9   2.8
 175.  *    .2    .2    .2    .3    .4    .5    .7   2.7   3.2   3.2   2.8    .9    .7    .5   2.0   2.6   3.9   3.2   2.6   2.7
 180.  *    .1    .2    .1    .2    .2    .3    .4   2.5   3.1   3.3   2.9   1.3    .7    .4   2.1   2.6   3.6   2.4   2.5   2.6
 185.  *    .1    .1    .0    .1    .1    .1    .2   2.3   3.0   3.2   3.0   1.1    .7    .5   2.1   2.8   3.6   2.1   2.4   2.5
 190.  *    .1    .1    .1    .0    .0    .0    .1   2.3   2.9   2.9   2.8   1.1    .7    .5   2.2   2.7   3.2   2.2   2.3   2.5
 195.  *    .1    .1    .1    .0    .0    .0    .0   2.3   2.7   3.0   2.7   1.0    .7    .6   2.3   3.0   2.9   1.8   2.4   2.5
 200.  *    .1    .2    .1    .0    .0    .0    .0   2.1   2.5   3.0   2.6   1.3    .8    .6   2.2   2.8   2.6   2.0   2.6   2.5
 205.  *    .2    .2    .1    .0    .0    .0    .0   2.1   2.5   2.7   2.5   1.2    .9    .6   2.4   2.8   2.5   2.2   2.6   2.6
1
                                                                                                                        PAGE  4
      JOB: Site 3 Opt 3 2014 AM - 3B3AM14.DAT                   RUN: Site 3 Opt 3 2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
 210.  *    .2    .2    .1    .0    .0    .0    .0   2.0   2.4   2.7   2.4   1.3    .7    .5   2.6   3.0   2.6   2.2   2.6   2.7
 215.  *    .2    .2    .2    .0    .0    .0    .0   2.1   2.4   2.6   2.3   1.2    .9    .5   2.8   3.0   2.4   2.4   2.9   2.8
 220.  *    .3    .2    .2    .0    .0    .0    .0   1.9   2.3   2.4   2.1   1.1    .9    .5   2.8   3.0   2.5   2.6   3.0   2.9
 225.  *    .3    .2    .2    .0    .0    .0    .0   1.9   2.1   2.4   1.9   1.1    .9    .6   2.9   3.2   2.4   2.7   3.1   3.0
 230.  *    .4    .4    .2    .0    .0    .0    .0   2.0   2.1   2.4   2.0   1.3    .9    .9   2.9   3.2   2.7   2.9   3.1   3.3
 235.  *    .5    .5    .4    .0    .0    .0    .0   1.9   2.1   2.3   2.0   1.3   1.2   1.0   3.1   3.1   2.8   3.1   3.3   3.3
 240.  *    .8    .8    .7    .1    .0    .0    .0   1.8   2.2   2.3   2.1   1.5   1.2   1.3   3.4   3.4   3.1   3.3   3.4   3.5
 245.  *   1.3   1.3   1.0    .3    .1    .0    .0   1.9   2.2   2.4   2.3   1.7   1.6   1.4   3.3   3.3   3.1   3.3   3.6   3.5
 250.  *   2.1   2.0   1.8    .7    .1    .1    .0   1.9   2.1   2.4   2.9   2.5   2.5   2.3   3.1   3.1   3.2   3.3   3.5   3.6
 255.  *   2.9   3.0   2.5   1.2    .3    .2    .1   2.0   2.4   2.5   3.4   2.9   3.0   3.1   3.0   3.0   2.9   3.0   3.4   3.4
 260.  *   3.7   3.7   3.4   2.0    .8    .3    .2   2.2   2.4   3.1   4.1   3.4   3.4   3.4   2.3   2.5   2.4   2.6   2.8   3.1
 265.  *   4.5   4.6   4.1   2.6    .9    .5    .3   2.3   3.1   3.4   4.3   3.8   3.5   3.4   2.0   1.8   1.9   1.9   2.3   2.4
 270.  *   4.9   5.0   4.5   3.1   1.3    .8    .5   2.6   3.3   3.8   4.6   3.6   3.4   3.4    .9   1.2   1.3   1.4   1.6   1.7
 275.  *   5.2   5.0   4.8   3.2   1.4    .8    .6   2.7   3.4   4.0   4.0   3.2   3.0   3.0    .5    .7    .7    .7   1.1   1.2
 280.  *   4.9   5.0   4.5   3.3   1.5    .9    .7   2.8   3.5   4.0   3.8   2.8   2.7   2.6    .3    .3    .4    .4    .5    .7
 285.  *   4.7   4.7   4.3   3.2   1.6   1.1    .7   2.9   3.6   4.1   3.3   2.6   2.5   2.2    .2    .2    .1    .1    .3    .4
 290.  *   4.6   4.4   4.1   3.0   1.7   1.2    .8   3.1   3.6   3.9   2.8   2.4   2.2   2.1    .2    .1    .1    .1    .2    .2
 295.  *   4.4   4.2   4.0   3.0   1.4   1.2    .9   3.3   3.6   3.7   2.5   2.1   2.0   2.0    .2    .1    .1    .1    .1    .2
 300.  *   4.1   3.9   3.8   2.7   1.5    .9    .8   3.1   3.9   3.8   2.4   2.2   1.9   1.9    .1    .1    .1    .1    .1    .1
 305.  *   3.9   3.7   3.6   2.5   1.5   1.1    .8   3.3   3.6   3.5   2.2   2.1   1.9   1.8    .1    .1    .1    .1    .1    .1
 310.  *   3.5   3.5   3.3   2.5   1.3   1.1    .8   3.1   3.6   3.4   2.0   2.0   1.7   1.7    .1    .1    .1    .0    .1    .1
 315.  *   3.4   3.5   3.2   2.3   1.3    .9    .8   3.1   3.6   3.3   2.0   1.9   1.7   1.7    .1    .1    .0    .0    .1    .1
 320.  *   3.4   3.2   3.1   2.3   1.3    .8    .7   2.9   3.5   3.1   2.0   1.9   1.6   1.6    .1    .1    .0    .0    .0    .1
 325.  *   3.3   3.2   3.1   2.2   1.2    .9    .9   2.9   3.3   2.9   1.9   1.9   1.6   1.6    .0    .0    .0    .0    .0    .1
 330.  *   3.2   3.1   2.9   2.2   1.2    .9    .8   2.6   3.2   2.5   1.8   1.8   1.6   1.6    .0    .0    .0    .0    .0    .1
 335.  *   3.2   3.1   2.9   2.0   1.1    .9   1.1   2.4   2.7   2.3   1.8   1.8   1.6   1.7    .0    .0    .0    .0    .0    .0
 340.  *   3.2   3.1   3.0   1.9   1.1   1.1   1.4   1.9   2.8   2.2   1.9   1.8   1.7   1.7    .0    .0    .0    .0    .0    .0
 345.  *   3.1   3.2   2.9   1.8   1.0   1.3   1.7   1.5   2.3   2.1   2.1   1.8   1.7   1.8    .0    .0    .0    .0    .0    .0
 350.  *   3.2   3.2   3.0   1.7   1.3   1.4   2.0   1.2   2.0   1.9   1.9   1.7   1.7   1.7    .0    .0    .0    .0    .0    .0
 355.  *   3.2   3.2   2.9   1.6   1.4   1.6   2.3   1.1   1.6   1.6   2.0   1.6   1.6   1.7    .0    .0    .0    .0    .0    .0
 360.  *   3.2   3.1   3.0   1.5   1.4   1.8   2.5    .8   1.3   1.4   1.9   1.6   1.6   1.6    .0    .0    .0    .0    .0    .0
 ------*-------------------------------------------------------------------------------------------------------------------------
 MAX   *   5.2   5.0   4.8   3.3   2.6   2.5   2.8   3.3   3.9   4.1   4.6   3.8   3.5   3.4   3.4   3.4   3.9   3.6   3.6   3.6
 DEGR. *  275   270   275   280    50    25    20   295   300   285   270   265   265   260   240   240   170   155   245   250

1
                                                                                                                        PAGE  5
      JOB: Site 3 Opt 3 2014 AM - 3B3AM14.DAT                   RUN: Site 3 Opt 3 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .2
  55.  *    .2
  60.  *    .4
  65.  *    .7
  70.  *   1.2
  75.  *   1.6
  80.  *   2.2
  85.  *   2.5
  90.  *   2.8
  95.  *   3.1
 100.  *   3.4
 105.  *   3.3
 110.  *   3.5
 115.  *   3.4
 120.  *   3.2
 125.  *   3.2
 130.  *   2.9
 135.  *   2.8
 140.  *   2.8
 145.  *   2.8
 150.  *   2.8
 155.  *   2.8
 160.  *   2.8
 165.  *   2.8
 170.  *   2.7
 175.  *   2.6
 180.  *   2.5
 185.  *   2.5
 190.  *   2.5
 195.  *   2.5
 200.  *   2.6
 205.  *   2.6
1
                                                                                                                             PAGE  6
      JOB: Site 3 Opt 3 2014 AM - 3B3AM14.DAT                  RUN: Site 3 Opt 3 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   2.6
 215.  *   2.8
 220.  *   3.0
 225.  *   3.0
 230.  *   3.2
 235.  *   3.2
 240.  *   3.4
 245.  *   3.6
 250.  *   3.5
 255.  *   3.3
 260.  *   3.0
 265.  *   2.6
 270.  *   1.8
 275.  *   1.1
 280.  *    .8
 285.  *    .3
 290.  *    .2
 295.  *    .2
 300.  *    .1
 305.  *    .1
 310.  *    .1
 315.  *    .1
 320.  *    .1
 325.  *    .1
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   3.6
 DEGR. *  245

 THE HIGHEST CONCENTRATION IS    5.20 PPM AT  275 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    5.00 PPM AT  270 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS    4.80 PPM AT  275 DEGREES FROM REC3 .
```

```
Site 3 Opt 3 2030 AM - 3B3AM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 Opt 3 2030 AM                     28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    2105 9.2   0  66   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    2105 9.2   0  66   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    2105 9.2   0  66   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    2105 9.2   0  66   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    2105 9.2   0  66   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    2105 9.2   0  66   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    2105 9.2   0  66   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    2105 9.2   0  66   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        92       2.0 2105   84.1 1555 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    1540 9.2   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    1540 9.2   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    1540 9.2   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    1540 9.2   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    1540 9.2   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    1540 9.2   0  44   30.
  1
```

```
SB         Rt8 departAG   791.  1427.   995.  1367.    1540 9.2   0  44   30.
  1
EB         Rt1 aprch AG  -757.  1920.  -322.  1944.    2730 9.2   0  68   30.
  1
EB         Rt1 aprch AG  -322.  1944.   -72.  1967.    2730 9.2   0  68   30.
  1
EB         Rt1 aprch AG   -72.  1967.   233.  2014.    2730 9.2   0  68   30.
  2
EB         Rt1 aprch AG   162.  2003.   -17.  1976.      0.  36   3
       120        71       2.0 2730   84.1 1465 1 3
  1
EB         Rt1 departAG   234.  2016.  1198.  2281.    2905 9.2   0  56   30.
  1
WB         Rt1 aprch AG  1187.  2341.   752.  2213.    3000 9.2   0  68   30.
  1
WB         Rt1 thru  AG   752.  2213.   221.  2064.    2865 9.2   0  44   30.
  1
WB         Rt1 thru  AG   221.  2064.    89.  2037.    2865 9.2   0  44   30.
  1
WB         Rt1 thru  AG    87.  2035.  -118.  2009.    2865 9.2   0  56   30.
  1
WB         Rt1 thru  AG  -118.  2009.  -758.  1962.    2865 9.2   0  56   30.
  1
WB         Rt1 left  AG   607.  2149.   205.  2045.     135 9.2   0  44   30.
  2
EB         Rt1 left  AG   296.  2069.   549.  2134.      0.  24   2
       120        89       2.0  135   84.1 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 3 Opt 3 2030 AM - 3B3AM30.DAT                   RUN: Site 3 Opt 3 2030 AM
      DATE: 05/06/2009   TIME: 09:50:20.95


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *     251.   283. AG   2105.    9.2    .0 66.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *     168.   287. AG   2105.    9.2    .0 66.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *     128.   300. AG   2105.    9.2    .0 66.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *     120.   309. AG   2105.    9.2    .0 66.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *      97.   321. AG   2105.    9.2    .0 66.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *     122.   332. AG   2105.    9.2    .0 66.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *      67.   338. AG   2105.    9.2    .0 66.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *     110.   349. AG   2105.    9.2    .0 66.0
       9. NB        Rt8 aprch *    273.0    1978.0    1886.8   -5983.2 *    8123.   169. AG    346. 100.0    .0 24.0 3.39 412.7
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *     189.   161. AG   1540.    9.2    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *     126.   153. AG   1540.    9.2    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *      92.   142. AG   1540.    9.2    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *     123.   130. AG   1540.    9.2    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *     146.   117. AG   1540.    9.2    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *     188.   108. AG   1540.    9.2    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *     213.   106. AG   1540.    9.2    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   2730.    9.2    .0 68.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   2730.    9.2    .0 68.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *     309.    81. AG   2730.    9.2    .0 68.0
      20. EB        Rt1 aprch *    162.0    2003.0   -3887.6    1392.2 *    4095.   261. AG    400. 100.0    .0 36.0 1.66 208.0
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   2905.    9.2    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *     453.   254. AG   3000.    9.2    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *     552.   254. AG   2865.    9.2    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *     135.   258. AG   2865.    9.2    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *     207.   263. AG   2865.    9.2    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   2865.    9.2    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *     415.   255. AG    135.    9.2    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0     327.6    2077.1 *      33.    76. AG    335. 100.0    .0 24.0  .18   1.7
1
                                                                                                                     PAGE  2
      JOB: Site 3 Opt 3 2030 AM - 3B3AM30.DAT                   RUN: Site 3 Opt 3 2030 AM
      DATE: 05/06/2009   TIME: 09:50:20.95

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     120       92       2.0      2105       1555      84.10      1        3
      20. EB        Rt1 aprch *     120       71       2.0      2730       1465      84.10      1        3
      28. EB        Rt1 left  *     120       89       2.0       135       1700      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z       *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0       5.0    *
      2. SW 164 W             *         8.0     1953.0       5.0    *
      3. SW 82 W              *        90.0     1961.0       5.0    *
      4. SW CNR               *       174.0     1953.0       5.0    *
      5. SW 82 S              *       218.0     1880.0       5.0    *
      6. SW 164 S             *       245.0     1804.0       5.0    *
      7. SW MID S             *       281.0     1726.0       5.0    *
      8. SE MID S             *       388.0     1751.0       5.0    *
      9. SE 164 S             *       338.0     1834.0       5.0    *
     10. SE 82 S              *       315.0     1914.0       5.0    *
     11. SE CNR               *       304.0     1995.0       5.0    *
     12. SE 82 E              *       376.0     2022.0       5.0    *
     13. SE 164 E             *       454.0     2045.0       5.0    *
     14. SE MID E             *       571.0     2079.0       5.0    *
     15. NE MID E             *       519.0     2169.0       5.0    *
     16. NE 164 E             *       374.0     2130.0       5.0    *
     17. NE 82 E              *       295.0     2110.0       5.0    *
     18. N CNR                *       215.0     2090.0       5.0    *
     19. NW 82 W              *       136.0     2072.0       5.0    *
     20. NW 164 W             *        54.0     2058.0       5.0    *
     21. NW MID W             *       -88.0     2040.0       5.0    *
1
                                                                                                                     PAGE  3
      JOB: Site 3 Opt 3 2030 AM - 3B3AM30.DAT                   RUN: Site 3 Opt 3 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*----------------------------------------------------------------------------------------------------------------------------
   0.  *   2.6   2.5   2.3   1.1   1.0   1.4   1.6    .6    .9   1.0   1.4   1.2   1.2   1.2    .0    .0    .0    .0    .0    .0
   5.  *   2.6   2.5   2.3   1.1   1.2   1.5   1.8    .6    .8   1.0   1.3   1.2   1.2   1.2    .0    .0    .0    .0    .0    .0
  10.  *   2.5   2.5   2.2   1.1   1.3   1.6   2.0    .5    .6   1.0   1.3   1.2   1.2   1.2    .1    .0    .0    .0    .0    .0
```

```
 15.  *   2.4   2.5   2.3   1.0   1.2   1.7   2.1    .5    .7    .9   1.4   1.2   1.2   1.3    .1    .1    .0    .0    .0    .0
 20.  *   2.6   2.5   2.3   1.2   1.6   1.8   2.0    .5    .7    .8   1.4   1.3   1.3   1.3    .1    .1    .1    .0    .0    .0
 25.  *   2.6   2.7   2.4   1.2   1.6   1.8   2.0    .4    .5    .8   1.3   1.4   1.4   1.3    .1    .1    .1    .0    .1    .0
 30.  *   2.8   2.6   2.4   1.2   1.7   1.8   2.0    .4    .5    .8   1.3   1.4   1.5   1.4    .1    .1    .1    .1    .1    .0
 35.  *   2.9   2.8   2.6   1.2   1.7   1.9   1.8    .5    .5    .8   1.4   1.5   1.5   1.5    .1    .1    .1    .1    .1    .0
 40.  *   3.1   2.9   2.6   1.6   1.8   1.9   1.8    .5    .7    .8   1.4   1.5   1.6   1.6    .2    .1    .1    .1    .1    .0
 45.  *   3.2   3.1   2.8   1.6   1.8   2.0   1.8    .5    .6    .9   1.5   1.6   1.7   1.8    .2    .2    .1    .1    .1    .0
 50.  *   3.4   3.3   2.9   1.7   1.8   1.7   1.8    .4    .6    .8   1.5   1.8   1.7   1.7    .3    .3    .2    .2    .2    .1
 55.  *   3.7   3.4   2.9   1.8   2.0   1.6   1.7    .2    .5    .8   1.6   1.8   1.9   1.9    .5    .4    .3    .2    .2    .3
 60.  *   3.7   3.4   3.0   2.2   2.0   1.7   1.6    .3    .5    .6   1.6   1.8   1.8   1.9    .8    .7    .7    .5    .5    .4
 65.  *   4.0   3.6   2.8   1.9   1.7   1.5   1.6    .3    .5    .5   1.5   1.8   1.7   1.8   1.0    .9    .9    .8    .7    .7
 70.  *   3.9   3.4   2.7   1.8   1.7   1.5   1.5    .1    .3    .3   1.2   1.6   1.6   1.7   1.5   1.4   1.2   1.1   1.0   1.1
 75.  *   3.7   3.2   2.4   1.8   1.5   1.4   1.4    .1    .3    .3   1.0   1.2   1.4   1.3   1.7   1.7   1.5   1.5   1.4   1.3
 80.  *   3.2   2.8   2.1   1.5   1.4   1.2   1.5    .1    .2    .1    .8   1.0   1.0   1.0   2.0   2.0   1.9   1.9   1.8   1.8
 85.  *   2.9   2.2   1.5   1.2   1.3   1.2   1.5    .1    .1    .0    .4    .7    .7    .8   2.1   2.0   1.9   2.0   2.0   2.0
 90.  *   2.2   1.7   1.3   1.1   1.2   1.3   1.4    .1    .1    .0    .2    .4    .4    .5   2.2   2.1   2.1   2.1   2.1   1.9
 95.  *   1.6   1.4   1.1   1.0   1.3   1.3   1.5    .1    .1    .1    .1    .2    .3    .3   2.0   2.0   1.9   2.0   2.0   2.1
100.  *   1.2   1.1   1.0   1.0   1.3   1.4   1.5    .1    .1    .1    .1    .2    .2    .2   2.0   1.9   1.8   2.0   2.0   2.2
105.  *    .9    .8    .9   1.0   1.3   1.3   1.5    .1    .2    .1    .0    .1    .1    .1   1.8   1.8   1.8   1.9   1.9   2.3
110.  *    .6    .8   1.0   1.0   1.3   1.4   1.6    .2    .2    .1    .0    .1    .1    .1   1.8   1.8   1.8   1.7   2.0   2.4
115.  *    .5    .6    .8   1.1   1.4   1.6   1.8    .3    .2    .1    .1    .1    .1    .1   1.7   1.7   1.8   1.6   1.9   2.4
120.  *    .4    .6    .7   1.0   1.5   1.6   1.9    .7    .2    .1    .1    .1    .1    .1   1.6   1.6   1.7   1.6   2.0   2.4
125.  *    .3    .5    .8   1.0   1.5   1.7   1.9    .8    .4    .1    .1    .1    .1    .1   1.5   1.5   1.6   1.7   2.0   2.5
130.  *    .3    .3    .7   1.3   1.6   1.6   1.7    .9    .8    .1    .1    .0    .1    .1   1.5   1.4   1.7   1.6   2.0   2.6
135.  *    .3    .3    .7   1.2   1.7   1.6   1.5   1.1    .9    .2    .1    .0    .0    .1   1.4   1.4   1.8   1.6   2.4   2.5
140.  *    .3    .4    .5   1.2   1.6   1.6   1.4   1.1    .8    .5    .1    .0    .0    .0   1.4   1.4   1.7   1.7   2.4   2.5
145.  *    .3    .4    .5   1.1   1.5   1.3   1.3   1.1   1.3    .8    .2    .0    .0    .0   1.4   1.4   1.8   2.1   2.3   2.3
150.  *    .3    .4    .5   1.0   1.4   1.1   1.2   1.2   1.4    .9    .5    .0    .0    .0   1.4   1.4   1.9   2.3   2.5   2.5
155.  *    .3    .4    .4    .9   1.3   1.1   1.1   1.4   1.5   1.3    .9    .1    .0    .0   1.4   1.5   2.1   2.4   2.4   2.4
160.  *    .2    .4    .4    .8    .9    .9   1.0   1.4   1.8   1.6   1.2    .2    .1    .1   1.5   1.6   2.5   2.7   2.3   2.4
165.  *    .2    .2    .3    .5    .9    .8   1.0   1.6   2.1   2.0   1.5    .4    .2    .1   1.5   1.7   2.7   2.8   2.4   2.4
170.  *    .1    .2    .2    .4    .6    .6    .8   1.7   2.3   2.3   2.1    .8    .3    .2   1.6   1.8   2.9   2.7   2.4   2.3
175.  *    .1    .1    .1    .3    .4    .4    .6   1.8   2.2   2.4   2.1    .7    .5    .2   1.7   2.0   3.0   2.1   2.1   2.2
180.  *    .0    .0    .1    .1    .2    .2    .3   1.7   2.3   2.3   2.2    .8    .5    .3   1.7   1.9   2.8   2.0   2.0   2.2
185.  *    .1    .1    .0    .1    .1    .1    .2   1.8   2.3   2.3   2.2    .9    .5    .3   1.7   1.9   2.7   1.8   1.9   2.0
190.  *    .1    .1    .0    .0    .0    .0    .1   1.7   2.2   2.3   2.1    .8    .5    .3   1.7   2.1   2.3   1.5   1.9   2.0
195.  *    .1    .1    .1    .0    .0    .0    .0   1.6   2.0   2.1   2.1    .8    .5    .3   1.7   2.2   2.2   1.5   1.9   2.0
200.  *    .1    .1    .1    .0    .0    .0    .0   1.5   1.9   2.0   1.9   1.0    .5    .3   1.7   2.1   2.0   1.7   2.0   2.0
205.  *    .1    .1    .1    .0    .0    .0    .0   1.5   1.9   2.1   1.8   1.0    .6    .3   1.8   2.2   1.8   1.6   2.1   2.1
1
                                                                                                             PAGE  4
     JOB: Site 3 Opt 3 2030 AM - 3B3AM30.DAT                RUN: Site 3 Opt 3 2030 AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*-----------------------------------------------------------------------------------------------------------------------
210.  *    .1    .1    .1    .0    .0    .0    .0   1.5   1.9   2.0   1.7    .9    .7    .4   1.9   2.0   1.9   1.8   2.2   2.1
215.  *    .1    .1    .1    .0    .0    .0    .0   1.4   1.8   1.9   1.6    .8    .6    .4   1.9   2.3   1.9   1.9   2.3   2.3
220.  *    .1    .1    .1    .0    .0    .0    .0   1.4   1.7   1.7   1.5    .9    .8    .4   2.2   2.3   1.9   1.9   2.2   2.3
225.  *    .3    .2    .1    .0    .0    .0    .0   1.4   1.7   1.7   1.4    .9    .7    .5   2.2   2.5   2.0   2.2   2.4   2.4
230.  *    .3    .3    .2    .0    .0    .0    .0   1.3   1.6   1.7   1.4    .7    .7    .4   2.3   2.6   2.0   2.2   2.6   2.6
235.  *    .4    .4    .3    .0    .0    .0    .0   1.3   1.6   1.9   1.5   1.0    .7    .6   2.4   2.4   2.2   2.5   2.7   2.5
240.  *    .6    .6    .5    .1    .0    .0    .0   1.4   1.7   1.8   1.4   1.0    .9    .8   2.4   2.7   2.4   2.6   2.8   2.9
245.  *   1.0   1.0    .7    .3    .0    .0    .0   1.4   1.6   1.9   1.8   1.3   1.2   1.2   2.5   2.6   2.8   2.7   2.8   2.8
250.  *   1.5   1.6   1.3    .5    .1    .1    .0   1.3   1.7   1.9   2.1   1.7   1.6   1.6   2.5   2.6   2.6   2.7   2.8   2.8
255.  *   2.3   2.1   2.0   1.1    .2    .1    .1   1.4   1.6   2.1   2.6   2.4   2.4   2.2   2.5   2.4   2.4   2.4   2.8   2.9
260.  *   2.9   2.9   2.6   1.4    .6    .2    .1   1.5   1.9   2.6   2.9   2.6   2.5   2.5   2.1   1.9   2.1   2.1   2.3   2.5
265.  *   3.6   3.5   3.1   2.0    .8    .3    .2   1.6   2.2   2.9   3.2   2.7   2.7   2.5   1.4   1.5   1.6   1.6   1.8   1.9
270.  *   3.8   3.8   3.5   2.2   1.0    .6    .3   1.7   2.6   3.0   3.2   2.6   2.7   2.3    .8    .9    .9   1.2   1.2   1.4
275.  *   4.0   4.0   3.5   2.6   1.1    .7    .5   1.9   2.6   3.2   3.1   2.4   2.3   2.2    .5    .5    .6    .6    .7   1.0
280.  *   3.8   3.9   3.6   2.6   1.2    .7    .5   2.0   2.7   3.2   2.7   2.3   2.2   1.7    .3    .2    .2    .4    .4    .5
285.  *   3.8   3.7   3.6   2.4   1.3    .9    .6   2.1   2.8   3.0   2.2   2.1   1.9   1.6    .2    .2    .1    .1    .2    .3
290.  *   3.6   3.6   3.2   2.2   1.2   1.0    .6   2.4   2.8   3.1   2.1   1.8   1.6   1.6    .2    .1    .1    .1    .1    .2
295.  *   3.4   3.3   3.1   2.1   1.2    .8    .7   2.3   2.8   2.9   1.9   1.7   1.5   1.5    .1    .1    .1    .1    .1    .1
300.  *   3.2   3.2   2.9   2.0   1.2    .9    .7   2.5   2.8   2.7   1.7   1.6   1.4   1.5    .1    .1    .1    .1    .1    .1
305.  *   3.1   2.8   2.7   2.0   1.0    .8    .7   2.3   2.9   2.7   1.5   1.5   1.3   1.3    .1    .1    .1    .0    .1    .1
310.  *   2.9   2.9   2.6   2.0   1.1    .8    .7   2.3   2.8   2.7   1.5   1.4   1.3   1.3    .1    .1    .1    .0    .1    .1
315.  *   2.8   2.7   2.5   1.9   1.0    .6    .6   2.5   2.7   2.4   1.6   1.4   1.2   1.2    .1    .1    .0    .0    .0    .1
320.  *   2.6   2.6   2.5   1.7    .9    .7    .5   2.0   2.5   2.5   1.3   1.4   1.2   1.2    .1    .0    .0    .0    .0    .1
325.  *   2.6   2.5   2.4   1.7    .9    .8    .7   1.9   2.5   2.0   1.3   1.3   1.2   1.2    .0    .0    .0    .0    .0    .1
330.  *   2.5   2.5   2.3   1.7   1.0    .7    .8   1.9   2.2   1.8   1.3   1.3   1.2   1.2    .0    .0    .0    .0    .0    .0
335.  *   2.5   2.5   2.2   1.5    .8    .8    .8   1.6   2.2   1.7   1.4   1.3   1.2   1.2    .0    .0    .0    .0    .0    .0
340.  *   2.6   2.5   2.4   1.5    .8    .6    .9   1.1   1.9   1.5   1.4   1.3   1.3   1.3    .0    .0    .0    .0    .0    .0
345.  *   2.6   2.5   2.4   1.4    .8    .8   1.3   1.1   1.6   1.4   1.5   1.2   1.3   1.3    .0    .0    .0    .0    .0    .0
350.  *   2.6   2.5   2.3   1.3   1.0   1.2   1.5    .8   1.4   1.2   1.4   1.2   1.3   1.3    .0    .0    .0    .0    .0    .0
355.  *   2.6   2.5   2.4   1.3   1.0   1.1   1.7    .7   1.1   1.2   1.4   1.2   1.2   1.2    .0    .0    .0    .0    .0    .0
360.  *   2.6   2.5   2.3   1.1   1.0   1.4   1.6    .6    .9   1.0   1.4   1.2   1.2   1.2    .0    .0    .0    .0    .0    .0
------*-----------------------------------------------------------------------------------------------------------------------
MAX   *   4.0   4.0   3.6   2.6   2.0   2.0   2.1   2.5   2.9   3.2   3.2   2.7   2.7   2.5   2.5   2.7   3.0   2.8   2.8   2.9
DEGR. *   275   275   285   275    55    45    15   315   305   275   270   265   265   260   245   240   175   165   240   240

1
                                                                                                             PAGE  5
     JOB: Site 3 Opt 3 2030 AM - 3B3AM30.DAT                RUN: Site 3 Opt 3 2030 AM

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21
------*------
  0.  *    .0
  5.  *    .0
 10.  *    .0
 15.  *    .0
 20.  *    .1
 25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .1
  55.  *    .2
  60.  *    .3
  65.  *    .6
  70.  *    .8
  75.  *   1.4
  80.  *   1.8
  85.  *   2.1
  90.  *   2.3
  95.  *   2.5
 100.  *   2.6
 105.  *   2.7
 110.  *   2.6
 115.  *   2.6
 120.  *   2.5
 125.  *   2.4
 130.  *   2.4
 135.  *   2.3
 140.  *   2.3
 145.  *   2.1
 150.  *   2.1
 155.  *   2.2
 160.  *   2.1
 165.  *   2.2
 170.  *   2.1
 175.  *   2.1
 180.  *   2.0
 185.  *   1.9
 190.  *   1.8
 195.  *   2.0
 200.  *   2.1
 205.  *   2.1
1
                                                                                                                         PAGE  6
      JOB: Site 3 Opt 3 2030 AM - 3B3AM30.DAT                    RUN: Site 3 Opt 3 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   2.2
 215.  *   2.2
 220.  *   2.3
 225.  *   2.4
 230.  *   2.6
 235.  *   2.6
 240.  *   2.8
 245.  *   2.9
 250.  *   2.9
 255.  *   2.6
 260.  *   2.5
 265.  *   2.1
 270.  *   1.5
 275.  *   1.0
 280.  *    .7
 285.  *    .3
 290.  *    .2
 295.  *    .2
 300.  *    .1
 305.  *    .1
 310.  *    .1
 315.  *    .1
 320.  *    .1
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   2.9
 DEGR. *  245

 THE HIGHEST CONCENTRATION IS    4.00 PPM AT  275 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    4.00 PPM AT  275 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS    3.60 PPM AT  285 DEGREES FROM REC3 .
```

```
Site 3 Opt 3 2014 PM - 3B3PM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 Opt 3 2014 PM                     28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    214411.4   0  66   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    214411.4   0  66   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    214411.4   0  66   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    214411.4   0  66   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    214411.4   0  66   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    214411.4   0  66   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    214411.4   0  66   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    214411.4   0  66   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        94       2.0 2144  102.2 1555 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    283311.4   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    283311.4   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    283311.4   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    283311.4   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    283311.4   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    283311.4   0  44   30.
  1
```

```
SB        Rt8 departAG   791.  1427.   995.  1367.    283311.4   0  44   30.
  1
EB        Rt1 aprch AG  -757.  1920.  -322.  1944.    316211.4   0  68   30.
  1
EB        Rt1 aprch AG  -322.  1944.   -72.  1967.    316211.4   0  68   30.
  1
EB        Rt1 aprch AG   -72.  1967.   233.  2014.    316211.4   0  68   30.
  2
EB        Rt1 aprch AG   162.  2003.   -17.  1976.      0.  36   3
       120        72       2.0 3162  102.2 1458 1 3
  1
EB        Rt1 departAG   234.  2016.  1198.  2281.    269011.4   0  56   30.
  1
WB        Rt1 aprch AG  1187.  2341.   752.  2213.    425911.4   0  68   30.
  1
WB        Rt1 thru  AG   752.  2213.   221.  2064.    318411.4   0  44   30.
  1
WB        Rt1 thru  AG   221.  2064.    89.  2037.    318411.4   0  44   30.
  1
WB        Rt1 thru  AG    87.  2035.  -118.  2009.    318411.4   0  56   30.
  1
WB        Rt1 thru  AG  -118.  2009.  -758.  1962.    318411.4   0  56   30.
  1
WB        Rt1 left  AG   607.  2149.   205.  2045.    107511.4   0  44   30.
  2
EB        Rt1 left  AG   296.  2069.   549.  2134.      0.  24   2
       120        84       2.0 1075  102.2 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                 PAGE  1

      JOB: Site 3 Opt 3 2014 PM - 3B3PM14.DAT                   RUN: Site 3 Opt 3 2014 PM
      DATE: 05/06/2009   TIME: 09:48:58.73


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *    251.   283. AG   2144.  11.4    .0 66.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *    168.   287. AG   2144.  11.4    .0 66.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *    128.   300. AG   2144.  11.4    .0 66.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *    120.   309. AG   2144.  11.4    .0 66.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *     97.   321. AG   2144.  11.4    .0 66.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *    122.   332. AG   2144.  11.4    .0 66.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *     67.   338. AG   2144.  11.4    .0 66.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *    110.   349. AG   2144.  11.4    .0 66.0
       9. NB        Rt8 aprch *    273.0    1978.0    1982.7   -6456.6 *   8606.   169. AG    429. 100.0    .0 24.0 3.76 437.2
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *    189.   161. AG   2833.  11.4    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *    126.   153. AG   2833.  11.4    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *     92.   142. AG   2833.  11.4    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *    123.   130. AG   2833.  11.4    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *    146.   117. AG   2833.  11.4    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *    188.   108. AG   2833.  11.4    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *    213.   106. AG   2833.  11.4    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *    436.    87. AG   3162.  11.4    .0 68.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *    251.    85. AG   3162.  11.4    .0 68.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *    309.    81. AG   3162.  11.4    .0 68.0
      20. EB        Rt1 aprch *    162.0    2003.0   -5528.6    1144.6 *   5755.   261. AG    493. 100.0    .0 36.0 1.97 292.4
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *   1000.    75. AG   2690.  11.4    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *    453.   254. AG   4259.  11.4    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *    552.   254. AG   3184.  11.4    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *    135.   258. AG   3184.  11.4    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *    207.   263. AG   3184.  11.4    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *    642.   266. AG   3184.  11.4    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *    415.   255. AG   1075.  11.4    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0    1454.4    2366.6 *   1196.    76. AG    384. 100.0    .0 24.0 1.19  60.8
1
                                                                                                             PAGE  2
      JOB: Site 3 Opt 3 2014 PM - 3B3PM14.DAT                   RUN: Site 3 Opt 3 2014 PM
      DATE: 05/06/2009   TIME: 09:48:58.73

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     120       94       2.0      2144       1555     102.20      1        3
      20. EB        Rt1 aprch *     120       72       2.0      3162       1458     102.20      1        3
      28. EB        Rt1 left  *     120       84       2.0      1075       1700     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z       *
     -------------------------*-------------------------------------*
      1. SW MID W             *      -114.0     1937.0       5.0    *
      2. SW 164 W             *         8.0     1953.0       5.0    *
      3. SW 82 W              *        90.0     1961.0       5.0    *
      4. SW CNR               *       174.0     1953.0       5.0    *
      5. SW 82 S              *       218.0     1880.0       5.0    *
      6. SW 164 S             *       245.0     1804.0       5.0    *
      7. SW MID S             *       281.0     1726.0       5.0    *
      8. SE MID S             *       388.0     1751.0       5.0    *
      9. SE 164 S             *       338.0     1834.0       5.0    *
     10. SE 82 S              *       315.0     1914.0       5.0    *
     11. SE CNR               *       304.0     1995.0       5.0    *
     12. SE 82 E              *       376.0     2022.0       5.0    *
     13. SE 164 E             *       454.0     2045.0       5.0    *
     14. SE MID E             *       571.0     2079.0       5.0    *
     15. NE MID E             *       519.0     2169.0       5.0    *
     16. NE 164 E             *       374.0     2130.0       5.0    *
     17. NE 82 E              *       295.0     2110.0       5.0    *
     18. N CNR                *       215.0     2090.0       5.0    *
     19. NW 82 W              *       136.0     2072.0       5.0    *
     20. NW 164 W             *        54.0     2058.0       5.0    *
     21. NW MID W             *       -88.0     2040.0       5.0    *
1
                                                                                                             PAGE  3
      JOB: Site 3 Opt 3 2014 PM - 3B3PM14.DAT                   RUN: Site 3 Opt 3 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*---------------------------------------------------------------------------------------------------------------------------
   0.  *   3.4   3.3   3.1   1.6   1.9   2.5   3.1   1.0   1.5   1.5   1.9   2.3   2.3   2.3    .0    .0    .0    .0    .0    .0
   5.  *   3.3   3.3   3.0   1.7   1.9   2.6   3.2    .9   1.3   1.5   2.0   2.3   2.3   2.3    .1    .0    .0    .0    .0    .0
  10.  *   3.3   3.3   3.0   1.5   2.3   2.8   3.2    .9   1.1   1.4   2.0   2.3   2.3   2.3    .1    .1    .0    .0    .0    .0
```

```
  15.  *   3.3   3.3   3.1   1.7   2.4   3.1   3.4    .9   1.1   1.4   2.2   2.3   2.4   2.4    .1    .1    .1    .0    .0    .0
  20.  *   3.5   3.4   3.1   1.6   2.4   3.0   3.2    .8   1.2   1.3   2.2   2.4   2.4   2.4    .1    .1    .1    .0    .1    .1
  25.  *   3.5   3.5   3.0   1.7   2.8   3.1   3.2    .8   1.1   1.3   2.3   2.4   2.4   2.6    .1    .1    .1    .1    .1    .1
  30.  *   3.6   3.5   3.4   2.1   2.9   3.1   3.1    .8   1.0   1.4   2.4   2.5   2.7   2.6    .2    .1    .1    .1    .1    .0
  35.  *   3.9   3.7   3.4   2.1   3.0   3.1   3.0    .7   1.1   1.5   2.4   2.7   2.7   2.7    .2    .2    .1    .1    .1    .0
  40.  *   4.1   4.0   3.7   2.5   3.0   3.2   2.9    .8   1.1   1.6   2.5   2.9   2.8   2.9    .2    .2    .1    .1    .1    .1
  45.  *   4.4   4.1   3.9   2.8   3.3   3.1   2.8    .8   1.1   1.5   2.7   3.0   2.9   3.0    .3    .2    .2    .1    .1    .1
  50.  *   4.5   4.4   4.0   3.0   3.4   2.9   2.9    .7   1.0   1.6   2.8   2.9   3.2   3.1    .5    .3    .3    .2    .2    .1
  55.  *   4.9   4.7   4.3   3.3   3.5   3.0   2.8    .7   1.1   1.5   3.0   3.3   3.3   3.2    .7    .7    .6    .4    .5    .3
  60.  *   5.4   4.9   4.5   3.4   3.2   2.7   2.5    .5    .9   1.2   2.9   3.3   3.1   3.2   1.3   1.1   1.0    .9    .8    .7
  65.  *   5.6   5.1   4.4   3.4   3.0   2.7   2.6    .5    .7   1.0   2.6   3.0   3.0   3.0   1.8   1.7   1.7   1.5   1.3   1.2
  70.  *   5.7   5.2   4.4   3.4   2.6   2.3   2.5    .2    .6    .8   2.3   2.7   2.6   2.6   2.5   2.5   2.3   2.2   2.0   1.7
  75.  *   5.4   4.7   3.8   2.8   2.5   2.3   2.2    .1    .5    .5   1.8   2.2   2.1   2.2   3.2   3.2   3.1   2.9   2.7   2.3
  80.  *   4.9   4.0   3.2   2.4   2.2   2.1   2.3    .1    .2    .3   1.2   1.5   1.6   1.6   3.7   3.7   3.5   3.4   3.2   2.8
  85.  *   4.1   3.5   2.7   2.1   2.0   2.0   2.2    .1    .1    .1    .8   1.0   1.0   1.1   3.9   4.1   3.9   3.7   3.4   3.1
  90.  *   3.0   2.5   2.0   1.7   2.1   2.0   2.3    .1    .2    .1    .4    .5    .7    .7   4.0   4.2   4.2   3.9   3.3   3.2
  95.  *   2.3   1.8   1.8   1.6   2.0   2.2   2.4    .1    .2    .1    .1    .3    .3    .4   3.9   4.1   4.1   3.7   3.3   3.2
 100.  *   1.6   1.5   1.5   1.6   2.0   2.2   2.4    .2    .2    .1    .1    .2    .2    .2   3.8   4.0   3.8   3.3   3.0   3.2
 105.  *   1.3   1.4   1.2   1.6   2.0   2.2   2.7    .2    .2    .1    .0    .1    .1    .2   3.7   3.8   3.7   3.1   2.9   3.2
 110.  *   1.0   1.3   1.2   1.6   2.2   2.3   3.1    .3    .2    .1    .1    .1    .1    .1   3.5   3.7   3.6   2.8   2.9   3.4
 115.  *    .9   1.0   1.2   1.8   2.3   2.7   3.3    .7    .3    .1    .1    .1    .1    .1   3.4   3.5   3.3   2.7   2.9   3.2
 120.  *    .6    .8   1.2   1.9   2.5   3.1   3.1    .9    .5    .1    .1    .1    .1    .1   3.2   3.3   3.3   2.5   2.9   3.6
 125.  *    .6   1.0   1.3   1.7   2.8   3.1   3.1   1.2   1.1    .2    .1    .1    .1    .1   3.1   3.1   3.1   2.4   2.9   3.7
 130.  *    .4   1.0   1.4   2.2   3.1   3.0   2.8   1.3   1.3    .5    .1    .1    .1    .1   3.0   3.0   2.9   2.4   3.1   3.8
 135.  *    .4    .8   1.3   2.4   3.0   2.8   2.6   1.5   1.3    .8    .1    .1    .1    .1   3.0   2.9   2.9   2.3   3.3   3.7
 140.  *    .4    .6   1.0   2.2   2.7   2.5   2.1   1.7   1.5    .9    .2    .1    .1    .0   2.9   2.9   2.9   2.6   3.5   3.6
 145.  *    .4    .4    .9   2.0   2.6   2.2   1.8   1.7   1.7   1.2    .6    .1    .2    .1   2.9   2.9   2.8   3.0   3.4   3.4
 150.  *    .4    .5    .7   1.7   2.2   1.8   1.7   1.8   1.9   1.6   1.1    .1    .2    .2   2.9   2.9   2.8   3.6   3.6   3.3
 155.  *    .4    .5    .6   1.5   2.0   1.7   1.6   2.0   2.1   1.8   1.2    .5    .3    .2   2.9   3.1   3.3   4.0   3.6   3.3
 160.  *    .4    .5    .5   1.1   1.7   1.4   1.4   2.1   2.6   2.3   1.9    .6    .3    .3   3.1   3.2   3.6   4.2   3.4   3.2
 165.  *    .3    .4    .4    .8   1.3   1.2   1.3   2.3   2.8   2.7   2.3    .8    .5    .3   3.3   3.5   4.2   4.3   3.3   3.1
 170.  *    .1    .3    .3    .7    .9    .8   1.0   2.5   3.0   3.0   2.8   1.2    .6    .4   3.3   3.6   4.4   4.0   3.1   3.0
 175.  *    .2    .2    .2    .3    .6    .6    .7   2.6   3.1   3.2   3.0   1.3    .7    .5   3.2   3.9   4.2   3.7   3.0   2.9
 180.  *    .1    .2    .1    .2    .2    .3    .4   2.5   3.2   3.3   3.0   1.2    .9    .4   3.3   4.0   4.1   3.0   2.6   2.8
 185.  *    .1    .1    .0    .1    .1    .1    .2   2.4   3.1   3.3   2.9   1.4   1.0    .4   3.3   4.1   3.8   2.7   2.7   2.6
 190.  *    .1    .1    .1    .0    .0    .1    .1   2.3   3.0   3.2   2.9   1.2    .9    .7   3.2   3.9   3.5   2.4   2.6   2.6
 195.  *    .1    .1    .1    .0    .0    .0    .0   2.3   2.8   2.9   2.8   1.2    .9    .6   3.4   3.9   3.5   2.3   2.6   2.6
 200.  *    .1    .2    .1    .0    .0    .0    .0   2.2   2.8   2.9   2.7   1.3    .9    .6   3.5   4.1   3.0   2.3   2.7   2.7
 205.  *    .2    .2    .1    .0    .0    .0    .0   2.0   2.6   2.8   2.6   1.2    .9    .7   3.6   4.1   3.0   2.4   2.8   2.8
1
                                                                                                                 PAGE  4
      JOB: Site 3 Opt 3 2014 PM - 3B3PM14.DAT                  RUN: Site 3 Opt 3 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .2    .2    .1    .0    .0    .0    .0   2.1   2.5   2.8   2.4   1.2    .9    .8   3.9   4.1   3.0   2.5   2.9   3.0
 215.  *    .3    .2    .2    .0    .0    .0    .0   2.1   2.5   2.7   2.4   1.3    .9    .6   4.1   4.0   2.9   2.6   3.1   3.0
 220.  *    .3    .2    .2    .0    .0    .0    .0   2.1   2.4   2.6   2.2   1.2    .9    .5   4.0   4.1   3.1   2.9   3.2   3.1
 225.  *    .3    .2    .2    .0    .0    .0    .0   2.0   2.3   2.4   2.1   1.2   1.0    .7   4.2   4.0   3.0   2.9   3.3   3.3
 230.  *    .4    .4    .2    .0    .0    .0    .0   2.0   2.3   2.5   2.0   1.2    .9    .8   4.2   4.0   3.2   3.2   3.4   3.5
 235.  *    .5    .6    .4    .0    .0    .0    .0   1.9   2.3   2.5   2.0   1.4   1.1    .8   4.4   3.9   3.2   3.3   3.6   3.5
 240.  *    .8    .8    .7    .1    .0    .0    .0   1.9   2.3   2.5   2.1   1.4   1.2   1.1   4.7   4.0   3.5   3.6   3.7   3.8
 245.  *   1.4   1.4   1.0    .3    .1    .0    .0   1.8   2.3   2.6   2.3   1.7   1.6   1.5   4.4   4.0   3.4   3.8   3.8   3.8
 250.  *   2.2   2.1   1.8    .8    .2    .1    .0   2.0   2.4   2.7   3.0   2.4   2.5   2.5   4.1   3.9   3.6   3.5   3.7   3.9
 255.  *   2.9   3.1   2.6   1.3    .3    .2    .1   2.0   2.5   2.8   3.5   3.0   3.0   3.2   3.7   3.4   3.3   3.3   3.7   3.7
 260.  *   3.8   3.9   3.5   2.1    .8    .3    .2   2.1   2.6   3.5   4.2   3.3   3.4   3.7   2.9   2.9   2.6   2.9   3.1   3.4
 265.  *   4.7   4.6   4.2   2.7    .9    .6    .3   2.3   3.3   3.7   4.2   3.7   3.6   3.7   2.3   2.1   2.0   2.2   2.6   2.7
 270.  *   5.0   5.0   4.6   3.1   1.3    .8    .5   2.6   3.3   4.0   4.4   3.5   3.8   3.8   1.4   1.3   1.5   1.5   1.7   1.8
 275.  *   5.3   5.1   4.9   3.3   1.6    .9    .6   2.7   3.7   4.2   4.0   3.5   3.4   3.6    .7    .9    .7    .9   1.1   1.3
 280.  *   5.2   5.2   4.7   3.4   1.6    .9    .7   2.8   3.7   4.2   3.9   3.1   3.0   3.4    .4    .4    .5    .5    .5    .8
 285.  *   4.9   5.0   4.5   3.3   1.8   1.1    .8   3.0   3.8   4.4   3.1   2.6   2.9   3.0    .3    .2    .1    .1    .3    .4
 290.  *   4.8   4.6   4.3   3.2   1.8   1.2    .8   3.2   3.8   4.0   3.0   2.4   2.8   2.9    .2    .2    .1    .1    .2    .3
 295.  *   4.5   4.4   4.1   3.0   1.6   1.3   1.0   3.3   3.7   3.8   2.4   2.4   2.6   2.9    .2    .1    .1    .1    .1    .2
 300.  *   4.2   4.0   4.0   2.8   1.6   1.1   1.0   3.3   3.9   3.7   2.4   2.1   2.6   2.7    .2    .1    .1    .1    .1    .2
 305.  *   4.0   3.8   3.7   2.7   1.7   1.1    .8   3.3   3.8   3.6   2.1   2.2   2.5   2.7    .1    .1    .1    .1    .1    .2
 310.  *   3.8   3.6   3.4   2.6   1.5   1.1    .8   3.0   3.8   3.4   2.1   2.2   2.4   2.5    .1    .1    .1    .1    .1    .1
 315.  *   3.6   3.6   3.4   2.5   1.3   1.0    .9   3.1   3.6   3.2   2.0   2.2   2.4   2.5    .1    .1    .1    .0    .1    .1
 320.  *   3.5   3.3   3.2   2.3   1.4   1.1    .9   2.9   3.5   3.1   2.0   2.2   2.3   2.3    .1    .1    .0    .0    .0    .1
 325.  *   3.5   3.3   3.2   2.3   1.3    .9   1.1   2.7   3.4   2.6   1.9   2.2   2.3   2.3    .1    .0    .0    .0    .0    .1
 330.  *   3.3   3.3   3.1   2.2   1.2   1.1   1.1   2.4   3.1   2.5   1.9   2.3   2.3   2.3    .0    .0    .0    .0    .0    .1
 335.  *   3.3   3.3   3.1   2.2   1.4   1.2   1.3   2.1   2.7   2.1   1.9   2.3   2.3   2.4    .0    .0    .0    .0    .0    .0
 340.  *   3.3   3.3   3.2   2.1   1.3   1.2   1.6   2.1   2.6   2.3   1.9   2.4   2.4   2.4    .0    .0    .0    .0    .0    .0
 345.  *   3.4   3.3   3.1   1.9   1.3   1.7   2.1   1.6   2.4   1.9   2.0   2.4   2.4   2.4    .0    .0    .0    .0    .0    .0
 350.  *   3.3   3.3   3.1   1.8   1.6   1.8   2.2   1.3   1.8   1.7   2.1   2.4   2.4   2.4    .0    .0    .0    .0    .0    .0
 355.  *   3.4   3.3   3.2   1.7   1.8   2.0   2.7   1.1   1.7   1.6   2.0   2.3   2.3   2.3    .0    .0    .0    .0    .0    .0
 360.  *   3.4   3.3   3.1   1.6   1.9   2.5   3.1   1.0   1.5   1.5   1.9   2.3   2.3   2.3    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   5.7   5.2   4.9   3.4   3.5   3.2   3.4   3.3   3.9   4.4   4.4   3.7   3.8   3.8   4.7   4.2   4.4   4.3   3.8   3.9
 DEGR. *   70    70   275    60    55    40    15   295   300   285   270   265   270   270   240    90   170   165   245   250

1
                                                                                                                 PAGE  5
      JOB: Site 3 Opt 3 2014 PM - 3B3PM14.DAT                  RUN: Site 3 Opt 3 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .2
  45.  *    .2
  50.  *    .2
  55.  *    .2
  60.  *    .5
  65.  *    .9
  70.  *   1.6
  75.  *   2.2
  80.  *   2.7
  85.  *   3.1
  90.  *   3.3
  95.  *   3.7
 100.  *   3.7
 105.  *   3.5
 110.  *   3.7
 115.  *   3.5
 120.  *   3.6
 125.  *   3.5
 130.  *   3.2
 135.  *   3.2
 140.  *   3.0
 145.  *   3.0
 150.  *   2.9
 155.  *   2.9
 160.  *   2.9
 165.  *   3.0
 170.  *   2.9
 175.  *   2.8
 180.  *   2.7
 185.  *   2.7
 190.  *   2.7
 195.  *   2.7
 200.  *   2.8
 205.  *   2.8
1
                                                                                                                         PAGE  6
      JOB: Site 3 Opt 3 2014 PM - 3B3PM14.DAT                  RUN: Site 3 Opt 3 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   2.9
 215.  *   3.2
 220.  *   3.2
 225.  *   3.2
 230.  *   3.5
 235.  *   3.5
 240.  *   3.7
 245.  *   3.9
 250.  *   3.8
 255.  *   3.7
 260.  *   3.3
 265.  *   2.9
 270.  *   2.1
 275.  *   1.3
 280.  *    .9
 285.  *    .5
 290.  *    .3
 295.  *    .2
 300.  *    .1
 305.  *    .1
 310.  *    .1
 315.  *    .1
 320.  *    .1
 325.  *    .1
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   3.9
 DEGR. *  245

 THE HIGHEST CONCENTRATION IS    5.70 PPM AT   70 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    5.20 PPM AT   70 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS    4.90 PPM AT  275 DEGREES FROM REC3 .
```

```
Site 3 Opt 3 2030 PM - 3B3PM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 -114.     1937.       5.0
SW 164 W                    8.     1953.       5.0
SW 82 W                    90.     1961.       5.0
SW CNR                    174.     1953.       5.0
SW 82 S                   218.     1880.       5.0
SW 164 S                  245.     1804.       5.0
SW MID S                  281.     1726.       5.0
SE MID S                  388.     1751.       5.0
SE 164 S                  338.     1834.       5.0
SE 82 S                   315.     1914.       5.0
SE CNR                    304.     1995.       5.0
SE 82 E                   376.     2022.       5.0
SE 164 E                  454.     2045.       5.0
SE MID E                  571.     2079.       5.0
NE MID E                  519.     2169.       5.0
NE 164 E                  374.     2130.       5.0
NE 82 E                   295.     2110.       5.0
N CNR                     215.     2090.       5.0
NW 82 W                   136.     2072.       5.0
NW 164 W                   54.     2058.       5.0
NW MID W                  -88.     2040.       5.0
Site 3 Opt 3 2030 PM                     28  1   0
  1
NB        Rt8 aprch AG  1039.  1413.   795.  1471.    1870 9.2   0  66   30.
  1
NB        Rt8 aprch AG   795.  1471.   635.  1521.    1870 9.2   0  66   30.
  1
NB        Rt8 aprch AG   635.  1521.   524.  1584.    1870 9.2   0  66   30.
  1
NB        Rt8 aprch AG   524.  1584.   431.  1660.    1870 9.2   0  66   30.
  1
NB        Rt8 aprch AG   431.  1660.   370.  1736.    1870 9.2   0  66   30.
  1
NB        Rt8 aprch AG   370.  1736.   312.  1843.    1870 9.2   0  66   30.
  1
NB        Rt8 aprch AG   312.  1843.   287.  1905.    1870 9.2   0  66   30.
  1
NB        Rt8 aprch AG   287.  1905.   266.  2013.    1870 9.2   0  66   30.
  2
NB        Rt8 aprch AG   273.  1978.   288.  1904.      0.  24   2
       120        94       2.0 1870   84.1 1555 1 3
  1
SB        Rt8 departAG   214.  1996.   274.  1817.    2430 9.2   0  44   30.
  1
SB        Rt8 departAG   274.  1817.   331.  1705.    2430 9.2   0  44   30.
  1
SB        Rt8 departAG   331.  1705.   388.  1633.    2430 9.2   0  44   30.
  1
SB        Rt8 departAG   388.  1633.   482.  1553.    2430 9.2   0  44   30.
  1
SB        Rt8 departAG   482.  1553.   612.  1486.    2430 9.2   0  44   30.
  1
SB        Rt8 departAG   612.  1486.   791.  1427.    2430 9.2   0  44   30.
  1
```

```
SB         Rt8 departAG   791.  1427.   995.  1367.    2430 9.2   0  44   30.
  1
EB         Rt1 aprch AG  -757.  1920.  -322.  1944.    3030 9.2   0  68   30.
  1
EB         Rt1 aprch AG  -322.  1944.   -72.  1967.    3030 9.2   0  68   30.
  1
EB         Rt1 aprch AG   -72.  1967.   233.  2014.    3030 9.2   0  68   30.
  2
EB         Rt1 aprch AG   162.  2003.   -17.  1976.      0.  36   3
       120        73       2.0 3030   84.1 1469 1 3
  1
EB         Rt1 departAG   234.  2016.  1198.  2281.    2675 9.2   0  56   30.
  1
WB         Rt1 aprch AG  1187.  2341.   752.  2213.    4065 9.2   0  68   30.
  1
WB         Rt1 thru  AG   752.  2213.   221.  2064.    3110 9.2   0  44   30.
  1
WB         Rt1 thru  AG   221.  2064.    89.  2037.    3110 9.2   0  44   30.
  1
WB         Rt1 thru  AG    87.  2035.  -118.  2009.    3110 9.2   0  56   30.
  1
WB         Rt1 thru  AG  -118.  2009.  -758.  1962.    3110 9.2   0  56   30.
  1
WB         Rt1 left  AG   607.  2149.   205.  2045.     955 9.2   0  44   30.
  2
EB         Rt1 left  AG   296.  2069.   549.  2134.      0.  24   2
       120        85       2.0  955   84.1 1700 1 3
1.0   04 1000.   0Y  5  0 72
```

```
1                       CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 3 Opt 3 2030 PM - 3B3PM30.DAT                  RUN: Site 3 Opt 3 2030 PM
      DATE: 05/06/2009   TIME: 09:51:35.76


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*------------------------------------------------------------
       1. NB        Rt8 aprch *   1039.0    1413.0     795.0    1471.0 *     251.   283. AG   1870.    9.2    .0 66.0
       2. NB        Rt8 aprch *    795.0    1471.0     635.0    1521.0 *     168.   287. AG   1870.    9.2    .0 66.0
       3. NB        Rt8 aprch *    635.0    1521.0     524.0    1584.0 *     128.   300. AG   1870.    9.2    .0 66.0
       4. NB        Rt8 aprch *    524.0    1584.0     431.0    1660.0 *     120.   309. AG   1870.    9.2    .0 66.0
       5. NB        Rt8 aprch *    431.0    1660.0     370.0    1736.0 *      97.   321. AG   1870.    9.2    .0 66.0
       6. NB        Rt8 aprch *    370.0    1736.0     312.0    1843.0 *     122.   332. AG   1870.    9.2    .0 66.0
       7. NB        Rt8 aprch *    312.0    1843.0     287.0    1905.0 *      67.   338. AG   1870.    9.2    .0 66.0
       8. NB        Rt8 aprch *    287.0    1905.0     266.0    2013.0 *     110.   349. AG   1870.    9.2    .0 66.0
       9. NB        Rt8 aprch *    273.0    1978.0    1693.0   -5027.3 *    7148.   169. AG    353. 100.0    .0 24.0 3.28 363.1
      10. SB        Rt8 depart*    214.0    1996.0     274.0    1817.0 *     189.   161. AG   2430.    9.2    .0 44.0
      11. SB        Rt8 depart*    274.0    1817.0     331.0    1705.0 *     126.   153. AG   2430.    9.2    .0 44.0
      12. SB        Rt8 depart*    331.0    1705.0     388.0    1633.0 *      92.   142. AG   2430.    9.2    .0 44.0
      13. SB        Rt8 depart*    388.0    1633.0     482.0    1553.0 *     123.   130. AG   2430.    9.2    .0 44.0
      14. SB        Rt8 depart*    482.0    1553.0     612.0    1486.0 *     146.   117. AG   2430.    9.2    .0 44.0
      15. SB        Rt8 depart*    612.0    1486.0     791.0    1427.0 *     188.   108. AG   2430.    9.2    .0 44.0
      16. SB        Rt8 depart*    791.0    1427.0     995.0    1367.0 *     213.   106. AG   2430.    9.2    .0 44.0
      17. EB        Rt1 aprch *   -757.0    1920.0    -322.0    1944.0 *     436.    87. AG   3030.    9.2    .0 68.0
      18. EB        Rt1 aprch *   -322.0    1944.0     -72.0    1967.0 *     251.    85. AG   3030.    9.2    .0 68.0
      19. EB        Rt1 aprch *    -72.0    1967.0     233.0    2014.0 *     309.    81. AG   3030.    9.2    .0 68.0
      20. EB        Rt1 aprch *    162.0    2003.0   -5159.0    1200.4 *    5381.   261. AG    412. 100.0    .0 36.0 1.92 273.4
      21. EB        Rt1 depart*    234.0    2016.0    1198.0    2281.0 *    1000.    75. AG   2675.    9.2    .0 56.0
      22. WB        Rt1 aprch *   1187.0    2341.0     752.0    2213.0 *     453.   254. AG   4065.    9.2    .0 68.0
      23. WB        Rt1 thru  *    752.0    2213.0     221.0    2064.0 *     552.   254. AG   3110.    9.2    .0 44.0
      24. WB        Rt1 thru  *    221.0    2064.0      89.0    2037.0 *     135.   258. AG   3110.    9.2    .0 44.0
      25. WB        Rt1 thru  *     87.0    2035.0    -118.0    2009.0 *     207.   263. AG   3110.    9.2    .0 56.0
      26. WB        Rt1 thru  *   -118.0    2009.0    -758.0    1962.0 *     642.   266. AG   3110.    9.2    .0 56.0
      27. WB        Rt1 left  *    607.0    2149.0     205.0    2045.0 *     415.   255. AG    955.    9.2    .0 44.0
      28. EB        Rt1 left  *    296.0    2069.0     980.2    2244.8 *     706.    76. AG    320. 100.0    .0 24.0 1.09  35.9
1
                                                                                                                    PAGE  2
      JOB: Site 3 Opt 3 2030 PM - 3B3PM30.DAT                  RUN: Site 3 Opt 3 2030 PM
      DATE: 05/06/2009   TIME: 09:51:35.76

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*------------------------------------------------------------------------------
       9. NB        Rt8 aprch *     120       94       2.0      1870       1555      84.10      1        3
      20. EB        Rt1 aprch *     120       73       2.0      3030       1469      84.10      1        3
      28. EB        Rt1 left  *     120       85       2.0       955       1700      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X           Y          Z        *
     -------------------------*--------------------------------------*
      1. SW MID W             *      -114.0     1937.0       5.0    *
      2. SW 164 W             *         8.0     1953.0       5.0    *
      3. SW 82 W              *        90.0     1961.0       5.0    *
      4. SW CNR               *       174.0     1953.0       5.0    *
      5. SW 82 S              *       218.0     1880.0       5.0    *
      6. SW 164 S             *       245.0     1804.0       5.0    *
      7. SW MID S             *       281.0     1726.0       5.0    *
      8. SE MID S             *       388.0     1751.0       5.0    *
      9. SE 164 S             *       338.0     1834.0       5.0    *
     10. SE 82 S              *       315.0     1914.0       5.0    *
     11. SE CNR               *       304.0     1995.0       5.0    *
     12. SE 82 E              *       376.0     2022.0       5.0    *
     13. SE 164 E             *       454.0     2045.0       5.0    *
     14. SE MID E             *       571.0     2079.0       5.0    *
     15. NE MID E             *       519.0     2169.0       5.0    *
     16. NE 164 E             *       374.0     2130.0       5.0    *
     17. NE 82 E              *       295.0     2110.0       5.0    *
     18. N CNR                *       215.0     2090.0       5.0    *
     19. NW 82 W              *       136.0     2072.0       5.0    *
     20. NW 164 W             *        54.0     2058.0       5.0    *
     21. NW MID W             *       -88.0     2040.0       5.0    *
1
                                                                                                                    PAGE  3
      JOB: Site 3 Opt 3 2030 PM - 3B3PM30.DAT                  RUN: Site 3 Opt 3 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   2.6   2.5   2.5   1.3   1.3   1.6   2.1    .8   1.2   1.2   1.7   1.9   1.9   1.9    .0    .0    .0    .0    .0    .0
   5.  *   2.7   2.5   2.4   1.3   1.4   2.1   2.1    .9    .9   1.1   1.6   1.9   1.9   1.9    .0    .0    .0    .0    .0    .0
  10.  *   2.6   2.6   2.4   1.1   1.8   2.1   2.6    .8    .9   1.1   1.7   1.9   1.9   2.0    .1    .1    .0    .0    .0    .0
```

```
  15.  *   2.7   2.6   2.4   1.2   1.7   2.2   2.5    .7    .9   1.1   1.7   2.0   2.0   1.9    .1    .1    .0    .0    .0    .0
  20.  *   2.7   2.7   2.5   1.3   2.0   2.3   2.6    .7    .9   1.1   1.7   2.0   2.0   1.9    .1    .1    .1    .0    .0    .0
  25.  *   2.8   2.8   2.5   1.3   2.1   2.3   2.5    .7    .7   1.1   2.0   2.0   2.0   2.0    .1    .1    .1    .0    .1    .0
  30.  *   2.9   2.8   2.6   1.5   2.2   2.3   2.4    .7    .7   1.2   2.0   2.1   2.1   2.1    .1    .1    .1    .1    .1    .0
  35.  *   3.2   2.9   2.8   1.7   2.2   2.3   2.3    .7    .9   1.2   2.0   2.1   2.2   2.3    .1    .1    .1    .1    .1    .0
  40.  *   3.3   3.1   2.7   1.8   2.5   2.5   2.2    .7    .9   1.2   2.1   2.3   2.3   2.2    .2    .1    .1    .1    .1    .0
  45.  *   3.4   3.2   3.2   2.1   2.5   2.3   2.2    .6    .8   1.3   2.1   2.4   2.4   2.3    .2    .2    .1    .1    .1    .0
  50.  *   3.7   3.6   3.1   2.3   2.6   2.1   2.1    .5    .7   1.2   2.4   2.5   2.4   2.4    .4    .3    .2    .2    .2    .1
  55.  *   4.0   3.7   3.4   2.6   2.6   2.1   1.9    .3    .8   1.1   2.2   2.7   2.5   2.5    .5    .6    .4    .4    .2    .3
  60.  *   4.0   4.1   3.4   2.6   2.2   2.1   1.9    .3    .6    .9   2.2   2.5   2.5   2.5   1.0    .9    .8    .7    .7    .4
  65.  *   4.4   4.2   3.4   2.6   2.1   1.7   1.8    .3    .5    .8   2.1   2.3   2.4   2.2   1.4   1.3   1.2   1.1   1.0    .8
  70.  *   4.4   4.0   3.3   2.4   2.0   1.8   1.6    .1    .4    .5   1.8   2.0   2.0   2.0   1.8   2.0   1.9   1.7   1.5   1.4
  75.  *   4.1   3.7   2.9   2.2   1.8   1.6   1.6    .1    .3    .4   1.4   1.5   1.6   1.7   2.3   2.4   2.3   2.2   2.0   1.9
  80.  *   3.8   3.3   2.5   1.8   1.5   1.5   1.6    .1    .2    .1    .9   1.1   1.2   1.2   2.8   2.8   2.9   2.7   2.4   2.1
  85.  *   3.1   2.6   1.9   1.4   1.4   1.4   1.7    .1    .1    .0    .5    .7    .8    .8   3.0   3.2   3.1   2.9   2.6   2.4
  90.  *   2.2   1.9   1.6   1.1   1.4   1.5   1.6    .1    .1    .0    .2    .4    .5    .5   3.2   3.2   3.4   3.0   2.6   2.5
  95.  *   1.7   1.5   1.1   1.1   1.5   1.5   1.6    .1    .1    .1    .1    .2    .2    .3   3.1   3.4   3.3   2.8   2.5   2.4
 100.  *   1.2   1.3    .9   1.2   1.5   1.5   1.8    .1    .1    .1    .1    .1    .2    .2   3.0   3.1   3.0   2.6   2.4   2.6
 105.  *   1.0    .9   1.0   1.2   1.5   1.7   1.7    .1    .1    .1    .0    .1    .1    .1   3.0   3.0   2.9   2.4   2.3   2.6
 110.  *    .9    .9   1.1   1.2   1.7   1.7   1.9    .2    .1    .1    .0    .1    .1    .1   2.8   2.9   2.8   2.2   2.1   2.5
 115.  *    .7    .7   1.0   1.2   1.7   1.8   2.2    .3    .2    .1    .0    .1    .1    .1   2.6   2.8   2.7   2.1   2.2   2.7
 120.  *    .5    .7    .9   1.2   1.7   1.8   2.3    .8    .2    .1    .1    .1    .1    .1   2.5   2.6   2.6   2.0   2.2   2.8
 125.  *    .3    .6    .8   1.3   1.8   2.2   2.2    .9    .3    .1    .1    .1    .1    .1   2.5   2.5   2.4   1.9   2.2   2.7
 130.  *    .3    .5    .7   1.4   2.0   2.1   2.2   1.0    .6    .1    .1    .0    .1    .1   2.4   2.4   2.4   2.0   2.2   3.0
 135.  *    .3    .5    .7   1.4   2.3   2.1   2.0   1.1    .9    .2    .1    .0    .0    .1   2.4   2.4   2.3   1.7   2.5   2.9
 140.  *    .3    .4    .6   1.5   2.1   1.9   1.7   1.1   1.1    .5    .1    .0    .0    .0   2.4   2.3   2.3   1.9   2.6   2.7
 145.  *    .3    .4    .6   1.4   1.8   1.6   1.3   1.2   1.3    .7    .2    .0    .0    .0   2.2   2.3   2.2   2.3   2.6   2.7
 150.  *    .3    .4    .6   1.2   1.8   1.4   1.4   1.3   1.4   1.1    .4    .0    .0    .0   2.2   2.3   2.3   2.6   2.7   2.8
 155.  *    .3    .4    .4   1.0   1.6   1.3   1.2   1.3   1.5   1.4    .8    .1    .0    .0   2.3   2.5   2.4   2.9   2.6   2.6
 160.  *    .3    .4    .4    .8   1.2   1.1   1.1   1.5   1.8   1.9   1.3    .2    .1    .1   2.4   2.6   2.9   3.3   2.5   2.6
 165.  *    .2    .2    .3    .7    .9    .8   1.0   1.7   2.1   2.1   1.7    .3    .2    .1   2.4   2.7   3.0   3.1   2.7   2.5
 170.  *    .1    .3    .2    .4    .7    .7    .8   1.7   2.2   2.4   1.9    .8    .3    .2   2.5   2.8   3.3   3.0   2.6   2.5
 175.  *    .2    .1    .1    .3    .5    .4    .6   1.9   2.5   2.4   2.2    .8    .4    .2   2.6   2.8   3.3   2.7   2.3   2.4
 180.  *    .1    .0    .1    .1    .2    .2    .3   1.9   2.4   2.4   2.1   1.0    .4    .3   2.5   3.0   3.1   2.4   2.2   2.3
 185.  *    .1    .1    .0    .1    .1    .1    .2   1.7   2.4   2.6   2.2    .8    .5    .3   2.5   3.0   2.9   2.1   2.0   2.2
 190.  *    .1    .1    .1    .0    .0    .0    .1   1.8   2.2   2.3   2.1    .8    .5    .3   2.7   3.1   2.6   1.9   2.1   2.2
 195.  *    .1    .1    .1    .0    .0    .0    .0   1.8   2.1   2.3   2.0    .9    .5    .3   2.7   3.3   2.4   1.7   2.2   2.2
 200.  *    .1    .1    .1    .0    .0    .0    .0   1.6   2.1   2.2   2.0    .9    .6    .3   2.6   3.1   2.4   1.8   2.3   2.2
 205.  *    .1    .1    .1    .0    .0    .0    .0   1.6   1.9   2.3   1.8   1.0    .6    .3   2.7   3.0   2.2   1.9   2.3   2.3
1
                                                                                                                     PAGE  4
      JOB: Site 3 Opt 3 2030 PM - 3B3PM30.DAT                 RUN: Site 3 Opt 3 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .0    .0    .0    .0   1.5   1.9   2.0   1.8   1.0    .6    .3   2.7   3.1   2.3   1.9   2.3   2.3
 215.  *    .1    .2    .1    .0    .0    .0    .0   1.6   1.9   2.0   1.6   1.0    .8    .5   3.0   3.2   2.3   2.1   2.4   2.4
 220.  *    .2    .2    .1    .0    .0    .0    .0   1.5   1.7   2.1   1.5   1.0    .8    .5   3.2   3.0   2.2   2.1   2.5   2.5
 225.  *    .3    .2    .1    .0    .0    .0    .0   1.3   1.7   1.8   1.4   1.0    .7    .6   3.2   3.2   2.3   2.4   2.7   2.6
 230.  *    .3    .3    .2    .0    .0    .0    .0   1.5   1.7   1.8   1.4    .8    .6    .5   3.4   3.2   2.5   2.5   2.7   2.8
 235.  *    .5    .5    .3    .0    .0    .0    .0   1.4   1.8   1.8   1.5   1.0    .7    .6   3.4   3.1   2.7   2.6   2.9   2.9
 240.  *    .6    .7    .5    .1    .0    .0    .0   1.4   1.7   1.9   1.4   1.0    .9    .9   3.4   3.1   2.7   2.8   3.1   3.0
 245.  *   1.1   1.1    .9    .3    .0    .0    .0   1.4   1.7   2.0   1.8   1.4   1.1   1.2   3.5   3.0   2.9   2.9   3.0   3.0
 250.  *   1.6   1.8   1.5    .6    .1    .1    .0   1.4   1.9   2.1   2.2   2.0   1.7   1.7   3.3   2.9   2.8   2.9   3.1   3.1
 255.  *   2.4   2.4   2.0   1.1    .2    .1    .1   1.6   1.8   2.1   2.6   2.3   2.3   2.7   2.9   2.7   2.7   2.7   2.8   3.0
 260.  *   3.2   3.2   2.8   1.7    .7    .3    .2   1.7   2.1   2.8   3.0   2.8   2.9   2.9   2.5   2.4   2.3   2.2   2.5   2.7
 265.  *   3.8   3.6   3.4   2.1    .8    .5    .3   1.8   2.4   2.9   3.4   3.1   3.0   3.0   1.8   1.6   1.7   1.6   2.0   2.2
 270.  *   4.1   4.1   3.8   2.6   1.1    .6    .3   2.0   2.7   3.2   3.3   3.0   2.7   3.1   1.0   1.1   1.0   1.3   1.4   1.6
 275.  *   4.2   4.2   3.8   2.7   1.2    .7    .6   2.1   2.9   3.2   3.0   2.7   2.5   2.8    .5    .5    .6    .6    .9   1.1
 280.  *   4.3   4.2   3.8   2.9   1.4    .8    .7   2.2   2.9   3.3   2.7   2.2   2.5   2.4    .3    .2    .2    .4    .5    .6
 285.  *   4.0   3.9   3.7   2.6   1.4    .9    .6   2.3   2.9   3.4   2.5   2.2   2.3   2.4    .2    .2    .1    .1    .2    .4
 290.  *   3.7   3.6   3.4   2.5   1.5   1.0    .7   2.4   2.8   3.3   2.1   2.1   2.3   2.3    .2    .1    .1    .1    .1    .2
 295.  *   3.6   3.6   3.3   2.4   1.2    .9    .8   2.4   2.9   3.1   1.9   1.9   2.1   2.2    .1    .1    .1    .1    .1    .2
 300.  *   3.4   3.3   3.0   2.3   1.3    .9    .7   2.5   3.0   2.8   1.8   1.8   2.1   2.2    .1    .1    .1    .1    .1    .1
 305.  *   3.2   3.2   2.9   2.1   1.2   1.0    .7   2.4   2.9   2.7   1.7   1.8   2.0   2.2    .1    .1    .1    .1    .1    .1
 310.  *   3.1   3.0   2.9   2.2   1.2    .8    .7   2.3   2.8   2.6   1.5   1.8   2.0   2.0    .1    .1    .1    .0    .1    .1
 315.  *   3.0   2.8   2.6   1.9   1.1    .8    .6   2.4   2.7   2.4   1.5   1.7   2.0   2.0    .1    .1    .0    .0    .0    .1
 320.  *   2.8   2.7   2.6   2.0   1.0    .9    .6   2.1   2.6   2.3   1.3   1.8   1.9   1.9    .1    .0    .0    .0    .0    .1
 325.  *   2.7   2.6   2.5   1.8   1.0    .9    .8   2.0   2.6   2.2   1.4   1.9   1.9   1.9    .0    .0    .0    .0    .0    .1
 330.  *   2.7   2.6   2.4   1.8   1.1    .9    .9   1.9   2.2   2.0   1.6   1.9   1.9   1.9    .0    .0    .0    .0    .0    .1
 335.  *   2.8   2.5   2.4   1.7    .9    .9   1.0   1.5   1.9   1.8   1.6   1.9   2.0   2.0    .0    .0    .0    .0    .0    .0
 340.  *   2.8   2.5   2.4   1.6   1.0    .8   1.2   1.3   1.9   1.6   1.6   2.0   2.0   2.0    .0    .0    .0    .0    .0    .0
 345.  *   2.7   2.5   2.5   1.6    .9   1.1   1.5   1.1   1.7   1.4   1.6   2.0   2.0   2.0    .0    .0    .0    .0    .0    .0
 350.  *   2.7   2.7   2.6   1.5   1.1   1.4   1.8   1.1   1.6   1.3   1.6   2.0   2.0   2.0    .0    .0    .0    .0    .0    .0
 355.  *   2.7   2.6   2.5   1.4   1.2   1.3   2.0    .9   1.2   1.4   1.6   1.9   1.9   2.0    .0    .0    .0    .0    .0    .0
 360.  *   2.6   2.5   2.5   1.3   1.3   1.6   2.1    .8   1.2   1.2   1.7   1.9   1.9   1.9    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   4.4   4.2   3.8   2.9   2.6   2.5   2.6   2.5   3.0   3.4   3.4   3.1   3.0   3.1   3.5   3.4   3.4   3.3   3.1   3.1
 DEGR. *   65   275   270   280    50    40    20   300   300   285   265   265   265   270   245    95    90   160   250   250

1
                                                                                                                     PAGE  5
      JOB: Site 3 Opt 3 2030 PM - 3B3PM30.DAT                 RUN: Site 3 Opt 3 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .1
```

```
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .2
  55.  *    .2
  60.  *    .4
  65.  *    .8
  70.  *   1.1
  75.  *   1.7
  80.  *   2.1
  85.  *   2.5
  90.  *   2.7
  95.  *   2.8
 100.  *   2.8
 105.  *   2.8
 110.  *   2.9
 115.  *   2.8
 120.  *   2.7
 125.  *   2.7
 130.  *   2.5
 135.  *   2.4
 140.  *   2.4
 145.  *   2.4
 150.  *   2.5
 155.  *   2.4
 160.  *   2.4
 165.  *   2.3
 170.  *   2.3
 175.  *   2.4
 180.  *   2.1
 185.  *   2.2
 190.  *   2.2
 195.  *   2.2
 200.  *   2.1
 205.  *   2.3
1
                                                                                                                               PAGE  6
      JOB: Site 3 Opt 3 2030 PM - 3B3PM30.DAT                  RUN: Site 3 Opt 3 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   2.4
 215.  *   2.5
 220.  *   2.4
 225.  *   2.6
 230.  *   2.7
 235.  *   2.8
 240.  *   3.0
 245.  *   2.9
 250.  *   3.1
 255.  *   3.1
 260.  *   2.7
 265.  *   2.2
 270.  *   1.6
 275.  *   1.1
 280.  *    .7
 285.  *    .3
 290.  *    .2
 295.  *    .2
 300.  *    .1
 305.  *    .1
 310.  *    .1
 315.  *    .1
 320.  *    .1
 325.  *    .1
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   3.1
 DEGR. *  250

 THE HIGHEST CONCENTRATION IS    4.40 PPM AT   65 DEGREES FROM REC1 .
 THE 2ND HIGHEST CONCENTRATION IS    4.20 PPM AT  275 DEGREES FROM REC2 .
 THE 3RD HIGHEST CONCENTRATION IS    3.80 PPM AT  270 DEGREES FROM REC3 .
```

```
Site 3 Opt 8 2014 AM - 3B8AM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                  366.     2199.       5.0
SW 164 W                  520.     2197.       5.0
SW 82 W                   602.     2202.       5.0
SW CNR                    681.     2197.       5.0
SW 82 S                   714.     2123.       5.0
SW 164 S                  738.     2044.       5.0
SW MID S                  760.     1982.       5.0
SE MID S                  882.     1987.       5.0
SE 164 S                  840.     2068.       5.0
SE 82 S                   816.     2145.       5.0
SE CNR                    813.     2226.       5.0
SE 82 E                   883.     2248.       5.0
SE 164 E                  965.     2262.       5.0
SE MID E                 1062.     2277.       5.0
NE MID E                 1032.     2367.       5.0
NE 164 E                  904.     2345.       5.0
NE 82 E                   823.     2336.       5.0
N CNR                     742.     2327.       5.0
NW 82 W                   659.     2319.       5.0
NW 164 W                  578.     2315.       5.0
NW MID W                  444.     2313.       5.0
Site 3 Opt 8 2014 AM                     40  1   0
  1
NB        Rt8 aprch AG  1576.  1713.  1404.  1696.    261011.4   0  44   30.
  1
NB        Rt8 aprch AG  1404.  1696.  1230.  1718.    261011.4   0  44   30.
  1
NB        Rt8 aprch AG  1230.  1718.  1083.  1777.    261011.4   0  44   30.
  1
NB        Rt8 aprch AG  1083.  1777.   940.  1861.    261011.4   0  44   30.
  1
NB        Rt8 aprch AG   940.  1861.   867.  1949.    261011.4   0  44   30.
  1
NB        Rt8 right AG   878.  1954.   836.  2019.    157011.4   0  44   30.
  1
NB        Rt8 right AG   836.  2019.   799.  2113.    157011.4   0  44   30.
  1
NB        Rt8 right AG   799.  2113.   775.  2263.    157011.4   0  44   30.
  2
NB        Rt8 right AG   782.  2219.   798.  2120.      0.  24   2
       120        85       2.0 1570  102.2 1394 1 3
  1
NB        Rt8 left  AG   855.  1949.   816.  2010.    104011.4   0  44   30.
  1
NB        Rt8 left  AG   816.  2010.   776.  2116.    104011.4   0  44   30.
  1
NB        Rt8 left  AG   776.  2116.   751.  2261.    104011.4   0  44   30.
  2
NB        Rt8 left  AG   758.  2217.   774.  2124.      0.  24   2
       120        92       2.0 1040  102.2 1717 1 3
  1
SB        Rt8 departAG   715.  2251.   731.  2144.    164511.4   0  56   30.
  1
SB        Rt8 departAG   731.  2144.   753.  2062.    164511.4   0  56   30.
```

```
  1
SB        Rt8 departAG   753.  2062.   793.  1973.    164511.4   0  56   30.
  1
SB        Rt8 departAG   793.  1973.   849.  1889.    164511.4   0  56   30.
  1
SB        Rt8 departAG   849.  1889.   921.  1822.    164511.4   0  44   30.
  1
SB        Rt8 departAG   921.  1822.  1013.  1765.    164511.4   0  44   30.
  1
SB        Rt8 departAG  1013.  1765.  1109.  1723.    164511.4   0  44   30.
  1
SB        Rt8 departAG  1109.  1723.  1221.  1682.    164511.4   0  44   30.
  1
SB        Rt8 departAG  1221.  1682.  1346.  1661.    164511.4   0  44   30.
  1
SB        Rt8 departAG  1346.  1661.  1450.  1658.    164511.4   0  44   30.
  1
SB        Rt8 departAG  1450.  1658.  1547.  1668.    164511.4   0  44   30.
  1
EB        Rt1 aprch AG  -266.  2268.   302.  2245.    314511.4   0  56   30.
  1
EB        Rt1 thru  AG   304.  2246.   476.  2245.    178011.4   0  56   30.
  1
EB        Rt1 thru  AG   476.  2245.   738.  2259.    178011.4   0  56   30.
  2
EB        Rt1 thru  AG   676.  2255.   503.  2246.      0.  36   3
       120        72        2.0 1780  102.2 1523 1 3
  1
EB        Rt1 right AG   309.  2223.   499.  2222.    136511.4   0  32   30.
  1
EB        Rt1 right AG   499.  2222.   743.  2234.    136511.4   0  32   30.
  2
EB        Rt1 right AG   682.  2231.   509.  2222.      0.  12   1
       120        40        2.0 1365  102.2 1348 1 3
  1
EB        Rt1 departAG   743.  2251.  1722.  2410.    335011.4   0  56   30.
  1
WB        Rt1 aprch AG  1717.  2447.   989.  2326.    300511.4   0  56   30.
  1
WB        Rt1 thru  AG   993.  2337.   749.  2301.    272511.4   0  44   30.
  2
WB        Rt1 thru  AG   803.  2309.   975.  2334.      0.  24   2
       120        34        2.0 2725  102.2 1753 1 3
  1
WB        Rt1 left  AG   995.  2316.   759.  2281.     28011.4   0  44   30.
  2
WB        Rt1 left  AG   809.  2288.   984.  2315.      0.  24   2
       120        85        2.0  280  102.2 1700 1 3
  1
WB        Rt1 departAG   748.  2300.   565.  2288.    376511.4   0  56   30.
  1
WB        Rt1 departAG   565.  2288.   366.  2286.    376511.4   0  56   30.
  1
WB        Rt1 departAG   366.  2286.  -264.  2305.    376511.4   0  56   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                   RUN: Site 3 Opt 8 2014 AM
      DATE: 05/06/2009   TIME: 08:56:51.65


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-----------------------------------------------------------
       1. NB        Rt8 aprch *   1576.0    1713.0    1404.0    1696.0 *     173.   264. AG   2610.  11.4    .0 44.0
       2. NB        Rt8 aprch *   1404.0    1696.0    1230.0    1718.0 *     175.   277. AG   2610.  11.4    .0 44.0
       3. NB        Rt8 aprch *   1230.0    1718.0    1083.0    1777.0 *     158.   292. AG   2610.  11.4    .0 44.0
       4. NB        Rt8 aprch *   1083.0    1777.0     940.0    1861.0 *     166.   300. AG   2610.  11.4    .0 44.0
       5. NB        Rt8 aprch *    940.0    1861.0     867.0    1949.0 *     114.   320. AG   2610.  11.4    .0 44.0
       6. NB        Rt8 right *    878.0    1954.0     836.0    2019.0 *      77.   327. AG   1570.  11.4    .0 44.0
       7. NB        Rt8 right *    836.0    2019.0     799.0    2113.0 *     101.   339. AG   1570.  11.4    .0 44.0
       8. NB        Rt8 right *    799.0    2113.0     775.0    2263.0 *     152.   351. AG   1570.  11.4    .0 44.0
       9. NB        Rt8 right *    782.0    2219.0    1539.7   -2469.4 *    4749.   171. AG    388. 100.0    .0 24.0 2.18 241.3
      10. NB        Rt8 left  *    855.0    1949.0     816.0    2010.0 *      72.   327. AG   1040.  11.4    .0 44.0
      11. NB        Rt8 left  *    816.0    2010.0     776.0    2116.0 *     113.   339. AG   1040.  11.4    .0 44.0
      12. NB        Rt8 left  *    776.0    2116.0     751.0    2261.0 *     147.   350. AG   1040.  11.4    .0 44.0
      13. NB        Rt8 left  *    758.0    2217.0    1120.9     107.7 *    2140.   170. AG    420. 100.0    .0 24.0 1.52 108.7
      14. SB        Rt8 depart*    715.0    2251.0     731.0    2144.0 *     108.   171. AG   1645.  11.4    .0 56.0
      15. SB        Rt8 depart*    731.0    2144.0     753.0    2062.0 *      85.   165. AG   1645.  11.4    .0 56.0
      16. SB        Rt8 depart*    753.0    2062.0     793.0    1973.0 *      98.   156. AG   1645.  11.4    .0 56.0
      17. SB        Rt8 depart*    793.0    1973.0     849.0    1889.0 *     101.   146. AG   1645.  11.4    .0 56.0
      18. SB        Rt8 depart*    849.0    1889.0     921.0    1822.0 *      98.   133. AG   1645.  11.4    .0 44.0
      19. SB        Rt8 depart*    921.0    1822.0    1013.0    1765.0 *     108.   122. AG   1645.  11.4    .0 44.0
      20. SB        Rt8 depart*   1013.0    1765.0    1109.0    1723.0 *     105.   114. AG   1645.  11.4    .0 44.0
      21. SB        Rt8 depart*   1109.0    1723.0    1221.0    1682.0 *     119.   110. AG   1645.  11.4    .0 44.0
      22. SB        Rt8 depart*   1221.0    1682.0    1346.0    1661.0 *     127.   100. AG   1645.  11.4    .0 44.0
      23. SB        Rt8 depart*   1346.0    1661.0    1450.0    1658.0 *     104.    92. AG   1645.  11.4    .0 44.0
      24. SB        Rt8 depart*   1450.0    1658.0    1547.0    1668.0 *      98.    84. AG   1645.  11.4    .0 44.0
      25. EB        Rt1 aprch *   -266.0    2268.0     302.0    2245.0 *     568.    92. AG   3145.  11.4    .0 56.0
      26. EB        Rt1 thru  *    304.0    2246.0     476.0    2245.0 *     172.    90. AG   1780.  11.4    .0 56.0
      27. EB        Rt1 thru  *    476.0    2245.0     738.0    2259.0 *     262.    87. AG   1780.  11.4    .0 56.0
      28. EB        Rt1 thru  *    676.0    2255.0     -23.1    2218.6 *     700.   267. AG    493. 100.0    .0 36.0 1.06  35.6
      29. EB        Rt1 right *    309.0    2223.0     499.0    2222.0 *     190.    90. AG   1365.  11.4    .0 32.0
      30. EB        Rt1 right *    499.0    2222.0     743.0    2234.0 *     244.    87. AG   1365.  11.4    .0 32.0
      31. EB        Rt1 right *    682.0    2231.0   -4876.5    1941.8 *    5566.   267. AG     91. 100.0    .0 12.0 1.60 282.8
      32. EB        Rt1 depart*    743.0    2251.0    1722.0    2410.0 *     992.    81. AG   3350.  11.4    .0 56.0
      33. WB        Rt1 aprch *   1717.0    2447.0     989.0    2326.0 *     738.   261. AG   3005.  11.4    .0 56.0
      34. WB        Rt1 thru  *    993.0    2337.0     749.0    2301.0 *     247.   262. AG   2725.  11.4    .0 44.0
      35. WB        Rt1 thru  *    803.0    2309.0    2850.8    2606.7 *    2069.    82. AG    155. 100.0    .0 24.0 1.14 105.1
      36. WB        Rt1 left  *    995.0    2316.0     759.0    2281.0 *     239.   262. AG    280.  11.4    .0 44.0
      37. WB        Rt1 left  *    809.0    2288.0     873.3    2297.9 *      65.    81. AG    388. 100.0    .0 24.0  .32   3.3
      38. WB        Rt1 depart*    748.0    2300.0     565.0    2288.0 *     183.   266. AG   3765.  11.4    .0 56.0
      39. WB        Rt1 depart*    565.0    2288.0     366.0    2286.0 *     199.   269. AG   3765.  11.4    .0 56.0
      40. WB        Rt1 depart*    366.0    2286.0    -264.0    2305.0 *     630.   272. AG   3765.  11.4    .0 56.0
1
                                                                                                                 PAGE  2
      JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                   RUN: Site 3 Opt 8 2014 AM
      DATE: 05/06/2009   TIME: 08:56:51.65

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*---------------------------------------------------------------------------------
       9. NB        Rt8 right *     120       85       2.0      1570       1394     102.20      1        3
      13. NB        Rt8 left  *     120       92       2.0      1040       1717     102.20      1        3
      28. EB        Rt1 thru  *     120       72       2.0      1780       1523     102.20      1        3
      31. EB        Rt1 right *     120       40       2.0      1365       1348     102.20      1        3
      35. WB        Rt1 thru  *     120       34       2.0      2725       1753     102.20      1        3
      37. WB        Rt1 left  *     120       85       2.0       280       1700     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       366.0     2199.0        5.0   *
      2. SW 164 W             *       520.0     2197.0        5.0   *
      3. SW 82 W              *       602.0     2202.0        5.0   *
      4. SW CNR               *       681.0     2197.0        5.0   *
      5. SW 82 S              *       714.0     2123.0        5.0   *
      6. SW 164 S             *       738.0     2044.0        5.0   *
      7. SW MID S             *       760.0     1982.0        5.0   *
      8. SE MID S             *       882.0     1987.0        5.0   *
      9. SE 164 S             *       840.0     2068.0        5.0   *
     10. SE 82 S              *       816.0     2145.0        5.0   *
     11. SE CNR               *       813.0     2226.0        5.0   *
     12. SE 82 E              *       883.0     2248.0        5.0   *
     13. SE 164 E             *       965.0     2262.0        5.0   *
     14. SE MID E             *      1062.0     2277.0        5.0   *
     15. NE MID E             *      1032.0     2367.0        5.0   *
     16. NE 164 E             *       904.0     2345.0        5.0   *
     17. NE 82 E              *       823.0     2336.0        5.0   *
     18. N CNR                *       742.0     2327.0        5.0   *
     19. NW 82 W              *       659.0     2319.0        5.0   *
     20. NW 164 W             *       578.0     2315.0        5.0   *
     21. NW MID W             *       444.0     2313.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                   RUN: Site 3 Opt 8 2014 AM

       MODEL RESULTS
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      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *   3.2   2.9   3.0   2.0   2.1   2.4   2.9    .9   1.1   1.7   2.1   2.2   2.1   2.1    .0    .0    .0    .0    .0    .0
   5.  *   3.2   2.9   2.9   1.9   2.0   2.7   3.3    .7   1.0   1.5   2.2   2.1   2.2   2.1    .0    .0    .0    .0    .0    .0
  10.  *   3.2   2.9   2.9   1.9   2.0   2.9   3.6    .7    .8   1.4   2.4   2.1   2.1   2.1    .0    .0    .0    .0    .1    .0
  15.  *   3.2   2.9   2.9   1.8   2.4   3.4   3.8    .7    .9   1.2   2.4   2.0   2.2   2.1    .0    .1    .0    .0    .1    .1
  20.  *   3.2   2.9   2.9   1.8   2.5   3.3   3.8    .7    .9   1.2   2.4   2.0   2.3   2.1    .0    .1    .0    .0    .1    .1
  25.  *   3.2   2.9   2.9   1.9   2.7   3.3   3.6    .8    .9   1.1   2.5   2.1   2.1   2.3    .0    .1    .1    .0    .1    .1
  30.  *   3.2   2.9   2.9   1.9   2.9   3.5   3.4    .6    .8   1.2   2.5   2.3   2.3   2.4    .1    .1    .1    .0    .2    .1
  35.  *   3.3   3.0   2.9   2.0   3.1   3.6   3.3    .6    .9   1.2   2.5   2.3   2.3   2.4    .1    .1    .1    .0    .2    .2
  40.  *   3.3   3.1   2.9   2.3   3.3   3.5   3.4    .6    .8   1.2   2.5   2.5   2.6   2.6    .1    .1    .1    .0    .2    .2
  45.  *   3.6   3.0   2.9   2.6   3.3   3.4   3.1    .6    .8   1.2   2.6   2.7   2.8   2.8    .1    .2    .1    .0    .2    .2
  50.  *   3.7   3.4   3.1   2.5   3.5   3.5   3.3    .6    .8   1.2   2.6   2.8   2.9   2.9    .1    .2    .1    .1    .2    .2
  55.  *   3.8   3.2   3.3   2.8   3.7   3.2   3.3    .6    .8   1.2   2.7   3.0   3.1   3.0    .2    .3    .2    .1    .3    .3
  60.  *   4.1   3.5   3.3   3.4   3.6   3.2   3.2    .5    .8   1.2   2.7   3.0   3.2   3.1    .4    .5    .4    .4    .4    .3
  65.  *   4.2   3.5   3.6   3.3   3.5   3.0   2.9    .4    .6   1.2   2.6   3.1   3.3   3.3    .6   1.0    .8    .6    .8    .9
  70.  *   4.3   3.6   3.3   3.4   3.4   2.9   2.9    .3    .5   1.0   2.7   3.2   3.2   3.2   1.0   1.4   1.2   1.0   1.3   1.0
  75.  *   4.1   3.6   3.3   3.3   3.0   2.8   3.1    .2    .4    .7   2.3   3.1   3.1   3.0   1.6   2.0   1.8   1.5   1.7   1.6
  80.  *   3.7   3.2   2.9   3.1   2.7   2.8   2.6    .0    .3    .6   2.0   2.6   2.8   2.6   2.1   2.7   2.4   2.2   2.4   2.2
  85.  *   3.4   2.5   2.5   2.8   2.8   2.5   2.7    .0    .0    .4   1.4   2.2   2.3   2.2   2.6   3.2   2.9   2.5   2.9   2.8
  90.  *   2.8   2.1   1.9   2.3   2.5   2.4   2.7    .0    .0    .1   1.0   1.6   1.6   1.5   2.9   3.5   3.2   3.2   3.2   3.1
  95.  *   1.9   1.5   1.5   2.2   2.3   2.5   2.8    .0    .0    .0    .5   1.1   1.1   1.1   3.1   3.6   3.5   3.3   3.2   3.3
 100.  *   1.0   1.0   1.3   1.9   2.3   2.5   2.8    .0    .0    .0    .3    .7    .8    .6   3.1   3.6   3.5   3.3   3.3   3.4
 105.  *    .9   1.1   1.3   2.0   2.5   2.8   2.9    .0    .1    .0    .2    .4    .5    .4   2.9   3.6   3.4   3.2   3.1   3.9
 110.  *    .5    .9   1.3   1.9   2.5   2.9   3.1    .0    .1    .0    .1    .3    .3    .3   2.9   3.3   3.3   3.0   3.2   3.7
 115.  *    .4    .8   1.3   2.2   2.3   3.1   3.2    .4    .1    .0    .1    .2    .3    .2   2.7   3.2   3.2   2.8   3.1   3.8
 120.  *    .4    .8   1.3   2.3   2.7   3.3   3.6    .4    .2    .0    .1    .2    .2    .2   2.6   3.1   3.1   2.6   3.2   3.8
 125.  *    .4   1.0   1.4   2.0   3.0   3.1   3.4    .5    .4    .0    .0    .2    .2    .2   2.5   2.7   3.0   2.5   3.2   3.9
 130.  *    .4    .9   1.3   2.3   3.3   3.4   3.2    .6    .4    .2    .0    .2    .2    .2   2.4   2.7   3.0   2.5   3.2   4.1
 135.  *    .4    .7   1.5   2.7   3.3   3.4   3.1   1.0    .6    .3    .0    .1    .2    .1   2.4   2.5   3.0   2.3   3.2   4.3
 140.  *    .4    .6   1.3   2.6   3.2   3.2   3.0   1.1    .6    .5    .2    .1    .1    .1   2.2   2.5   2.9   2.5   3.8   4.3
 145.  *    .4    .6   1.3   2.6   3.4   3.1   3.0   1.2   1.1    .7    .3    .2    .2    .1   2.2   2.4   2.8   2.9   4.0   4.2
 150.  *    .4    .6   1.0   2.4   3.2   2.8   2.7   1.6   1.3   1.0    .5    .3    .2    .2   2.2   2.4   3.1   3.2   4.4   4.1
 155.  *    .4    .6    .9   2.2   2.9   2.9   2.8   1.6   1.8   1.3    .9    .4    .2    .2   2.2   2.4   3.2   3.5   4.2   3.9
 160.  *    .4    .6    .8   1.9   2.5   2.5   2.6   1.9   2.2   2.4   1.3    .4    .3    .2   2.2   2.7   3.6   4.1   4.1   3.7
 165.  *    .3    .5    .8   1.7   2.3   2.4   2.4   2.1   2.7   3.0   1.8    .7    .4    .2   2.2   2.9   3.9   4.7   4.0   3.7
 170.  *    .2    .3    .6   1.3   2.1   1.9   1.9   2.7   3.0   3.6   2.5    .9    .5    .4   2.6   3.2   4.6   4.9   3.8   3.6
 175.  *    .1    .2    .4    .8   1.4   1.4   1.4   2.9   3.6   4.2   3.2   1.1    .7    .5   2.6   3.4   4.7   4.5   3.6   3.5
 180.  *    .0    .1    .2    .5    .9    .9    .8   3.0   3.7   4.3   3.6   1.4    .9    .7   2.8   3.5   4.8   4.0   3.3   3.2
 185.  *    .0    .0    .0    .2    .4    .5    .5   2.9   3.7   4.3   3.4   1.5   1.1    .7   2.9   3.4   4.8   3.6   3.1   3.0
 190.  *    .0    .0    .0    .0    .3    .3    .2   3.0   3.7   4.1   3.4   1.7   1.0    .8   3.0   3.7   4.8   3.0   2.9   3.0
 195.  *    .0    .0    .0    .0    .2    .1    .1   2.9   3.4   4.1   3.1   1.6   1.0    .9   2.9   3.6   4.4   2.6   2.8   3.1
 200.  *    .0    .0    .0    .0    .1    .1    .0   2.8   3.3   4.0   3.3   1.6   1.1    .9   2.9   3.8   4.0   2.4   2.9   3.1
 205.  *    .0    .0    .0    .0    .1    .1    .0   2.6   3.2   3.8   3.2   1.6   1.0    .8   2.8   4.1   3.6   2.5   3.0   3.1
1
                                                                                                                        PAGE  4
     JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                  RUN: Site 3 Opt 8 2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .1    .1    .0   2.6   3.2   3.6   3.2   1.7   1.0    .9   3.0   3.9   3.6   2.3   3.0   3.2
 215.  *    .0    .0    .0    .0    .1    .1    .0   2.5   3.0   3.5   2.9   1.9   1.1    .8   2.9   4.1   3.3   2.5   3.1   3.2
 220.  *    .0    .0    .0    .0    .1    .1    .0   2.5   3.0   3.5   2.8   1.8   1.2    .6   2.9   4.2   3.1   2.7   3.2   3.3
 225.  *    .0    .0    .0    .0    .1    .1    .0   2.4   2.8   3.2   2.7   1.5   1.3    .7   3.1   4.1   3.0   2.8   3.4   3.5
 230.  *    .0    .0    .0    .0    .1    .1    .0   2.3   2.8   3.3   2.7   1.6   1.2    .8   3.2   4.2   3.1   3.0   3.7   3.6
 235.  *    .0    .0    .0    .0    .1    .1    .0   2.3   2.8   3.3   2.6   1.6   1.3   1.0   3.4   4.1   2.8   3.2   3.9   3.6
 240.  *    .0    .0    .0    .0    .1    .1    .0   2.3   2.8   3.1   2.4   1.6   1.5   1.0   3.5   4.3   3.1   3.5   4.2   3.8
 245.  *    .2    .0    .1    .0    .0    .0    .0   2.4   2.8   3.2   2.6   1.9   1.6   1.3   3.5   4.4   3.3   3.9   4.1   4.0
 250.  *    .3    .3    .2    .1    .0    .0    .0   2.3   2.9   3.2   2.7   2.4   2.1   1.8   4.0   4.2   3.5   4.0   4.2   4.0
 255.  *    .6    .5    .7    .5    .0    .0    .0   2.3   2.8   3.3   3.0   2.9   3.0   2.9   3.3   3.8   3.5   4.1   4.2   4.1
 260.  *   1.2   1.2   1.2   1.1    .1    .0    .0   2.3   2.8   3.4   3.6   3.5   3.4   3.2   3.0   3.6   3.3   3.9   4.0   3.9
 265.  *   1.7   1.6   2.0   1.8    .4    .0    .0   2.3   3.0   3.6   4.3   3.7   3.7   3.5   2.5   3.2   2.8   3.3   3.6   3.4
 270.  *   2.3   2.3   2.7   2.1    .5    .4    .1   2.5   3.2   4.1   4.5   4.4   4.1   3.8   2.0   2.2   2.2   2.7   3.0   2.9
 275.  *   3.1   3.0   3.2   2.7   1.1    .4    .5   2.8   3.3   4.6   4.7   4.1   4.0   3.8   1.0   1.6   1.5   1.9   2.3   2.3
 280.  *   3.6   3.4   3.7   3.1   1.4    .7    .5   2.9   3.7   4.8   4.7   4.0   4.0   3.7    .7    .9    .8   1.3   1.5   1.4
 285.  *   3.8   3.9   4.0   3.4   1.6    .8    .8   2.9   3.9   5.3   4.2   3.7   3.6   3.3    .2    .5    .6    .8   1.1    .9
 290.  *   4.2   3.9   3.9   3.3   1.8   1.3    .9   3.3   4.1   5.0   3.7   3.3   3.4   3.1    .2    .2    .2    .5    .6    .5
 295.  *   4.0   3.6   3.8   3.4   1.7   1.3   1.1   3.5   4.4   4.9   3.2   3.2   2.9   2.6    .1    .2    .1    .3    .4    .3
 300.  *   4.0   3.4   3.6   3.1   1.9   1.3   1.1   3.6   4.2   5.0   2.9   2.9   2.8   2.6    .0    .2    .1    .2    .3    .1
 305.  *   3.8   3.5   3.3   3.1   1.7   1.5   1.1   3.5   4.4   4.8   2.6   2.8   2.4   2.5    .0    .1    .1    .2    .2    .1
 310.  *   3.8   3.2   3.4   2.8   1.6   1.3   1.1   3.6   4.0   4.5   2.5   2.8   2.4   2.4    .1    .1    .1    .2    .2    .1
 315.  *   3.6   3.1   3.0   2.8   1.6   1.2   1.1   3.5   4.0   4.3   2.3   2.8   2.3   2.3    .0    .1    .1    .2    .2    .0
 320.  *   3.4   3.1   3.0   2.7   1.6   1.3   1.2   3.3   4.1   4.0   2.2   2.7   2.2   2.3    .0    .1    .1    .1    .2    .0
 325.  *   3.3   3.0   3.0   2.7   1.6   1.4   1.1   3.0   3.5   3.9   1.9   2.6   2.1   2.2    .0    .1    .0    .1    .1    .0
 330.  *   3.3   2.9   3.0   2.6   1.7   1.4   1.3   2.9   3.4   3.4   1.8   2.6   2.1   2.2    .0    .1    .0    .1    .1    .0
 335.  *   3.3   2.9   2.9   2.3   1.9   1.6   1.5   2.4   3.0   3.1   1.9   2.5   2.1   2.1    .0    .0    .0    .1    .1    .0
 340.  *   3.2   2.9   3.0   2.3   1.6   1.5   1.7   1.6   2.5   2.6   2.0   2.5   2.1   2.1    .0    .0    .0    .0    .1    .0
 345.  *   3.2   2.9   3.0   2.3   1.6   1.8   2.0   1.4   2.1   2.4   2.1   2.5   2.2   2.2    .0    .0    .0    .0    .0    .0
 350.  *   3.1   2.8   3.0   2.2   1.7   1.9   2.4   1.1   1.7   2.0   2.1   2.4   2.1   2.2    .0    .0    .0    .0    .0    .0
 355.  *   3.1   2.9   2.9   2.2   1.7   2.2   2.7   1.1   1.5   1.8   2.1   2.4   2.2   2.2    .0    .0    .0    .0    .0    .0
 360.  *   3.2   2.9   3.0   2.0   2.1   2.4   2.9    .9   1.1   1.7   2.1   2.2   2.1   2.1    .0    .0    .0    .0    .0    .0
 ------*-------------------------------------------------------------------------------------------------------------------------
 MAX   *   4.3   3.9   4.0   3.4   3.7   3.6   3.8   3.6   4.4   5.3   4.7   4.4   4.1   3.8   4.0   4.4   4.8   4.9   4.4   4.3
 DEGR. *   70    285   285   60    55    35    15    300   305   285   275   270   270   270   250   245   180   170   150   135

1
                                                                                                                        PAGE  5
     JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                  RUN: Site 3 Opt 8 2014 AM

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
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                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
  30.  *    .1
  35.  *    .1
  40.  *    .2
  45.  *    .2
  50.  *    .2
  55.  *    .2
  60.  *    .3
  65.  *    .4
  70.  *   1.0
  75.  *   1.3
  80.  *   2.0
  85.  *   2.6
  90.  *   3.1
  95.  *   3.3
 100.  *   3.9
 105.  *   4.0
 110.  *   4.2
 115.  *   4.2
 120.  *   4.2
 125.  *   3.8
 130.  *   3.9
 135.  *   3.7
 140.  *   3.6
 145.  *   3.5
 150.  *   3.5
 155.  *   3.4
 160.  *   3.3
 165.  *   3.2
 170.  *   3.2
 175.  *   3.1
 180.  *   2.9
 185.  *   2.9
 190.  *   2.9
 195.  *   2.8
 200.  *   2.8
 205.  *   2.8
1
                                                                                                                             PAGE  6
      JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                   RUN: Site 3 Opt 8 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   2.9
 215.  *   3.0
 220.  *   3.2
 225.  *   3.3
 230.  *   3.5
 235.  *   3.6
 240.  *   3.8
 245.  *   3.9
 250.  *   4.0
 255.  *   3.9
 260.  *   3.7
 265.  *   3.4
 270.  *   2.8
 275.  *   2.3
 280.  *   1.6
 285.  *   1.0
 290.  *    .7
 295.  *    .4
 300.  *    .3
 305.  *    .2
 310.  *    .2
 315.  *    .2
 320.  *    .2
 325.  *    .1
 330.  *    .1
 335.  *    .1
 340.  *    .1
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   4.2
 DEGR. *  110

 THE HIGHEST CONCENTRATION IS    5.30 PPM AT  285 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    4.90 PPM AT  170 DEGREES FROM REC18.
 THE 3RD HIGHEST CONCENTRATION IS    4.80 PPM AT  180 DEGREES FROM REC17.
```

```
Site 3 Opt 8 2030 AM - 3B8AM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                  366.     2199.       5.0
SW 164 W                  520.     2197.       5.0
SW 82 W                   602.     2202.       5.0
SW CNR                    681.     2197.       5.0
SW 82 S                   714.     2123.       5.0
SW 164 S                  738.     2044.       5.0
SW MID S                  760.     1982.       5.0
SE MID S                  882.     1987.       5.0
SE 164 S                  840.     2068.       5.0
SE 82 S                   816.     2145.       5.0
SE CNR                    813.     2226.       5.0
SE 82 E                   883.     2248.       5.0
SE 164 E                  965.     2262.       5.0
SE MID E                 1062.     2277.       5.0
NE MID E                 1032.     2367.       5.0
NE 164 E                  904.     2345.       5.0
NE 82 E                   823.     2336.       5.0
N CNR                     742.     2327.       5.0
NW 82 W                   659.     2319.       5.0
NW 164 W                  578.     2315.       5.0
NW MID W                  444.     2313.       5.0
Site 3 Opt 8 2030 AM                     40  1   0
  1
NB         Rt8 aprch AG  1576.  1713.  1404.  1696.    2050 9.2   0  68   30.
  1
NB         Rt8 aprch AG  1404.  1696.  1230.  1718.    2050 9.2   0  68   30.
  1
NB         Rt8 aprch AG  1230.  1718.  1083.  1777.    2050 9.2   0  68   30.
  1
NB         Rt8 aprch AG  1083.  1777.   940.  1861.    2050 9.2   0  68   30.
  1
NB         Rt8 aprch AG   940.  1861.   867.  1949.    2050 9.2   0  68   30.
  1
NB         Rt8 right AG   878.  1954.   836.  2019.    1230 9.2   0  44   30.
  1
NB         Rt8 right AG   836.  2019.   799.  2113.    1230 9.2   0  44   30.
  1
NB         Rt8 right AG   799.  2113.   775.  2263.    1230 9.2   0  44   30.
  2
NB         Rt8 right AG   782.  2219.   798.  2120.      0.  24   2
       120        61       2.0 1230   84.1 1394 1 3
  1
NB         Rt8 left  AG   855.  1949.   816.  2010.     820 9.2   0  44   30.
  1
NB         Rt8 left  AG   816.  2010.   776.  2116.     820 9.2   0  44   30.
  1
NB         Rt8 left  AG   776.  2116.   751.  2261.     820 9.2   0  44   30.
  2
NB         Rt8 left  AG   758.  2217.   774.  2124.      0.  24   2
       120        93       2.0  820   84.1 1717 1 3
  1
SB         Rt8 departAG   715.  2251.   731.  2144.    1625 9.2   0  56   30.
  1
SB         Rt8 departAG   731.  2144.   753.  2062.    1625 9.2   0  56   30.
```

```
  1
SB        Rt8 departAG   753.  2062.   793.  1973.    1625 9.2   0  56   30.
  1
SB        Rt8 departAG   793.  1973.   849.  1889.    1625 9.2   0  56   30.
  1
SB        Rt8 departAG   849.  1889.   921.  1822.    1625 9.2   0  44   30.
  1
SB        Rt8 departAG   921.  1822.  1013.  1765.    1625 9.2   0  44   30.
  1
SB        Rt8 departAG  1013.  1765.  1109.  1723.    1625 9.2   0  44   30.
  1
SB        Rt8 departAG  1109.  1723.  1221.  1682.    1625 9.2   0  44   30.
  1
SB        Rt8 departAG  1221.  1682.  1346.  1661.    1625 9.2   0  44   30.
  1
SB        Rt8 departAG  1346.  1661.  1450.  1658.    1625 9.2   0  44   30.
  1
SB        Rt8 departAG  1450.  1658.  1547.  1668.    1625 9.2   0  44   30.
  1
EB        Rt1 aprch AG  -266.  2268.   302.  2245.    3090 9.2   0  68   30.
  1
EB        Rt1 thru  AG   304.  2246.   476.  2245.    1765 9.2   0  56   30.
  1
EB        Rt1 thru  AG   476.  2245.   738.  2259.    1765 9.2   0  56   30.
  2
EB        Rt1 thru  AG   676.  2255.   503.  2246.      0.  36   3
       120        68       2.0 1765   84.1 1679 1 3
  1
EB        Rt1 right AG   309.  2223.   499.  2222.    1325 9.2   0  32   30.
  1
EB        Rt1 right AG   499.  2222.   743.  2234.    1325 9.2   0  32   30.
  2
EB        Rt1 right AG   682.  2231.   509.  2222.      0.  12   1
       120        37       2.0 1325   84.1 1568 1 3
  1
EB        Rt1 departAG   743.  2251.  1722.  2410.    2995 9.2   0  56   30.
  1
WB        Rt1 aprch AG  1717.  2447.   989.  2326.    2920 9.2   0  68   30.
  1
WB        Rt1 thru  AG   993.  2337.   749.  2301.    2620 9.2   0  44   30.
  2
WB        Rt1 thru  AG   803.  2309.   975.  2334.      0.  24   2
       120        35       2.0 2620   84.1 1753 1 3
  1
WB        Rt1 left  AG   995.  2316.   759.  2281.     300 9.2   0  44   30.
  2
WB        Rt1 left  AG   809.  2288.   984.  2315.      0.  24   2
       120        92       2.0  300   84.1 1700 1 3
  1
WB        Rt1 departAG   748.  2300.   565.  2288.    3440 9.2   0  56   30.
  1
WB        Rt1 departAG   565.  2288.   366.  2286.    3440 9.2   0  56   30.
  1
WB        Rt1 departAG   366.  2286.  -264.  2305.    3440 9.2   0  56   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 3 Opt 8 2030 AM - 3B8AM30.DAT                  RUN: Site 3 Opt 8 2030 AM
      DATE: 05/06/2009   TIME: 08:56:27.54


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
        1. NB        Rt8 aprch *   1576.0    1713.0    1404.0    1696.0 *     173.   264. AG   2050.   9.2    .0 68.0
        2. NB        Rt8 aprch *   1404.0    1696.0    1230.0    1718.0 *     175.   277. AG   2050.   9.2    .0 68.0
        3. NB        Rt8 aprch *   1230.0    1718.0    1083.0    1777.0 *     158.   292. AG   2050.   9.2    .0 68.0
        4. NB        Rt8 aprch *   1083.0    1777.0     940.0    1861.0 *     166.   300. AG   2050.   9.2    .0 68.0
        5. NB        Rt8 aprch *    940.0    1861.0     867.0    1949.0 *     114.   320. AG   2050.   9.2    .0 68.0
        6. NB        Rt8 right *    878.0    1954.0     836.0    2019.0 *      77.   327. AG   1230.   9.2    .0 44.0
        7. NB        Rt8 right *    836.0    2019.0     799.0    2113.0 *     101.   339. AG   1230.   9.2    .0 44.0
        8. NB        Rt8 right *    799.0    2113.0     775.0    2263.0 *     152.   351. AG   1230.   9.2    .0 44.0
        9. NB        Rt8 right *    782.0    2219.0     827.8    1935.4 *     287.   171. AG    229. 100.0    .0 24.0  .96  14.6
       10. NB        Rt8 left  *    855.0    1949.0     816.0    2010.0 *      72.   327. AG    820.   9.2    .0 44.0
       11. NB        Rt8 left  *    816.0    2010.0     776.0    2116.0 *     113.   339. AG    820.   9.2    .0 44.0
       12. NB        Rt8 left  *    776.0    2116.0     751.0    2261.0 *     147.   350. AG    820.   9.2    .0 44.0
       13. NB        Rt8 left  *    758.0    2217.0     947.2    1117.5 *    1116.   170. AG    350. 100.0    .0 24.0 1.25  56.7
       14. SB        Rt8 depart*    715.0    2251.0     731.0    2144.0 *     108.   171. AG   1625.   9.2    .0 56.0
       15. SB        Rt8 depart*    731.0    2144.0     753.0    2062.0 *      85.   165. AG   1625.   9.2    .0 56.0
       16. SB        Rt8 depart*    753.0    2062.0     793.0    1973.0 *      98.   156. AG   1625.   9.2    .0 56.0
       17. SB        Rt8 depart*    793.0    1973.0     849.0    1889.0 *     101.   146. AG   1625.   9.2    .0 56.0
       18. SB        Rt8 depart*    849.0    1889.0     921.0    1822.0 *      98.   133. AG   1625.   9.2    .0 44.0
       19. SB        Rt8 depart*    921.0    1822.0    1013.0    1765.0 *     108.   122. AG   1625.   9.2    .0 44.0
       20. SB        Rt8 depart*   1013.0    1765.0    1109.0    1723.0 *     105.   114. AG   1625.   9.2    .0 44.0
       21. SB        Rt8 depart*   1109.0    1723.0    1221.0    1682.0 *     119.   110. AG   1625.   9.2    .0 44.0
       22. SB        Rt8 depart*   1221.0    1682.0    1346.0    1661.0 *     127.   100. AG   1625.   9.2    .0 44.0
       23. SB        Rt8 depart*   1346.0    1661.0    1450.0    1658.0 *     104.    92. AG   1625.   9.2    .0 44.0
       24. SB        Rt8 depart*   1450.0    1658.0    1547.0    1668.0 *      98.    84. AG   1625.   9.2    .0 44.0
       25. EB        Rt1 aprch *   -266.0    2268.0     302.0    2245.0 *     568.    92. AG   3090.   9.2    .0 68.0
       26. EB        Rt1 thru  *    304.0    2246.0     476.0    2245.0 *     172.    90. AG   1765.   9.2    .0 56.0
       27. EB        Rt1 thru  *    476.0    2245.0     738.0    2259.0 *     262.    87. AG   1765.   9.2    .0 56.0
       28. EB        Rt1 thru  *    676.0    2255.0     431.4    2242.3 *     245.   267. AG    383. 100.0    .0 36.0  .88  12.4
       29. EB        Rt1 right *    309.0    2223.0     499.0    2222.0 *     190.    90. AG   1325.   9.2    .0 32.0
       30. EB        Rt1 right *    499.0    2222.0     743.0    2234.0 *     244.    87. AG   1325.   9.2    .0 32.0
       31. EB        Rt1 right *    682.0    2231.0   -2666.7    2056.8 *    3353.   267. AG     70. 100.0    .0 12.0 1.28 170.3
       32. EB        Rt1 depart*    743.0    2251.0    1722.0    2410.0 *     992.    81. AG   2995.   9.2    .0 56.0
       33. WB        Rt1 aprch *   1717.0    2447.0     989.0    2326.0 *     738.   261. AG   2920.   9.2    .0 68.0
       34. WB        Rt1 thru  *    993.0    2337.0     749.0    2301.0 *     247.   262. AG   2620.   9.2    .0 44.0
       35. WB        Rt1 thru  *    803.0    2309.0    2472.0    2551.6 *    1687.    82. AG    132. 100.0    .0 24.0 1.11  85.7
       36. WB        Rt1 left  *    995.0    2316.0     759.0    2281.0 *     239.   262. AG    300.   9.2    .0 44.0
       37. WB        Rt1 left  *    809.0    2288.0     883.6    2299.5 *      75.    81. AG    346. 100.0    .0 24.0  .44   3.8
       38. WB        Rt1 depart*    748.0    2300.0     565.0    2288.0 *     183.   266. AG   3440.   9.2    .0 56.0
       39. WB        Rt1 depart*    565.0    2288.0     366.0    2286.0 *     199.   269. AG   3440.   9.2    .0 56.0
       40. WB        Rt1 depart*    366.0    2286.0    -264.0    2305.0 *     630.   272. AG   3440.   9.2    .0 56.0
1
                                                                                                                      PAGE  2
      JOB: Site 3 Opt 8 2030 AM - 3B8AM30.DAT                  RUN: Site 3 Opt 8 2030 AM
      DATE: 05/06/2009   TIME: 08:56:27.54

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
        9. NB        Rt8 right *     120       61       2.0      1230       1394      84.10      1        3
       13. NB        Rt8 left  *     120       93       2.0       820       1717      84.10      1        3
       28. EB        Rt1 thru  *     120       68       2.0      1765       1679      84.10      1        3
       31. EB        Rt1 right *     120       37       2.0      1325       1568      84.10      1        3
       35. WB        Rt1 thru  *     120       35       2.0      2620       1753      84.10      1        3
       37. WB        Rt1 left  *     120       92       2.0       300       1700      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
       1. SW MID W            *       366.0     2199.0       5.0   *
       2. SW 164 W            *       520.0     2197.0       5.0   *
       3. SW 82 W             *       602.0     2202.0       5.0   *
       4. SW CNR              *       681.0     2197.0       5.0   *
       5. SW 82 S             *       714.0     2123.0       5.0   *
       6. SW 164 S            *       738.0     2044.0       5.0   *
       7. SW MID S            *       760.0     1982.0       5.0   *
       8. SE MID S            *       882.0     1987.0       5.0   *
       9. SE 164 S            *       840.0     2068.0       5.0   *
      10. SE 82 S             *       816.0     2145.0       5.0   *
      11. SE CNR              *       813.0     2226.0       5.0   *
      12. SE 82 E             *       883.0     2248.0       5.0   *
      13. SE 164 E            *       965.0     2262.0       5.0   *
      14. SE MID E            *      1062.0     2277.0       5.0   *
      15. NE MID E            *      1032.0     2367.0       5.0   *
      16. NE 164 E            *       904.0     2345.0       5.0   *
      17. NE 82 E             *       823.0     2336.0       5.0   *
      18. N CNR               *       742.0     2327.0       5.0   *
      19. NW 82 W             *       659.0     2319.0       5.0   *
      20. NW 164 W            *       578.0     2315.0       5.0   *
      21. NW MID W            *       444.0     2313.0       5.0   *
1
                                                                                                                      PAGE  3
      JOB: Site 3 Opt 8 2030 AM - 3B8AM30.DAT                  RUN: Site 3 Opt 8 2030 AM

       MODEL RESULTS
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       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.6   2.2   2.2   1.6   1.3   1.9   2.2    .6   1.0   1.2   1.7   1.9   1.7   1.7    .0    .0    .0    .0    .0    .0
   5.  *   1.5   2.3   2.2   1.5   1.5   1.9   2.5    .5    .7   1.2   1.8   1.8   1.7   1.7    .0    .0    .0    .0    .0    .0
  10.  *   1.5   2.2   2.2   1.3   1.5   2.2   2.5    .5    .7   1.0   1.8   1.8   1.7   1.7    .0    .0    .0    .0    .0    .0
  15.  *   1.5   2.2   2.2   1.3   1.6   2.1   2.8    .5    .7   1.0   1.9   1.7   1.6   1.7    .1    .0    .0    .0    .1    .0
  20.  *   1.6   2.2   2.2   1.4   2.1   2.6   2.7    .5    .7   1.0   2.0   1.7   1.6   1.7    .1    .1    .0    .0    .1    .1
  25.  *   1.5   2.2   2.2   1.4   2.1   2.6   2.7    .4    .6    .9   2.0   1.7   1.7   1.7    .1    .1    .0    .0    .1    .1
  30.  *   1.6   2.2   2.2   1.5   2.1   2.6   2.5    .5    .6    .9   2.1   1.8   1.7   1.8    .1    .1    .1    .0    .1    .1
  35.  *   1.6   2.3   2.3   1.5   2.4   2.7   2.5    .5    .7    .9   2.0   1.8   1.8   1.9    .1    .1    .1    .0    .1    .1
  40.  *   1.7   2.4   2.3   1.6   2.6   2.5   2.5    .5    .6    .8   2.1   1.9   1.9   2.0    .1    .1    .1    .0    .1    .1
  45.  *   1.8   2.4   2.4   1.8   2.4   2.4   2.4    .5    .6    .8   2.1   2.0   2.0   2.1    .1    .1    .1    .0    .2    .1
  50.  *   2.1   2.5   2.2   2.1   2.7   2.5   2.4    .5    .6    .8   2.0   2.2   2.1   2.3    .2    .1    .1    .1    .2    .2
  55.  *   2.3   2.6   2.4   2.2   2.7   2.2   2.5    .5    .6    .9   2.0   2.1   2.2   2.3    .2    .3    .1    .1    .2    .2
  60.  *   2.7   2.7   2.5   2.5   2.5   2.3   2.6    .4    .6    .8   2.0   2.2   2.4   2.5    .4    .4    .4    .1    .3    .3
  65.  *   3.1   2.9   2.4   2.5   2.5   2.2   2.5    .3    .5    .8   2.1   2.4   2.5   2.6    .6    .7    .6    .5    .7    .5
  70.  *   3.0   3.0   2.5   2.5   2.3   2.0   2.4    .3    .4    .8   1.9   2.3   2.5   2.4    .9   1.1    .9    .8    .9    .9
  75.  *   2.7   2.6   2.5   2.3   2.3   1.9   1.9    .0    .3    .6   1.8   2.2   2.3   2.3   1.4   1.5   1.3   1.1   1.4   1.1
  80.  *   2.5   2.2   2.3   2.2   2.1   1.9   1.8    .0    .1    .4   1.4   2.0   2.1   2.0   1.8   2.1   1.8   1.7   1.8   1.8
  85.  *   2.2   1.9   2.0   2.0   1.8   1.7   1.8    .0    .0    .2   1.0   1.6   1.6   1.5   2.1   2.5   2.4   2.1   2.2   2.1
  90.  *   2.0   1.5   1.6   1.8   1.9   1.7   2.1    .0    .0    .1    .7   1.2   1.2   1.2   2.3   2.7   2.6   2.3   2.3   2.4
  95.  *   1.3   1.2   1.1   1.6   1.7   1.7   2.1    .0    .0    .0    .4    .8    .8    .7   2.4   2.9   2.7   2.8   2.6   2.4
 100.  *    .9    .7   1.1   1.3   1.7   1.7   1.8    .0    .0    .0    .2    .5    .5    .4   2.5   2.8   2.8   2.6   2.6   2.4
 105.  *    .5    .7   1.0   1.3   1.7   1.8   2.2    .0    .0    .0    .1    .3    .3    .3   2.4   2.7   2.7   2.4   2.3   2.7
 110.  *    .3    .4    .9   1.4   1.6   2.0   2.2    .0    .0    .0    .1    .2    .2    .2   2.3   2.6   2.5   2.4   2.3   2.8
 115.  *    .3    .4    .8   1.5   1.6   2.3   2.4    .0    .0    .0    .0    .2    .2    .2   2.2   2.4   2.6   2.2   2.2   2.8
 120.  *    .3    .4    .8   1.6   1.7   2.3   2.3    .4    .0    .0    .0    .1    .2    .1   2.0   2.4   2.5   2.2   2.4   2.8
 125.  *    .2    .4    .8   1.5   2.1   2.4   2.2    .4    .1    .0    .0    .1    .1    .1   1.9   2.3   2.4   2.0   2.4   2.9
 130.  *    .2    .4    .7   1.6   2.1   2.2   2.2    .5    .3    .0    .0    .1    .1    .1   1.9   2.1   2.5   1.8   2.2   3.0
 135.  *    .2    .4    .6   2.1   2.4   2.3   2.0    .6    .4    .0    .0    .1    .1    .1   1.9   2.0   2.4   1.7   2.5   3.0
 140.  *    .2    .3    .7   1.8   2.4   2.2   2.0    .9    .5    .1    .0    .1    .1    .1   1.8   1.9   2.4   1.8   2.6   2.9
 145.  *    .2    .3    .7   1.7   2.0   2.0   1.8   1.1    .4    .3    .1    .1    .1    .1   1.7   1.9   2.4   1.7   2.6   3.0
 150.  *    .1    .2    .5   1.6   1.9   1.8   1.6    .9    .6    .6    .1    .1    .1    .1   1.7   1.9   2.4   2.0   2.8   2.8
 155.  *    .1    .2    .3   1.3   1.7   1.6   1.5   1.0   1.0    .7    .4    .1    .0    .0   1.7   1.9   2.5   2.3   2.8   2.7
 160.  *    .1    .2    .3   1.0   1.5   1.3   1.3   1.1   1.3   1.1    .7    .2    .0    .0   1.7   1.8   2.6   2.4   2.7   2.6
 165.  *    .0    .1    .2    .9   1.4   1.2   1.0   1.2   1.4   1.5    .8    .2    .1    .0   1.7   1.9   2.7   2.7   2.6   2.5
 170.  *    .0    .1    .1    .6   1.0    .9    .9   1.3   1.7   2.1   1.1    .4    .2    .0   1.8   2.0   3.0   2.9   2.6   2.4
 175.  *    .0    .0    .1    .3    .7    .6    .5   1.4   1.7   2.3   1.7    .5    .2    .0   1.8   2.1   3.1   2.9   2.3   2.5
 180.  *    .0    .0    .0    .1    .5    .4    .3   1.5   1.9   2.4   1.8    .5    .3    .2   1.8   2.3   3.2   2.7   2.3   2.4
 185.  *    .0    .0    .0    .1    .3    .2    .2   1.4   2.1   2.5   2.2    .6    .3    .2   1.9   2.3   3.2   2.4   2.3   2.4
 190.  *    .0    .0    .0    .0    .2    .2    .1   1.5   2.2   2.7   2.3    .8    .5    .4   1.9   2.4   3.2   2.1   2.2   2.4
 195.  *    .0    .0    .0    .0    .1    .1    .0   1.4   2.3   2.8   2.3    .9    .6    .3   1.9   2.6   3.3   1.9   2.2   2.3
 200.  *    .0    .0    .0    .0    .1    .1    .0   1.5   2.2   2.7   2.2    .9    .5    .4   2.2   2.8   3.1   1.9   2.3   2.4
 205.  *    .0    .0    .0    .0    .1    .1    .0   1.4   2.2   2.6   2.0   1.1    .5    .4   2.1   2.9   2.8   1.6   2.3   2.3
1
                                                                                                                     PAGE  4
      JOB: Site 3 Opt 8 2030 AM - 3B8AM30.DAT                  RUN: Site 3 Opt 8 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .1    .1    .0   1.5   2.2   2.4   2.0   1.2    .5    .4   2.1   3.0   2.5   1.8   2.4   2.3
 215.  *    .0    .0    .0    .0    .1    .1    .0   1.4   2.1   2.2   2.0   1.2    .7    .4   2.2   3.2   2.6   1.8   2.4   2.5
 220.  *    .0    .0    .0    .0    .1    .1    .0   1.4   2.0   2.4   2.0   1.1    .7    .4   2.2   3.3   2.5   2.1   2.5   2.6
 225.  *    .0    .0    .0    .0    .1    .1    .0   1.5   1.9   2.3   1.8   1.1    .7    .5   2.2   3.2   2.4   2.2   2.7   2.6
 230.  *    .0    .0    .0    .0    .1    .0    .0   1.4   1.9   2.3   1.9   1.1    .8    .5   2.7   3.6   2.0   2.3   2.5   2.6
 235.  *    .0    .0    .0    .0    .0    .0    .0   1.6   1.9   2.2   1.8   1.1    .9    .6   2.7   3.5   2.1   2.5   2.9   2.5
 240.  *    .0    .0    .0    .0    .0    .0    .0   1.6   1.9   2.2   1.6   1.2    .9    .7   2.9   3.3   2.3   2.5   2.9   2.8
 245.  *    .0    .0    .0    .0    .0    .0    .0   1.5   1.9   2.1   1.8   1.4   1.0    .8   2.8   3.0   2.3   3.1   3.1   2.6
 250.  *    .2    .0    .0    .0    .0    .0    .0   1.6   1.9   2.1   1.9   1.4   1.6   1.1   3.0   3.2   2.3   3.0   2.7   2.7
 255.  *    .2    .3    .4    .2    .0    .0    .0   1.6   2.0   2.3   2.2   2.1   2.1   1.7   2.6   2.8   2.4   3.0   2.9   2.7
 260.  *    .5    .5    .7    .6    .0    .0    .0   1.6   2.0   2.3   2.4   2.4   2.6   2.3   2.4   2.4   2.4   2.8   2.7   2.6
 265.  *    .8    .9   1.2   1.0    .3    .0    .0   1.6   1.9   2.7   2.7   2.7   2.8   2.6   1.9   2.2   1.9   2.3   2.4   2.3
 270.  *   1.1   1.3   1.5   1.5    .3    .1    .0   1.7   2.1   2.6   3.2   2.8   2.7   2.7   1.4   1.6   1.6   2.0   2.0   1.9
 275.  *   1.4   1.4   2.1   1.9    .6    .3    .1   1.9   2.3   3.2   3.1   2.9   2.8   2.7   1.1   1.2   1.0   1.3   1.4   1.3
 280.  *   1.7   1.9   2.4   2.1    .9    .3    .2   1.7   2.4   3.3   3.1   2.7   2.8   2.9    .4    .6    .7    .8   1.0   1.1
 285.  *   1.9   2.2   2.6   2.4   1.1    .5    .3   2.0   2.5   3.4   3.0   2.6   2.8   2.6    .2    .3    .3    .5    .6    .7
 290.  *   2.1   2.3   2.8   2.4   1.2    .6    .4   2.2   2.8   3.6   2.6   2.3   2.3   2.2    .2    .2    .2    .3    .5    .4
 295.  *   2.0   2.5   2.7   2.5   1.3    .8    .4   2.3   2.8   3.5   2.4   2.4   2.3   2.2    .1    .1    .1    .2    .2    .2
 300.  *   1.9   2.3   2.8   2.4   1.1    .9    .6   2.3   3.1   3.2   2.2   2.2   2.1   2.0    .1    .1    .1    .2    .2    .1
 305.  *   1.9   2.4   2.6   2.2   1.3    .9    .6   2.6   2.8   3.1   1.9   2.2   2.0   1.9    .1    .1    .1    .1    .2    .1
 310.  *   1.8   2.5   2.5   2.2   1.2    .9    .8   2.5   2.8   3.3   1.7   2.2   1.9   1.8    .1    .1    .1    .1    .2    .0
 315.  *   1.7   2.4   2.5   2.2   1.2   1.0    .7   2.4   2.8   3.1   1.6   2.0   1.8   1.9    .1    .1    .1    .1    .1    .0
 320.  *   1.8   2.4   2.3   2.0   1.2    .9    .8   2.2   2.9   2.6   1.4   2.2   1.6   1.7    .1    .1    .0    .1    .1    .0
 325.  *   1.6   2.2   2.3   2.0   1.2    .9    .9   2.3   2.5   2.8   1.4   2.2   1.6   1.7    .0    .1    .0    .1    .1    .0
 330.  *   1.6   2.2   2.2   2.0   1.3   1.2   1.0   1.8   2.2   2.2   1.3   2.2   1.6   1.8    .0    .0    .0    .1    .1    .0
 335.  *   1.6   2.2   2.2   1.9   1.2   1.2   1.2   1.6   2.0   2.1   1.4   2.2   1.6   1.7    .0    .0    .0    .0    .1    .0
 340.  *   1.6   2.2   2.2   1.8   1.3   1.2   1.3   1.0   1.6   1.7   1.4   2.1   1.6   1.7    .0    .0    .0    .0    .1    .0
 345.  *   1.5   2.1   2.3   1.7   1.3   1.2   1.4   1.1   1.5   1.7   1.6   2.1   1.6   1.7    .0    .0    .0    .0    .0    .0
 350.  *   1.5   2.1   2.2   1.6   1.3   1.5   1.9    .9   1.1   1.5   1.6   2.0   1.6   1.7    .0    .0    .0    .0    .0    .0
 355.  *   1.5   2.2   2.3   1.6   1.3   1.9   2.0    .7   1.1   1.3   1.7   2.0   1.6   1.7    .0    .0    .0    .0    .0    .0
 360.  *   1.6   2.2   2.2   1.6   1.3   1.9   2.2    .6   1.0   1.2   1.7   1.9   1.7   1.7    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   3.1   3.0   2.8   2.5   2.7   2.7   2.8   2.6   3.1   3.6   3.2   2.9   2.8   2.9   3.0   3.6   3.3   3.1   3.1   3.0
 DEGR. *   65    70   290    60    50    35    15   305   300   290   270   275   265   280   250   230   195   245   245   130

1
                                                                                                                     PAGE  5
      JOB: Site 3 Opt 8 2030 AM - 3B8AM30.DAT                  RUN: Site 3 Opt 8 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
```

```
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .1
  50.  *    .1
  55.  *    .2
  60.  *    .2
  65.  *    .4
  70.  *    .7
  75.  *   1.0
  80.  *   1.3
  85.  *   2.0
  90.  *   2.2
  95.  *   2.7
 100.  *   2.8
 105.  *   3.0
 110.  *   2.9
 115.  *   3.1
 120.  *   3.0
 125.  *   3.0
 130.  *   2.7
 135.  *   2.7
 140.  *   2.6
 145.  *   2.6
 150.  *   2.4
 155.  *   2.5
 160.  *   2.2
 165.  *   2.2
 170.  *   2.2
 175.  *   2.2
 180.  *   2.2
 185.  *   2.0
 190.  *   1.9
 195.  *   1.9
 200.  *   1.8
 205.  *   1.7
1
                                                                                                                 PAGE  6
      JOB: Site 3 Opt 8 2030 AM - 3B8AM30.DAT                   RUN: Site 3 Opt 8 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   1.7
 215.  *   1.6
 220.  *   1.8
 225.  *   1.8
 230.  *   1.9
 235.  *   2.0
 240.  *   2.0
 245.  *   2.3
 250.  *   2.3
 255.  *   2.3
 260.  *   2.4
 265.  *   2.2
 270.  *   1.9
 275.  *   1.5
 280.  *   1.2
 285.  *    .7
 290.  *    .5
 295.  *    .3
 300.  *    .2
 305.  *    .1
 310.  *    .1
 315.  *    .1
 320.  *    .1
 325.  *    .1
 330.  *    .1
 335.  *    .1
 340.  *    .1
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   3.1
 DEGR. *  115

 THE HIGHEST CONCENTRATION IS    3.60 PPM AT  230 DEGREES FROM REC16.
 THE 2ND HIGHEST CONCENTRATION IS    3.60 PPM AT  290 DEGREES FROM REC10.
 THE 3RD HIGHEST CONCENTRATION IS    3.30 PPM AT  195 DEGREES FROM REC17.
```

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Site 3 Opt 8 2014 PM - 3B8PM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                  366.     2199.       5.0
SW 164 W                  520.     2197.       5.0
SW 82 W                   602.     2202.       5.0
SW CNR                    681.     2197.       5.0
SW 82 S                   714.     2123.       5.0
SW 164 S                  738.     2044.       5.0
SW MID S                  760.     1982.       5.0
SE MID S                  882.     1987.       5.0
SE 164 S                  840.     2068.       5.0
SE 82 S                   816.     2145.       5.0
SE CNR                    813.     2226.       5.0
SE 82 E                   883.     2248.       5.0
SE 164 E                  965.     2262.       5.0
SE MID E                 1062.     2277.       5.0
NE MID E                 1032.     2367.       5.0
NE 164 E                  904.     2345.       5.0
NE 82 E                   823.     2336.       5.0
N CNR                     742.     2327.       5.0
NW 82 W                   659.     2319.       5.0
NW 164 W                  578.     2315.       5.0
NW MID W                  444.     2313.       5.0
Site 3 Opt 8 2014 PM                     40  1   0
  1
NB        Rt8 aprch AG  1576.  1713.  1404.  1696.    207511.4   0  68   30.
  1
NB        Rt8 aprch AG  1404.  1696.  1230.  1718.    207511.4   0  68   30.
  1
NB        Rt8 aprch AG  1230.  1718.  1083.  1777.    207511.4   0  68   30.
  1
NB        Rt8 aprch AG  1083.  1777.   940.  1861.    207511.4   0  68   30.
  1
NB        Rt8 aprch AG   940.  1861.   867.  1949.    207511.4   0  68   30.
  1
NB        Rt8 right AG   878.  1954.   836.  2019.    124511.4   0  44   30.
  1
NB        Rt8 right AG   836.  2019.   799.  2113.    124511.4   0  44   30.
  1
NB        Rt8 right AG   799.  2113.   775.  2263.    124511.4   0  44   30.
  2
NB        Rt8 right AG   782.  2219.   798.  2120.      0.  24   2
       120        83       2.0 1245  102.2 1394 1 3
  1
NB        Rt8 left  AG   855.  1949.   816.  2010.     83011.4   0  44   30.
  1
NB        Rt8 left  AG   816.  2010.   776.  2116.     83011.4   0  44   30.
  1
NB        Rt8 left  AG   776.  2116.   751.  2261.     83011.4   0  44   30.
  2
NB        Rt8 left  AG   758.  2217.   774.  2124.      0.  24   2
       120        93       2.0  830  102.2 1717 1 3
  1
SB        Rt8 departAG   715.  2251.   731.  2144.    269011.4   0  56   30.
  1
SB        Rt8 departAG   731.  2144.   753.  2062.    269011.4   0  56   30.
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  1
SB        Rt8 departAG   753.  2062.   793.  1973.    269011.4   0  56   30.
  1
SB        Rt8 departAG   793.  1973.   849.  1889.    269011.4   0  56   30.
  1
SB        Rt8 departAG   849.  1889.   921.  1822.    269011.4   0  44   30.
  1
SB        Rt8 departAG   921.  1822.  1013.  1765.    269011.4   0  44   30.
  1
SB        Rt8 departAG  1013.  1765.  1109.  1723.    269011.4   0  44   30.
  1
SB        Rt8 departAG  1109.  1723.  1221.  1682.    269011.4   0  44   30.
  1
SB        Rt8 departAG  1221.  1682.  1346.  1661.    269011.4   0  44   30.
  1
SB        Rt8 departAG  1346.  1661.  1450.  1658.    269011.4   0  44   30.
  1
SB        Rt8 departAG  1450.  1658.  1547.  1668.    269011.4   0  44   30.
  1
EB        Rt1 aprch AG  -266.  2268.   302.  2245.    316511.4   0  68   30.
  1
EB        Rt1 thru  AG   304.  2246.   476.  2245.    162011.4   0  56   30.
  1
EB        Rt1 thru  AG   476.  2245.   738.  2259.    162011.4   0  56   30.
  2
EB        Rt1 thru  AG   676.  2255.   503.  2246.      0.  36   3
       120        74       2.0 1620  102.2 1510 1 3
  1
EB        Rt1 right AG   309.  2223.   499.  2222.    154511.4   0  32   30.
  1
EB        Rt1 right AG   499.  2222.   743.  2234.    154511.4   0  32   30.
  2
EB        Rt1 right AG   682.  2231.   509.  2222.      0.  12   1
       120        49       2.0 1545  102.2 1348 1 3
  1
EB        Rt1 departAG   743.  2251.  1722.  2410.    286511.4   0  56   30.
  1
WB        Rt1 aprch AG  1717.  2447.   989.  2326.    443511.4   0  68   30.
  1
WB        Rt1 thru  AG   993.  2337.   749.  2301.    329011.4   0  44   30.
  2
WB        Rt1 thru  AG   803.  2309.   975.  2334.      0.  24   2
       120        33       2.0 3290  102.2 1753 1 3
  1
WB        Rt1 left  AG   995.  2316.   759.  2281.     114511.4   0  44   30.
  2
WB        Rt1 left  AG   809.  2288.   984.  2315.      0.  24   2
       120        83       2.0 1145  102.2 1700 1 3
  1
WB        Rt1 departAG   748.  2300.   565.  2288.    412011.4   0  56   30.
  1
WB        Rt1 departAG   565.  2288.   366.  2286.    412011.4   0  56   30.
  1
WB        Rt1 departAG   366.  2286.  -264.  2305.    412011.4   0  56   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                  RUN: Site 3 Opt 8 2014 AM
      DATE: 05/06/2009   TIME: 08:56:02.44


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)        (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
        1. NB        Rt8 aprch *   1576.0    1713.0    1404.0    1696.0 *    173.   264. AG   2075.  11.4    .0 68.0
        2. NB        Rt8 aprch *   1404.0    1696.0    1230.0    1718.0 *    175.   277. AG   2075.  11.4    .0 68.0
        3. NB        Rt8 aprch *   1230.0    1718.0    1083.0    1777.0 *    158.   292. AG   2075.  11.4    .0 68.0
        4. NB        Rt8 aprch *   1083.0    1777.0     940.0    1861.0 *    166.   300. AG   2075.  11.4    .0 68.0
        5. NB        Rt8 aprch *    940.0    1861.0     867.0    1949.0 *    114.   320. AG   2075.  11.4    .0 68.0
        6. NB        Rt8 right *    878.0    1954.0     836.0    2019.0 *     77.   327. AG   1245.  11.4    .0 44.0
        7. NB        Rt8 right *    836.0    2019.0     799.0    2113.0 *    101.   339. AG   1245.  11.4    .0 44.0
        8. NB        Rt8 right *    799.0    2113.0     775.0    2263.0 *    152.   351. AG   1245.  11.4    .0 44.0
        9. NB        Rt8 right *    782.0    2219.0    1227.0    -534.6 *   2789.   171. AG    379. 100.0    .0 24.0 1.62 141.7
       10. NB        Rt8 left  *    855.0    1949.0     816.0    2010.0 *     72.   327. AG    830.  11.4    .0 44.0
       11. NB        Rt8 left  *    816.0    2010.0     776.0    2116.0 *    113.   339. AG    830.  11.4    .0 44.0
       12. NB        Rt8 left  *    776.0    2116.0     751.0    2261.0 *    147.   350. AG    830.  11.4    .0 44.0
       13. NB        Rt8 left  *    758.0    2217.0     956.2    1065.1 *   1169.   170. AG    425. 100.0    .0 24.0 1.26  59.4
       14. SB        Rt8 depart*    715.0    2251.0     731.0    2144.0 *    108.   171. AG   2690.  11.4    .0 56.0
       15. SB        Rt8 depart*    731.0    2144.0     753.0    2062.0 *     85.   165. AG   2690.  11.4    .0 56.0
       16. SB        Rt8 depart*    753.0    2062.0     793.0    1973.0 *     98.   156. AG   2690.  11.4    .0 56.0
       17. SB        Rt8 depart*    793.0    1973.0     849.0    1889.0 *    101.   146. AG   2690.  11.4    .0 56.0
       18. SB        Rt8 depart*    849.0    1889.0     921.0    1822.0 *     98.   133. AG   2690.  11.4    .0 44.0
       19. SB        Rt8 depart*    921.0    1822.0    1013.0    1765.0 *    108.   122. AG   2690.  11.4    .0 44.0
       20. SB        Rt8 depart*   1013.0    1765.0    1109.0    1723.0 *    105.   114. AG   2690.  11.4    .0 44.0
       21. SB        Rt8 depart*   1109.0    1723.0    1221.0    1682.0 *    119.   110. AG   2690.  11.4    .0 44.0
       22. SB        Rt8 depart*   1221.0    1682.0    1346.0    1661.0 *    127.   100. AG   2690.  11.4    .0 44.0
       23. SB        Rt8 depart*   1346.0    1661.0    1450.0    1658.0 *    104.    92. AG   2690.  11.4    .0 44.0
       24. SB        Rt8 depart*   1450.0    1658.0    1547.0    1668.0 *     98.    84. AG   2690.  11.4    .0 44.0
       25. EB        Rt1 aprch *   -266.0    2268.0     302.0    2245.0 *    568.    92. AG   3165.  11.4    .0 68.0
       26. EB        Rt1 thru  *    304.0    2246.0     476.0    2245.0 *    172.    90. AG   1620.  11.4    .0 56.0
       27. EB        Rt1 thru  *    476.0    2245.0     738.0    2259.0 *    262.    87. AG   1620.  11.4    .0 56.0
       28. EB        Rt1 thru  *    676.0    2255.0     225.7    2231.6 *    451.   267. AG    507. 100.0    .0 36.0 1.02  22.9
       29. EB        Rt1 right *    309.0    2223.0     499.0    2222.0 *    190.    90. AG   1545.  11.4    .0 32.0
       30. EB        Rt1 right *    499.0    2222.0     743.0    2234.0 *    244.    87. AG   1545.  11.4    .0 32.0
       31. EB        Rt1 right *    682.0    2231.0   -7800.3    1789.7 *   8494.   267. AG    112. 100.0    .0 12.0 2.05 431.5
       32. EB        Rt1 depart*    743.0    2251.0    1722.0    2410.0 *    992.    81. AG   2865.  11.4    .0 56.0
       33. WB        Rt1 aprch *   1717.0    2447.0     989.0    2326.0 *    738.   261. AG   4435.  11.4    .0 68.0
       34. WB        Rt1 thru  *    993.0    2337.0     749.0    2301.0 *    247.   262. AG   3290.  11.4    .0 44.0
       35. WB        Rt1 thru  *    803.0    2309.0    5542.5    2997.9 *   4789.    82. AG    151. 100.0    .0 24.0 1.36 243.3
       36. WB        Rt1 left  *    995.0    2316.0     759.0    2281.0 *    239.   262. AG    114. 511.0   4.0  4.0
       37. WB        Rt1 left  *    809.0    2288.0    2214.1    2504.8 *   1422.    81. AG    379. 100.0    .0 24.0 1.22  72.2
       38. WB        Rt1 depart*    748.0    2300.0     565.0    2288.0 *    183.   266. AG   4120.  11.4    .0 56.0
       39. WB        Rt1 depart*    565.0    2288.0     366.0    2286.0 *    199.   269. AG   4120.  11.4    .0 56.0
       40. WB        Rt1 depart*    366.0    2286.0    -264.0    2305.0 *    630.   272. AG   4120.  11.4    .0 56.0
1
                                                                                                           PAGE  2
      JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                  RUN: Site 3 Opt 8 2014 AM
      DATE: 05/06/2009   TIME: 08:56:02.44

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
        9. NB        Rt8 right *     120       83       2.0      1245       1394     102.20      1        3
       13. NB        Rt8 left  *     120       93       2.0       830       1717     102.20      1        3
       28. EB        Rt1 thru  *     120       74       2.0      1620       1510     102.20      1        3
       31. EB        Rt1 right *     120       49       2.0      1545       1348     102.20      1        3
       35. WB        Rt1 thru  *     120       33       2.0      3290       1753     102.20      1        3
       37. WB        Rt1 left  *     120       83       2.0      1145       1700     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
       1. SW MID W            *       366.0     2199.0        5.0   *
       2. SW 164 W            *       520.0     2197.0        5.0   *
       3. SW 82 W             *       602.0     2202.0        5.0   *
       4. SW CNR              *       681.0     2197.0        5.0   *
       5. SW 82 S             *       714.0     2123.0        5.0   *
       6. SW 164 S            *       738.0     2044.0        5.0   *
       7. SW MID S            *       760.0     1982.0        5.0   *
       8. SE MID S            *       882.0     1987.0        5.0   *
       9. SE 164 S            *       840.0     2068.0        5.0   *
      10. SE 82 S             *       816.0     2145.0        5.0   *
      11. SE CNR              *       813.0     2226.0        5.0   *
      12. SE 82 E             *       883.0     2248.0        5.0   *
      13. SE 164 E            *       965.0     2262.0        5.0   *
      14. SE MID E            *      1062.0     2277.0        5.0   *
      15. NE MID E            *      1032.0     2367.0        5.0   *
      16. NE 164 E            *       904.0     2345.0        5.0   *
      17. NE 82 E             *       823.0     2336.0        5.0   *
      18. N CNR               *       742.0     2327.0        5.0   *
      19. NW 82 W             *       659.0     2319.0        5.0   *
      20. NW 164 W            *       578.0     2315.0        5.0   *
      21. NW MID W            *       444.0     2313.0        5.0   *
1
                                                                                                           PAGE  3
      JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                  RUN: Site 3 Opt 8 2014 AM

       MODEL RESULTS
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      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   3.3   2.9   3.0   2.2   2.6   3.0   3.5   1.0   1.4   1.8   2.4   3.2   3.2   3.1    .0    .0    .0    .0    .0    .0
   5.  *   3.3   3.0   2.9   2.1   2.4   3.5   3.9   1.1   1.4   1.7   2.5   3.1   3.1   3.0    .0    .0    .0    .0    .0    .0
  10.  *   3.3   2.9   3.0   2.1   2.8   3.4   4.0   1.0   1.2   1.8   2.6   3.1   3.3   3.0    .1    .0    .0    .0    .1    .0
  15.  *   3.1   3.0   3.0   1.9   2.9   3.9   4.2    .9   1.2   1.6   2.7   3.1   3.2   3.0    .1    .1    .0    .0    .1    .1
  20.  *   3.2   3.0   3.0   2.1   3.2   4.0   4.3    .9   1.3   1.6   2.8   3.1   3.4   3.2    .1    .1    .1    .0    .1    .1
  25.  *   3.3   3.0   3.1   2.2   3.4   4.2   4.5    .9   1.4   1.8   2.9   3.3   3.3   3.2    .1    .1    .1    .0    .2    .1
  30.  *   3.5   3.1   3.1   2.1   3.8   4.1   4.3    .8   1.1   1.8   2.9   3.4   3.4   3.3    .2    .1    .1    .0    .2    .2
  35.  *   3.5   3.2   3.1   2.5   4.0   4.3   4.1    .9   1.2   1.9   3.1   3.5   3.5   3.5    .2    .2    .1    .0    .2    .2
  40.  *   3.6   3.3   3.2   2.8   4.1   4.3   4.2   1.0   1.3   1.8   3.2   3.7   3.6   3.6    .2    .2    .1    .0    .2    .2
  45.  *   3.9   3.4   3.4   3.2   4.3   4.2   3.9   1.0   1.1   1.8   3.4   3.9   3.8   3.9    .2    .2    .1    .1    .2    .2
  50.  *   3.9   3.4   3.5   3.5   4.4   4.2   3.8    .8   1.1   1.7   3.4   4.0   3.9   4.0    .3    .3    .2    .1    .3    .2
  55.  *   4.1   3.8   3.6   4.0   4.4   4.0   4.0    .8   1.1   1.8   3.6   4.2   4.1   4.3    .4    .4    .3    .1    .3    .3
  60.  *   4.5   4.0   3.6   4.1   4.4   3.8   3.7    .7   1.1   1.9   3.8   4.3   4.3   4.4    .8    .8    .6    .5    .6    .4
  65.  *   4.7   4.3   4.2   4.4   4.4   3.7   3.6    .6   1.0   1.6   3.9   4.5   4.4   4.4   1.1   1.4   1.0    .8   1.1    .9
  70.  *   4.7   4.1   4.4   4.5   4.1   3.5   3.6    .4    .7   1.5   3.6   4.3   4.3   4.3   1.8   2.1   1.8   1.5   1.6   1.5
  75.  *   4.8   4.1   4.1   4.3   3.8   3.3   3.4    .4    .6   1.2   3.3   4.0   4.0   3.9   2.7   2.9   2.7   2.4   2.4   2.2
  80.  *   4.5   3.9   3.8   3.9   3.3   3.1   3.1    .2    .4    .7   2.7   3.6   3.6   3.4   3.5   3.9   3.6   3.2   3.3   3.0
  85.  *   3.7   3.1   3.3   3.6   3.1   2.9   3.1    .0    .2    .4   2.0   2.7   2.7   2.7   4.2   4.8   4.4   4.0   4.0   3.6
  90.  *   3.1   2.5   2.5   2.9   2.9   2.7   3.1    .0    .0    .3   1.3   1.9   1.9   1.8   4.5   5.1   4.8   4.4   4.5   4.1
  95.  *   2.3   2.0   2.0   2.5   2.6   2.9   3.0    .0    .0    .0    .7   1.3   1.3   1.3   4.8   5.4   5.1   4.6   4.5   4.2
 100.  *   1.4   1.1   1.5   2.2   2.6   2.8   3.1    .0    .0    .0    .4    .7    .8    .7   4.8   5.4   5.2   4.7   4.3   4.1
 105.  *   1.0   1.0   1.4   2.2   2.7   2.9   3.2    .0    .0    .0    .1    .4    .4    .4   4.6   5.1   4.9   4.2   4.0   4.2
 110.  *    .8    .8   1.3   2.2   2.7   3.1   3.5    .0    .1    .0    .1    .3    .3    .3   4.4   5.0   4.8   4.0   3.8   4.2
 115.  *    .5    .8   1.5   2.3   2.8   3.3   3.8    .3    .1    .0    .1    .2    .2    .2   4.2   4.9   4.5   3.8   3.7   4.0
 120.  *    .5    .8   1.4   2.3   2.9   3.6   4.2    .5    .1    .0    .0    .2    .2    .2   4.0   4.5   4.2   3.3   3.5   4.2
 125.  *    .4   1.0   1.3   2.4   3.4   4.1   4.0    .7    .4    .0    .0    .2    .2    .2   3.8   4.4   4.0   3.2   3.6   4.2
 130.  *    .4    .9   1.5   2.8   3.7   4.1   3.9   1.0    .5    .0    .0    .1    .1    .1   3.7   4.1   4.0   3.0   3.5   4.4
 135.  *    .4    .8   1.4   2.9   3.7   3.8   3.7   1.1    .7    .2    .0    .1    .1    .1   3.5   4.1   3.8   2.9   3.4   4.5
 140.  *    .4    .8   1.4   3.1   3.8   4.0   3.6   1.1    .8    .3    .0    .1    .1    .1   3.5   3.9   3.6   2.9   3.7   4.4
 145.  *    .4    .6   1.2   3.0   3.9   3.7   3.6   1.3   1.0    .7    .3    .1    .1    .1   3.3   3.8   3.5   3.3   4.2   4.3
 150.  *    .4    .6   1.1   2.9   3.7   3.4   3.3   1.3   1.2   1.1    .4    .2    .1    .1   3.2   3.8   3.6   3.3   4.6   4.3
 155.  *    .3    .6   1.0   2.6   3.3   3.2   3.1   1.6   1.5   1.6    .7    .3    .2    .1   3.2   3.8   3.8   3.9   4.6   4.3
 160.  *    .3    .5    .7   2.3   3.1   2.9   2.8   1.8   1.9   1.9   1.5    .3    .2    .0   3.2   3.9   4.0   4.6   4.4   4.1
 165.  *    .1    .3    .6   1.9   2.6   2.4   2.3   2.0   2.4   3.0   2.0    .6    .3    .2   3.4   4.2   4.5   4.9   4.3   3.7
 170.  *    .1    .2    .4   1.3   2.2   2.0   1.9   2.4   2.9   3.5   2.5   1.0    .4    .2   3.4   4.4   4.9   5.0   4.0   3.6
 175.  *    .0    .1    .2    .9   1.7   1.5   1.3   2.7   3.3   3.9   2.9   1.3    .7    .5   3.6   4.6   5.3   4.6   3.9   3.4
 180.  *    .0    .0    .1    .5   1.0    .9    .9   2.8   3.5   4.3   3.2   1.3    .8    .4   3.6   4.6   5.3   4.4   3.6   3.2
 185.  *    .0    .0    .0    .2    .7    .6    .4   2.8   3.6   4.2   3.3   1.6   1.1    .6   3.8   4.8   5.4   3.5   3.3   3.2
 190.  *    .0    .0    .0    .0    .3    .3    .2   2.9   3.5   4.0   3.5   1.7   1.1    .8   3.7   4.9   5.2   3.3   3.0   3.2
 195.  *    .0    .0    .0    .0    .3    .2    .0   2.8   3.3   4.0   3.3   1.5   1.1    .9   4.0   5.0   4.9   2.9   3.1   3.2
 200.  *    .0    .0    .0    .0    .2    .2    .0   2.8   3.3   3.8   3.1   1.7   1.2    .9   4.0   5.2   4.6   2.8   3.1   3.2
 205.  *    .0    .0    .0    .0    .2    .2    .0   2.7   3.3   3.8   3.2   1.7    .9   1.0   4.3   5.0   4.4   2.5   3.1   3.3
1
                                                                                                                         PAGE  4
     JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                 RUN: Site 3 Opt 8 2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .2    .2    .0   2.5   3.2   3.6   3.0   1.6   1.0    .8   4.5   5.2   4.2   2.6   3.2   3.4
 215.  *    .0    .0    .0    .0    .2    .1    .0   2.7   3.1   3.6   3.1   1.7   1.1    .7   4.5   5.3   4.0   2.8   3.3   3.4
 220.  *    .0    .0    .0    .0    .1    .1    .0   2.4   3.0   3.4   2.8   1.7   1.1    .8   4.7   5.1   3.9   2.8   3.5   3.6
 225.  *    .0    .0    .0    .0    .1    .1    .0   2.5   2.8   3.3   2.7   1.7   1.2    .8   5.0   5.1   3.6   3.0   3.6   3.6
 230.  *    .0    .0    .0    .0    .1    .1    .0   2.4   2.8   3.2   2.6   1.6   1.1    .8   5.0   5.3   3.7   3.1   3.8   3.7
 235.  *    .0    .0    .0    .0    .1    .1    .0   2.4   2.8   3.1   2.6   1.7   1.3    .9   5.3   5.0   3.5   3.5   4.1   4.1
 240.  *    .0    .0    .0    .0    .1    .1    .0   2.4   2.8   3.1   2.6   1.7   1.4   1.1   5.2   4.9   3.5   3.8   4.1   4.1
 245.  *    .1    .0    .0    .0    .1    .1    .0   2.3   2.9   3.2   2.6   2.0   1.5   1.4   5.3   4.9   3.7   4.1   4.3   4.3
 250.  *    .2    .4    .4    .2    .1    .0    .0   2.3   2.8   3.2   2.9   2.2   2.2   1.9   5.3   4.7   3.9   4.2   4.4   4.3
 255.  *    .5    .5    .7    .5    .0    .0    .0   2.3   2.8   3.1   3.2   2.8   2.8   2.7   4.6   4.4   3.6   4.2   4.2   4.2
 260.  *   1.0   1.0   1.1   1.0    .1    .0    .0   2.3   2.8   3.6   3.7   3.3   3.1   3.2   3.9   4.1   3.8   4.1   4.1   4.0
 265.  *   1.5   1.6   1.9   1.6    .4    .1    .1   2.4   3.0   3.5   4.3   4.2   3.7   4.1   3.1   3.4   3.0   3.5   3.8   3.5
 270.  *   2.1   2.3   2.6   2.0    .4    .3    .2   2.4   3.2   4.0   4.6   4.3   4.3   4.4   2.6   2.5   2.3   2.7   3.0   3.0
 275.  *   2.7   2.8   3.3   2.7    .9    .4    .4   2.6   3.2   4.6   4.8   4.2   4.3   4.6   1.6   1.7   1.6   2.0   2.3   2.3
 280.  *   3.2   3.3   3.7   3.1   1.2    .6    .4   2.8   3.6   5.0   4.7   4.0   4.5   4.9    .9   1.1   1.1   1.3   1.5   1.5
 285.  *   3.7   3.8   3.9   3.5   1.5    .7    .7   3.2   4.0   5.1   4.3   4.2   4.3   4.3    .3    .6    .6    .7   1.0    .9
 290.  *   3.9   4.0   4.2   3.5   1.7   1.2    .7   3.3   4.3   5.1   3.7   3.4   4.1   4.3    .3    .3    .3    .6    .6    .5
 295.  *   4.0   3.8   3.9   3.5   1.8   1.3    .9   3.2   4.4   4.9   3.3   3.5   3.7   4.1    .1    .2    .1    .3    .4    .3
 300.  *   4.1   3.7   3.8   3.2   2.0   1.5   1.1   3.7   4.2   4.7   3.0   3.1   3.6   3.8    .1    .2    .1    .2    .3    .1
 305.  *   3.9   3.6   3.5   3.1   1.8   1.5   1.2   3.5   4.4   4.8   2.7   3.1   3.4   3.7    .1    .2    .1    .2    .2    .1
 310.  *   3.9   3.4   3.6   2.9   1.8   1.5   1.5   3.6   4.3   4.4   2.5   3.2   3.4   3.5    .1    .2    .1    .2    .2    .1
 315.  *   3.8   3.3   3.4   2.9   1.7   1.3   1.2   3.3   4.0   4.1   2.4   3.2   3.3   3.3    .1    .1    .1    .2    .2    .0
 320.  *   3.6   3.2   3.1   2.9   1.7   1.3   1.4   3.2   3.8   3.9   2.2   3.0   3.3   3.3    .1    .1    .1    .1    .2    .0
 325.  *   3.5   3.1   3.1   2.7   1.8   1.7   1.5   2.8   3.5   3.7   2.1   3.0   3.2   3.0    .1    .1    .1    .1    .2    .0
 330.  *   3.3   3.1   3.0   2.8   2.0   1.7   1.6   2.8   3.3   3.3   2.1   3.1   3.1   3.0    .1    .1    .0    .1    .1    .0
 335.  *   3.3   3.1   3.0   2.6   2.0   2.0   1.9   2.4   3.0   2.9   2.2   3.1   3.1   3.1    .0    .0    .0    .1    .1    .0
 340.  *   3.2   3.1   3.0   2.6   2.1   1.8   2.2   1.8   2.6   2.8   2.1   3.1   3.2   3.0    .0    .0    .0    .0    .1    .0
 345.  *   3.1   3.1   3.0   2.5   2.2   2.2   2.4   1.4   2.1   2.4   2.3   3.2   3.2   3.1    .0    .0    .0    .0    .0    .0
 350.  *   3.2   3.0   3.0   2.2   2.2   2.6   2.9   1.3   1.9   2.0   2.5   3.2   3.1   3.1    .0    .0    .0    .0    .0    .0
 355.  *   3.3   2.9   3.0   2.2   2.3   3.0   3.5   1.1   1.5   2.1   2.5   3.2   3.2   3.1    .0    .0    .0    .0    .0    .0
 360.  *   3.3   2.9   3.0   2.2   2.6   3.0   3.5   1.0   1.4   1.8   2.4   3.2   3.2   3.1    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   4.8   4.3   4.4   4.5   4.4   4.3   4.5   3.7   4.4   5.1   4.8   4.5   4.5   4.9   5.3   5.4   5.4   5.0   4.6   4.5
 DEGR. *   75    65    70    70    50    35    25    300   305   285   275   65    280   280   235   100   185   170   150   135

1
                                                                                                                         PAGE  5
     JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                 RUN: Site 3 Opt 8 2014 AM

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
```

```
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .1
  30.  *    .1
  35.  *    .2
  40.  *    .2
  45.  *    .2
  50.  *    .2
  55.  *    .2
  60.  *    .3
  65.  *    .7
  70.  *   1.2
  75.  *   1.7
  80.  *   2.7
  85.  *   3.2
  90.  *   3.8
  95.  *   4.1
 100.  *   4.6
 105.  *   4.4
 110.  *   4.4
 115.  *   4.4
 120.  *   4.3
 125.  *   4.3
 130.  *   4.2
 135.  *   4.1
 140.  *   4.0
 145.  *   3.7
 150.  *   3.5
 155.  *   3.6
 160.  *   3.3
 165.  *   3.3
 170.  *   3.2
 175.  *   3.1
 180.  *   3.0
 185.  *   3.0
 190.  *   3.0
 195.  *   2.9
 200.  *   2.9
 205.  *   2.9
1
                                                                                                                             PAGE  6
      JOB: Site 3 Opt 8 2014 AM - 3B8AM14.DAT                  RUN: Site 3 Opt 8 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   3.1
 215.  *   3.2
 220.  *   3.4
 225.  *   3.4
 230.  *   3.5
 235.  *   3.7
 240.  *   3.8
 245.  *   3.8
 250.  *   4.0
 255.  *   3.8
 260.  *   3.7
 265.  *   3.3
 270.  *   2.8
 275.  *   2.4
 280.  *   1.6
 285.  *   1.1
 290.  *    .7
 295.  *    .5
 300.  *    .4
 305.  *    .2
 310.  *    .2
 315.  *    .2
 320.  *    .2
 325.  *    .2
 330.  *    .1
 335.  *    .1
 340.  *    .1
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   4.6
 DEGR. *  100

 THE HIGHEST CONCENTRATION IS    5.40 PPM AT  100 DEGREES FROM REC16.
 THE 2ND HIGHEST CONCENTRATION IS    5.40 PPM AT  185 DEGREES FROM REC17.
 THE 3RD HIGHEST CONCENTRATION IS    5.30 PPM AT  235 DEGREES FROM REC15.
```

```
Site 3 Opt 8 2030 PM - 3B8PM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                  366.     2199.       5.0
SW 164 W                  520.     2197.       5.0
SW 82 W                   602.     2202.       5.0
SW CNR                    681.     2197.       5.0
SW 82 S                   714.     2123.       5.0
SW 164 S                  738.     2044.       5.0
SW MID S                  760.     1982.       5.0
SE MID S                  882.     1987.       5.0
SE 164 S                  840.     2068.       5.0
SE 82 S                   816.     2145.       5.0
SE CNR                    813.     2226.       5.0
SE 82 E                   883.     2248.       5.0
SE 164 E                  965.     2262.       5.0
SE MID E                 1062.     2277.       5.0
NE MID E                 1032.     2367.       5.0
NE 164 E                  904.     2345.       5.0
NE 82 E                   823.     2336.       5.0
N CNR                     742.     2327.       5.0
NW 82 W                   659.     2319.       5.0
NW 164 W                  578.     2315.       5.0
NW MID W                  444.     2313.       5.0
Site 3 Opt 8 2030 PM                     40  1   0
  1
NB        Rt8 aprch AG  1576.  1713.  1404.  1696.    2380 9.2   0  68   30.
  1
NB        Rt8 aprch AG  1404.  1696.  1230.  1718.    2380 9.2   0  68   30.
  1
NB        Rt8 aprch AG  1230.  1718.  1083.  1777.    2380 9.2   0  68   30.
  1
NB        Rt8 aprch AG  1083.  1777.   940.  1861.    2380 9.2   0  68   30.
  1
NB        Rt8 aprch AG   940.  1861.   867.  1949.    2380 9.2   0  68   30.
  1
NB        Rt8 right AG   878.  1954.   836.  2019.    1430 9.2   0  44   30.
  1
NB        Rt8 right AG   836.  2019.   799.  2113.    1430 9.2   0  44   30.
  1
NB        Rt8 right AG   799.  2113.   775.  2263.    1430 9.2   0  44   30.
  2
NB        Rt8 right AG   782.  2219.   798.  2120.      0.  24   2
       120        55       2.0 1430   84.1 1394 1 3
  1
NB        Rt8 left  AG   855.  1949.   816.  2010.     950 9.2   0  44   30.
  1
NB        Rt8 left  AG   816.  2010.   776.  2116.     950 9.2   0  44   30.
  1
NB        Rt8 left  AG   776.  2116.   751.  2261.     950 9.2   0  44   30.
  2
NB        Rt8 left  AG   758.  2217.   774.  2124.      0.  24   2
       120        93       2.0  950   84.1 1717 1 3
  1
SB        Rt8 departAG   715.  2251.   731.  2144.    2510 9.2   0  56   30.
  1
SB        Rt8 departAG   731.  2144.   753.  2062.    2510 9.2   0  56   30.
```

```
  1
SB        Rt8 departAG   753.  2062.   793.  1973.    2510 9.2   0  56   30.
  1
SB        Rt8 departAG   793.  1973.   849.  1889.    2510 9.2   0  56   30.
  1
SB        Rt8 departAG   849.  1889.   921.  1822.    2510 9.2   0  44   30.
  1
SB        Rt8 departAG   921.  1822.  1013.  1765.    2510 9.2   0  44   30.
  1
SB        Rt8 departAG  1013.  1765.  1109.  1723.    2510 9.2   0  44   30.
  1
SB        Rt8 departAG  1109.  1723.  1221.  1682.    2510 9.2   0  44   30.
  1
SB        Rt8 departAG  1221.  1682.  1346.  1661.    2510 9.2   0  44   30.
  1
SB        Rt8 departAG  1346.  1661.  1450.  1658.    2510 9.2   0  44   30.
  1
SB        Rt8 departAG  1450.  1658.  1547.  1668.    2510 9.2   0  44   30.
  1
EB        Rt1 aprch AG  -266.  2268.   302.  2245.    3000 9.2   0  68   30.
  1
EB        Rt1 thru  AG   304.  2246.   476.  2245.    1535 9.2   0  56   30.
  1
EB        Rt1 thru  AG   476.  2245.   738.  2259.    1535 9.2   0  56   30.
  2
EB        Rt1 thru  AG   676.  2255.   503.  2246.      0.  36   3
       120        73       2.0 1535   84.1 1510 1 3
  1
EB        Rt1 right AG   309.  2223.   499.  2222.    1465 9.2   0  32   30.
  1
EB        Rt1 right AG   499.  2222.   743.  2234.    1465 9.2   0  32   30.
  2
EB        Rt1 right AG   682.  2231.   509.  2222.      0.  12   1
       120        42       2.0 1465   84.1 1348 1 3
  1
EB        Rt1 departAG   743.  2251.  1722.  2410.    2965 9.2   0  56   30.
  1
WB        Rt1 aprch AG  1717.  2447.   989.  2326.    4165 9.2   0  68   30.
  1
WB        Rt1 thru  AG   993.  2337.   749.  2301.    3120 9.2   0  44   30.
  2
WB        Rt1 thru  AG   803.  2309.   975.  2334.      0.  24   2
       120        35       2.0 3120   84.1 1753 1 3
  1
WB        Rt1 left  AG   995.  2316.   759.  2281.    1045 9.2   0  44   30.
  2
WB        Rt1 left  AG   809.  2288.   984.  2315.      0.  24   2
       120        86       2.0 1045   84.1 1700 1 3
  1
WB        Rt1 departAG   748.  2300.   565.  2288.    4070 9.2   0  56   30.
  1
WB        Rt1 departAG   565.  2288.   366.  2286.    4070 9.2   0  56   30.
  1
WB        Rt1 departAG   366.  2286.  -264.  2305.    4070 9.2   0  56   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                 PAGE  1

      JOB: Site 3 Opt 8 2030 PM - 3B8PM30.DAT                   RUN: Site 3 Opt 8 2030 PM
      DATE: 05/06/2009   TIME: 08:55:36.79


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt8 aprch *   1576.0    1713.0    1404.0    1696.0 *     173.   264. AG   2380.   9.2    .0 68.0
       2. NB        Rt8 aprch *   1404.0    1696.0    1230.0    1718.0 *     175.   277. AG   2380.   9.2    .0 68.0
       3. NB        Rt8 aprch *   1230.0    1718.0    1083.0    1777.0 *     158.   292. AG   2380.   9.2    .0 68.0
       4. NB        Rt8 aprch *   1083.0    1777.0     940.0    1861.0 *     166.   300. AG   2380.   9.2    .0 68.0
       5. NB        Rt8 aprch *    940.0    1861.0     867.0    1949.0 *     114.   320. AG   2380.   9.2    .0 68.0
       6. NB        Rt8 right *    878.0    1954.0     836.0    2019.0 *      77.   327. AG   1430.   9.2    .0 44.0
       7. NB        Rt8 right *    836.0    2019.0     799.0    2113.0 *     101.   339. AG   1430.   9.2    .0 44.0
       8. NB        Rt8 right *    799.0    2113.0     775.0    2263.0 *     152.   351. AG   1430.   9.2    .0 44.0
       9. NB        Rt8 right *    782.0    2219.0     848.2    1809.5 *     415.   171. AG    207. 100.0    .0 24.0 1.01  21.1
      10. NB        Rt8 left  *    855.0    1949.0     816.0    2010.0 *      72.   327. AG    950.   9.2    .0 44.0
      11. NB        Rt8 left  *    816.0    2010.0     776.0    2116.0 *     113.   339. AG    950.   9.2    .0 44.0
      12. NB        Rt8 left  *    776.0    2116.0     751.0    2261.0 *     147.   350. AG    950.   9.2    .0 44.0
      13. NB        Rt8 left  *    758.0    2217.0    1064.2     437.2 *    1806.   170. AG    350. 100.0    .0 24.0 1.44  91.7
      14. SB        Rt8 depart*    715.0    2251.0     731.0    2144.0 *     108.   171. AG   2510.   9.2    .0 56.0
      15. SB        Rt8 depart*    731.0    2144.0     753.0    2062.0 *      85.   165. AG   2510.   9.2    .0 56.0
      16. SB        Rt8 depart*    753.0    2062.0     793.0    1973.0 *      98.   156. AG   2510.   9.2    .0 56.0
      17. SB        Rt8 depart*    793.0    1973.0     849.0    1889.0 *     101.   146. AG   2510.   9.2    .0 56.0
      18. SB        Rt8 depart*    849.0    1889.0     921.0    1822.0 *      98.   133. AG   2510.   9.2    .0 44.0
      19. SB        Rt8 depart*    921.0    1822.0    1013.0    1765.0 *     108.   122. AG   2510.   9.2    .0 44.0
      20. SB        Rt8 depart*   1013.0    1765.0    1109.0    1723.0 *     105.   114. AG   2510.   9.2    .0 44.0
      21. SB        Rt8 depart*   1109.0    1723.0    1221.0    1682.0 *     119.   110. AG   2510.   9.2    .0 44.0
      22. SB        Rt8 depart*   1221.0    1682.0    1346.0    1661.0 *     127.   100. AG   2510.   9.2    .0 44.0
      23. SB        Rt8 depart*   1346.0    1661.0    1450.0    1658.0 *     104.    92. AG   2510.   9.2    .0 44.0
      24. SB        Rt8 depart*   1450.0    1658.0    1547.0    1668.0 *      98.    84. AG   2510.   9.2    .0 44.0
      25. EB        Rt1 aprch *   -266.0    2268.0     302.0    2245.0 *     568.    92. AG   3000.   9.2    .0 68.0
      26. EB        Rt1 thru  *    304.0    2246.0     476.0    2245.0 *     172.    90. AG   1535.   9.2    .0 56.0
      27. EB        Rt1 thru  *    476.0    2245.0     738.0    2259.0 *     262.    87. AG   1535.   9.2    .0 56.0
      28. EB        Rt1 thru  *    676.0    2255.0     409.4    2241.1 *     267.   267. AG    412. 100.0    .0 36.0  .94  13.6
      29. EB        Rt1 right *    309.0    2223.0     499.0    2222.0 *     190.    90. AG   1465.   9.2    .0 32.0
      30. EB        Rt1 right *    499.0    2222.0     743.0    2234.0 *     244.    87. AG   1465.   9.2    .0 32.0
      31. EB        Rt1 right *    682.0    2231.0   -6133.4    1876.4 *    6825.   267. AG     79. 100.0    .0 12.0 1.76 346.7
      32. EB        Rt1 depart*    743.0    2251.0    1722.0    2410.0 *     992.    81. AG   2965.   9.2    .0 56.0
      33. WB        Rt1 aprch *   1717.0    2447.0     989.0    2326.0 *     738.   261. AG   4165.   9.2    .0 68.0
      34. WB        Rt1 thru  *    993.0    2337.0     749.0    2301.0 *     247.   262. AG   3120.   9.2    .0 44.0
      35. WB        Rt1 thru  *    803.0    2309.0    4989.5    2917.5 *    4231.    82. AG    132. 100.0    .0 24.0 1.32 214.9
      36. WB        Rt1 left  *    995.0    2316.0     759.0    2281.0 *     239.   262. AG   1045.   9.2    .0 44.0
      37. WB        Rt1 left  *    809.0    2288.0    2116.8    2489.8 *    1323.    81. AG    323. 100.0    .0 24.0 1.23  67.2
      38. WB        Rt1 depart*    748.0    2300.0     565.0    2288.0 *     183.   266. AG   4070.   9.2    .0 56.0
      39. WB        Rt1 depart*    565.0    2288.0     366.0    2286.0 *     199.   269. AG   4070.   9.2    .0 56.0
      40. WB        Rt1 depart*    366.0    2286.0    -264.0    2305.0 *     630.   272. AG   4070.   9.2    .0 56.0
1
                                                                                                                     PAGE  2
      JOB: Site 3 Opt 8 2030 PM - 3B8PM30.DAT                   RUN: Site 3 Opt 8 2030 PM
      DATE: 05/06/2009   TIME: 08:55:36.79

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*----------------------------------------------------------------------------------
       9. NB        Rt8 right *     120       55       2.0      1430       1394      84.10      1        3
      13. NB        Rt8 left  *     120       93       2.0       950       1717      84.10      1        3
      28. EB        Rt1 thru  *     120       73       2.0      1535       1510      84.10      1        3
      31. EB        Rt1 right *     120       42       2.0      1465       1348      84.10      1        3
      35. WB        Rt1 thru  *     120       35       2.0      3120       1753      84.10      1        3
      37. WB        Rt1 left  *     120       86       2.0      1045       1700      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y           Z       *
     -------------------------*-------------------------------------*
       1. SW MID W            *       366.0     2199.0       5.0    *
       2. SW 164 W            *       520.0     2197.0       5.0    *
       3. SW 82 W             *       602.0     2202.0       5.0    *
       4. SW CNR              *       681.0     2197.0       5.0    *
       5. SW 82 S             *       714.0     2123.0       5.0    *
       6. SW 164 S            *       738.0     2044.0       5.0    *
       7. SW MID S            *       760.0     1982.0       5.0    *
       8. SE MID S            *       882.0     1987.0       5.0    *
       9. SE 164 S            *       840.0     2068.0       5.0    *
      10. SE 82 S             *       816.0     2145.0       5.0    *
      11. SE CNR              *       813.0     2226.0       5.0    *
      12. SE 82 E             *       883.0     2248.0       5.0    *
      13. SE 164 E            *       965.0     2262.0       5.0    *
      14. SE MID E            *      1062.0     2277.0       5.0    *
      15. NE MID E            *      1032.0     2367.0       5.0    *
      16. NE 164 E            *       904.0     2345.0       5.0    *
      17. NE 82 E             *       823.0     2336.0       5.0    *
      18. N CNR               *       742.0     2327.0       5.0    *
      19. NW 82 W             *       659.0     2319.0       5.0    *
      20. NW 164 W            *       578.0     2315.0       5.0    *
      21. NW MID W            *       444.0     2313.0       5.0    *
1
                                                                                                                     PAGE  3
      JOB: Site 3 Opt 8 2030 PM - 3B8PM30.DAT                   RUN: Site 3 Opt 8 2030 PM

       MODEL RESULTS
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      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.6   2.4   2.4   1.7   1.8   2.4   2.6    .8   1.1   1.5   1.9   2.4   2.5   2.5    .0    .0    .0    .0    .0    .0
   5.  *   1.6   2.4   2.4   1.7   1.8   2.2   2.8    .8   1.0   1.4   1.9   2.4   2.5   2.5    .0    .0    .0    .0    .0    .0
  10.  *   1.5   2.4   2.4   1.5   2.0   2.7   3.0    .8    .9   1.2   2.0   2.4   2.6   2.6    .1    .0    .0    .0    .0    .0
  15.  *   1.6   2.5   2.4   1.6   2.3   3.0   3.1    .8   1.0   1.3   2.1   2.4   2.5   2.6    .1    .1    .0    .0    .1    .1
  20.  *   1.7   2.4   2.4   1.6   2.5   3.0   3.2    .8   1.1   1.3   2.2   2.4   2.6   2.6    .1    .1    .0    .0    .1    .1
  25.  *   1.6   2.4   2.4   1.5   2.6   3.2   3.4    .8   1.0   1.3   2.2   2.4   2.5   2.6    .1    .1    .1    .0    .1    .1
  30.  *   1.8   2.5   2.4   1.6   2.8   3.5   3.3    .7    .9   1.4   2.3   2.6   2.7   2.7    .1    .1    .1    .0    .1    .1
  35.  *   1.9   2.5   2.4   1.8   3.1   3.3   3.2    .8    .9   1.3   2.4   2.6   2.7   2.8    .1    .1    .1    .0    .2    .1
  40.  *   2.1   2.6   2.6   2.1   3.1   3.2   3.1    .8   1.0   1.3   2.5   2.8   3.0   3.0    .2    .1    .1    .0    .2    .2
  45.  *   2.4   2.6   2.5   2.4   3.2   3.1   2.8    .8   1.0   1.3   2.5   3.0   3.1   3.1    .2    .1    .1    .0    .2    .2
  50.  *   2.6   2.7   2.6   2.6   3.3   3.3   2.9    .8   1.0   1.4   2.6   3.0   3.1   3.2    .2    .2    .1    .1    .2    .2
  55.  *   2.8   2.9   2.8   2.9   3.3   3.1   3.0    .7   1.0   1.4   2.7   3.2   3.2   3.3    .3    .3    .2    .1    .2    .2
  60.  *   3.0   2.9   2.9   3.0   3.4   3.1   3.0    .7   1.0   1.3   3.0   3.4   3.5   3.6    .6    .7    .5    .4    .4    .3
  65.  *   3.4   3.3   3.0   3.3   3.2   2.8   3.0    .5    .8   1.4   2.9   3.5   3.7   3.7    .9   1.0    .8    .7    .9    .7
  70.  *   3.7   3.2   3.3   3.4   3.2   2.8   2.7    .4    .7   1.3   2.9   3.6   3.6   3.5   1.4   1.6   1.3   1.1   1.3   1.0
  75.  *   3.4   3.3   3.2   3.4   3.0   2.4   2.5    .2    .4   1.0   2.6   3.3   3.4   3.3   2.1   2.3   2.0   1.9   2.0   1.6
  80.  *   3.4   2.8   3.0   3.1   2.6   2.5   2.2    .1    .4    .7   2.0   2.8   2.9   2.6   2.7   3.2   2.7   2.5   2.5   2.4
  85.  *   2.9   2.2   2.5   2.6   2.5   2.1   2.1    .0    .0    .4   1.4   2.2   2.3   2.1   3.3   3.7   3.5   3.0   3.2   2.9
  90.  *   2.4   1.8   2.0   2.2   2.2   2.1   2.4    .0    .0    .2   1.0   1.6   1.6   1.6   3.6   4.1   3.8   3.4   3.3   3.2
  95.  *   1.5   1.5   1.3   1.9   2.0   2.2   2.3    .0    .0    .0    .5   1.0   1.1    .9   3.9   4.3   4.0   3.6   3.4   3.3
 100.  *   1.1    .9   1.3   1.6   2.0   2.0   2.3    .0    .0    .0    .2    .6    .7    .6   3.9   4.2   4.0   3.4   3.3   3.1
 105.  *    .7    .7   1.0   1.6   2.1   2.1   2.5    .0    .0    .0    .1    .3    .3    .3   3.7   4.2   3.7   3.1   2.8   3.5
 110.  *    .3    .5   1.0   1.7   2.0   2.3   2.7    .0    .0    .0    .1    .2    .2    .2   3.5   3.9   3.5   2.9   2.9   3.1
 115.  *    .3    .6   1.1   1.6   2.1   2.6   2.7    .2    .1    .0    .0    .2    .2    .2   3.4   3.7   3.4   2.7   2.4   3.1
 120.  *    .3    .5   1.0   1.7   2.2   2.7   2.8    .4    .1    .0    .0    .1    .2    .1   3.1   3.5   3.3   2.4   2.7   3.2
 125.  *    .3    .5   1.0   1.9   2.6   3.0   2.9    .5    .3    .0    .0    .1    .1    .1   3.0   3.3   3.1   2.3   2.6   3.3
 130.  *    .2    .7   1.3   2.1   2.6   3.0   3.1    .9    .4    .0    .0    .1    .1    .1   3.0   3.1   3.0   2.1   2.5   3.5
 135.  *    .2    .6   1.1   2.4   2.8   3.0   2.7   1.0    .5    .2    .0    .1    .1    .1   2.9   3.0   2.7   1.9   2.7   3.5
 140.  *    .2    .4    .9   2.3   3.0   2.8   2.6   1.0    .6    .3    .0    .1    .1    .1   2.7   2.9   2.7   2.2   2.9   3.4
 145.  *    .2    .4    .8   2.2   2.9   2.6   2.5   1.1    .8    .4    .1    .1    .1    .1   2.6   2.9   2.6   2.3   3.0   3.4
 150.  *    .2    .3    .8   2.1   2.6   2.6   2.1   1.2   1.1    .8    .3    .1    .1    .1   2.6   2.7   2.6   2.4   3.3   3.3
 155.  *    .1    .3    .6   1.7   2.3   2.2   2.0   1.3   1.1   1.2    .4    .1    .0    .0   2.6   2.6   2.8   2.6   3.5   3.2
 160.  *    .1    .2    .3   1.3   2.1   2.1   1.8   1.2   1.5   1.5    .8    .2    .1    .0   2.6   2.8   2.9   3.0   3.5   2.9
 165.  *    .1    .2    .3   1.1   1.8   1.6   1.4   1.4   1.8   2.0   1.3    .3    .2    .0   2.7   2.9   3.3   3.4   3.1   2.8
 170.  *    .0    .1    .2    .9   1.5   1.3   1.1   1.7   2.1   2.4   1.8    .5    .2    .2   2.8   3.0   3.5   3.8   3.0   2.7
 175.  *    .0    .1    .1    .6   1.0   1.0    .8   1.7   2.1   2.6   2.0    .6    .3    .1   2.8   3.1   3.6   3.4   2.8   2.7
 180.  *    .0    .0    .1    .3    .7    .6    .4   1.9   2.4   2.8   2.0    .8    .4    .3   3.0   3.2   3.8   3.0   2.7   2.6
 185.  *    .0    .0    .0    .1    .5    .4    .2   1.9   2.6   2.7   2.3    .9    .5    .3   2.9   3.3   3.9   2.9   2.5   2.5
 190.  *    .0    .0    .0    .0    .2    .3    .1   1.9   2.5   2.8   2.4   1.1    .6    .3   2.8   3.3   3.7   2.5   2.5   2.5
 195.  *    .0    .0    .0    .0    .2    .2    .0   2.1   2.4   2.9   2.4   1.0    .7    .5   2.9   3.3   3.5   2.2   2.5   2.6
 200.  *    .0    .0    .0    .0    .2    .1    .0   2.0   2.4   2.8   2.3   1.3    .7    .5   3.0   3.5   3.4   2.3   2.5   2.6
 205.  *    .0    .0    .0    .0    .1    .1    .0   2.0   2.4   2.6   2.3   1.3    .7    .5   3.1   3.7   3.2   1.9   2.5   2.6
1
                                                                                                                    PAGE  4
     JOB: Site 3 Opt 8 2030 PM - 3B8PM30.DAT                 RUN: Site 3 Opt 8 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .1    .1    .0   1.9   2.4   2.6   2.3   1.3    .9    .5   3.2   4.0   3.2   2.1   2.6   2.5
 215.  *    .0    .0    .0    .0    .1    .1    .0   1.9   2.2   2.6   2.1   1.3    .8    .5   3.3   4.0   3.0   2.0   2.7   2.7
 220.  *    .0    .0    .0    .0    .1    .1    .0   1.8   2.1   2.6   2.1   1.1    .9    .4   3.4   4.0   2.9   2.3   2.7   2.9
 225.  *    .0    .0    .0    .0    .1    .1    .0   1.8   2.1   2.4   2.1   1.2   1.1    .6   3.6   3.8   2.8   2.5   2.9   2.9
 230.  *    .0    .0    .0    .0    .1    .1    .0   1.9   2.1   2.4   2.0   1.2    .9    .6   3.9   4.1   2.5   2.6   3.1   2.9
 235.  *    .0    .0    .0    .0    .1    .1    .0   1.9   2.1   2.3   1.9   1.2    .9    .6   3.8   3.7   2.6   2.8   3.1   2.9
 240.  *    .0    .0    .0    .0    .1    .1    .0   1.9   2.1   2.3   1.9   1.4   1.1    .8   4.0   3.7   2.8   2.9   3.2   2.9
 245.  *    .0    .0    .0    .0    .1    .0    .0   1.8   2.2   2.4   2.0   1.7   1.3   1.1   3.8   3.5   2.9   3.2   3.3   2.9
 250.  *    .2    .1    .1    .0    .0    .0    .0   1.7   2.2   2.2   2.1   1.6   1.5   1.3   4.1   3.6   2.7   3.3   3.4   3.1
 255.  *    .2    .3    .5    .4    .0    .0    .0   1.7   2.2   2.4   2.5   2.4   2.3   2.2   3.6   3.1   2.8   3.2   3.2   3.1
 260.  *    .5    .5    .8    .6    .0    .0    .0   1.7   2.1   2.5   2.7   2.6   2.7   2.7   3.1   3.0   2.5   2.9   3.0   2.8
 265.  *    .9   1.0   1.3   1.2    .3    .0    .0   1.7   2.1   2.8   3.2   3.0   2.9   3.0   2.6   2.5   2.1   2.7   2.9   2.6
 270.  *   1.2   1.3   1.7   1.5    .3    .2    .1   1.7   2.4   2.8   3.7   3.1   3.0   3.4   1.7   1.8   1.7   2.1   2.2   2.4
 275.  *   1.5   1.7   2.4   1.9    .6    .3    .4   2.1   2.4   3.1   3.7   3.3   3.5   3.5   1.3   1.3   1.1   1.4   1.6   1.7
 280.  *   1.8   2.1   2.7   2.3    .9    .3    .4   2.2   2.6   3.4   3.5   3.3   3.1   3.5    .6    .7    .7   1.0   1.2   1.2
 285.  *   2.0   2.3   2.8   2.6   1.2    .5    .4   2.4   2.8   3.6   3.3   2.8   3.1   3.5    .3    .5    .4    .6    .7    .8
 290.  *   2.1   2.5   2.8   2.7   1.4    .7    .5   2.6   3.1   3.7   2.7   2.5   3.1   3.3    .2    .2    .2    .3    .5    .4
 295.  *   2.2   2.6   3.0   2.7   1.3    .8    .6   2.5   3.2   3.7   2.5   2.7   2.8   3.0    .1    .2    .1    .2    .3    .2
 300.  *   2.1   2.7   2.9   2.5   1.6   1.0    .6   2.5   3.5   3.5   2.4   2.4   2.7   3.0    .1    .1    .1    .2    .2    .1
 305.  *   2.0   2.7   2.8   2.5   1.2   1.2    .6   2.8   3.2   3.4   2.1   2.4   2.5   2.8    .1    .1    .1    .2    .2    .1
 310.  *   2.0   2.6   2.8   2.5   1.4   1.0    .6   2.8   3.0   3.3   2.1   2.4   2.5   2.8    .1    .1    .1    .1    .2    .0
 315.  *   1.8   2.7   2.6   2.3   1.4   1.2    .9   2.6   2.9   3.0   2.0   2.3   2.5   2.6    .1    .1    .1    .1    .2    .0
 320.  *   1.8   2.5   2.5   2.2   1.4   1.0    .9   2.5   3.0   2.8   1.6   2.3   2.4   2.6    .1    .1    .1    .1    .1    .0
 325.  *   1.6   2.5   2.5   2.2   1.6   1.2   1.0   2.3   2.7   2.9   1.5   2.3   2.4   2.6    .1    .1    .0    .1    .1    .0
 330.  *   1.6   2.5   2.4   2.0   1.7   1.4   1.2   2.1   2.5   2.6   1.5   2.3   2.4   2.5    .0    .1    .0    .1    .1    .0
 335.  *   1.6   2.5   2.4   2.0   1.5   1.4   1.6   1.7   2.0   2.2   1.7   2.3   2.4   2.5    .0    .0    .0    .1    .1    .0
 340.  *   1.6   2.4   2.5   1.9   1.6   1.5   1.6   1.4   1.8   1.9   1.7   2.4   2.4   2.5    .0    .0    .0    .0    .1    .0
 345.  *   1.5   2.5   2.4   1.9   1.8   1.6   1.7   1.0   1.6   1.8   1.7   2.4   2.4   2.6    .0    .0    .0    .0    .0    .0
 350.  *   1.6   2.4   2.4   1.8   1.8   1.9   2.5   1.0   1.5   1.4   1.8   2.4   2.4   2.6    .0    .0    .0    .0    .0    .0
 355.  *   1.6   2.4   2.4   1.8   1.5   2.3   2.5    .9   1.1   1.6   1.8   2.4   2.5   2.6    .0    .0    .0    .0    .0    .0
 360.  *   1.6   2.4   2.4   1.7   1.8   2.4   2.6    .8   1.1   1.5   1.9   2.4   2.5   2.5    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   3.7   3.3   3.3   3.4   3.4   3.5   3.4   2.8   3.5   3.7   3.7   3.6   3.7   3.7   4.1   4.3   4.0   3.8   3.5   3.5
 DEGR. *   70    65    70    70    60    30    25   305   300   295   270    70    65    65   250    95    95   170   155   105

1
                                                                                                                    PAGE  5
     JOB: Site 3 Opt 8 2030 PM - 3B8PM30.DAT                 RUN: Site 3 Opt 8 2030 PM

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
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```
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
  30.  *    .1
  35.  *    .1
  40.  *    .1
  45.  *    .2
  50.  *    .2
  55.  *    .2
  60.  *    .2
  65.  *    .4
  70.  *   1.0
  75.  *   1.3
  80.  *   1.9
  85.  *   2.6
  90.  *   2.9
  95.  *   3.2
 100.  *   3.3
 105.  *   3.4
 110.  *   3.5
 115.  *   3.4
 120.  *   3.5
 125.  *   3.4
 130.  *   3.2
 135.  *   2.9
 140.  *   2.9
 145.  *   2.9
 150.  *   2.7
 155.  *   2.6
 160.  *   2.5
 165.  *   2.6
 170.  *   2.6
 175.  *   2.4
 180.  *   2.5
 185.  *   2.4
 190.  *   2.4
 195.  *   2.2
 200.  *   2.1
 205.  *   2.2
1
                                                                                                                                PAGE  6
      JOB: Site 3 Opt 8 2030 PM - 3B8PM30.DAT                  RUN: Site 3 Opt 8 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   2.1
 215.  *   2.0
 220.  *   2.2
 225.  *   2.2
 230.  *   2.3
 235.  *   2.3
 240.  *   2.3
 245.  *   2.5
 250.  *   2.5
 255.  *   2.6
 260.  *   2.7
 265.  *   2.5
 270.  *   2.2
 275.  *   1.7
 280.  *   1.3
 285.  *    .9
 290.  *    .5
 295.  *    .3
 300.  *    .3
 305.  *    .2
 310.  *    .2
 315.  *    .2
 320.  *    .1
 325.  *    .1
 330.  *    .1
 335.  *    .1
 340.  *    .1
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   3.5
 DEGR. *  110

 THE HIGHEST CONCENTRATION IS    4.30 PPM AT   95 DEGREES FROM REC16.
 THE 2ND HIGHEST CONCENTRATION IS    4.10 PPM AT  250 DEGREES FROM REC15.
 THE 3RD HIGHEST CONCENTRATION IS    4.00 PPM AT   95 DEGREES FROM REC17.
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Site 4

```
Site 4 Existing AM - 4EXAM.DAT          60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Existing AM                       15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.    148515.5   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.    148515.5   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
        40        22       2.0 1485  141.4 1457 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    121015.5   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.     48515.5   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.     48515.5   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
        40        22       2.0  485  141.4 1322 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.     67015.5   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.     53515.5   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
        40        22       2.0  535  141.4 1150 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.     57015.5   0  32   30.
```

```
  1
WB         Rt7A aprchAG  1388.  2708.   655.  2720.    105515.5   0  44   30.
  1
WB         Rt7A aprchAG   655.  2720.   387.  2730.    105515.5   0  56   30.
  2
WB         Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
        40        22       2.0 1055  141.4 1224 1 3
  1
WB         Rt7A deparAG   386.  2733.  -609.  2763.    111015.5   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 4 Existing AM - 4EXAM.DAT                       RUN: Site 4 Existing AM
      DATE: 05/07/2009   TIME: 07:40:04.78


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG   1485.  15.5    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG   1485.  15.5    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     391.9    2609.1 *      50.   181. AG    834. 100.0    .0 48.0  .73   2.5
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1210.  15.5    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG    485.  15.5    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG    485.  15.5    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     356.2    2778.6 *      15.     1. AG    834. 100.0    .0 48.0  .26    .7
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG    670.  15.5    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG    535.  15.5    .0 44.0
      10. EB        Rt7A aprch*    309.0    2719.0     275.1    2720.0 *      34.   272. AG    417. 100.0    .0 24.0  .66   1.7
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG    570.  15.5    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   1055.  15.5    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   1055.  15.5    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     518.9    2725.2 *      60.    92. AG    626. 100.0    .0 36.0  .82   3.0
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1110.  15.5    .0 44.0
1
                                                                                                                 PAGE  2
      JOB: Site 4 Existing AM - 4EXAM.DAT                       RUN: Site 4 Existing AM
      DATE: 05/07/2009   TIME: 07:40:04.78

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)       (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *      40       22       2.0      1485       1457     141.40      1        3
       7. SB        Rt4 aprch *      40       22       2.0       485       1322     141.40      1        3
      10. EB        Rt7A aprch*      40       22       2.0       535       1150     141.40      1        3
      14. WB        Rt7A aprch*      40       22       2.0      1055       1224     141.40      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0        5.0   *
      2. SW 164 W             *       151.0     2697.0        5.0   *
      3. SW 82 W              *       234.0     2693.0        5.0   *
      4. SW CNR               *       310.0     2683.0        5.0   *
      5. SW 82 S              *       316.0     2608.0        5.0   *
      6. SW 164 S             *       313.0     2527.0        5.0   *
      7. SW MID S             *       311.0     2362.0        5.0   *
      8. SE MID S             *       428.0     2361.0        5.0   *
      9. SE 164 S             *       431.0     2516.0        5.0   *
     10. SE 82 S              *       432.0     2598.0        5.0   *
     11. SE CNR               *       448.0     2662.0        5.0   *
     12. SE 82 E              *       506.0     2676.0        5.0   *
     13. SE 164 E             *       589.0     2673.0        5.0   *
     14. SE MID E             *       744.0     2669.0        5.0   *
     15. NE MID E             *       744.0     2746.0        5.0   *
     16. NE 164 E             *       588.0     2753.0        5.0   *
     17. NE 82 E              *       506.0     2757.0        5.0   *
     18. NE CNR               *       440.0     2763.0        5.0   *
     19. NE 82 N              *       433.0     2827.0        5.0   *
     20. NE 164 N             *       433.0     2911.0        5.0   *
     21. NE MID N             *       436.0     3044.0        5.0   *
     22. NW MID N             *       328.0     3045.0        5.0   *
     23. NW 164 N             *       323.0     2917.0        5.0   *
     24. NW 82 N              *       320.0     2833.0        5.0   *
     25. NW CNR               *       313.0     2765.0        5.0   *
     26. NW 82 W              *       247.0     2766.0        5.0   *
     27. NW 164 W             *       166.0     2767.0        5.0   *
     28. NW MID W             *       -36.0     2773.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 4 Existing AM - 4EXAM.DAT                       RUN: Site 4 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .7    .7    .8   1.5    .9    .9    .6   1.3   1.4   1.5   1.2   1.9    .8    .7    .0    .1    .2    .6    .8    .8
   5.  *    .7    .7    .9   1.6   1.2   1.1    .9    .9   1.2   1.2   1.2   1.7    .7    .7    .0    .0    .1    .4    .6    .6
  10.  *    .7    .8   1.0   1.6   1.1   1.2   1.1    .7   1.0   1.0   1.2   1.6    .7    .7    .0    .0    .1    .2    .4    .4
  15.  *    .7    .8   1.0   1.6   1.2   1.4   1.4    .6    .8    .8   1.3   1.4    .7    .7    .0    .0    .0    .1    .2    .3
  20.  *    .7    .9   1.0   1.5   1.2   1.5   1.3    .3    .6    .9   1.2   1.2    .7    .7    .0    .0    .0    .1    .1    .2
  25.  *    .8    .9    .9   1.6   1.4   1.6   1.3    .2    .5    .8   1.3   1.1    .7    .7    .0    .0    .0    .0    .1    .1
  30.  *    .8    .9   1.1   1.5   1.5   1.7   1.2    .1    .4    .7   1.3   1.0    .7    .7    .0    .0    .0    .0    .0    .1
  35.  *    .8   1.0   1.2   1.5   1.4   1.6   1.2    .1    .3    .6   1.3    .9    .8    .7    .0    .0    .0    .0    .0    .0
```

```
  40.  *    .9   1.0   1.3   1.3   1.5   1.6   1.1    .2    .3    .5   1.3    .8    .7    .7    .0    .0    .0    .0    .0    .0
  45.  *    .9   1.1   1.4   1.3   1.8   1.6   1.0    .2    .3    .5   1.3    .8    .7    .7    .0    .0    .0    .0    .0    .0
  50.  *    .9   1.1   1.5   1.4   1.9   1.5   1.0    .2    .3    .4   1.2    .7    .8    .7    .0    .0    .0    .0    .0    .0
  55.  *    .9   1.1   1.6   1.6   1.9   1.5    .9    .2    .2    .5   1.0    .8    .8    .7    .0    .0    .0    .0    .0    .0
  60.  *   1.0   1.2   1.6   1.6   2.0   1.4    .9    .1    .2    .3    .9    .8    .8    .7    .0    .0    .1    .0    .0    .0
  65.  *   1.0   1.2   1.7   1.6   2.2   1.1    .8    .1    .2    .3    .9    .9    .9    .9    .1    .1    .1    .0    .0    .0
  70.  *   1.0   1.4   1.9   1.6   2.2   1.0    .9    .1    .2    .4    .8    .9   1.0    .9    .1    .2    .1    .1    .0    .0
  75.  *   1.0   1.5   2.0   1.7   2.1    .9    .7    .0    .2    .3    .8    .9    .9    .9    .2    .2    .2    .2    .0    .0
  80.  *   1.1   1.5   1.9   1.9   2.0    .9    .7    .0    .2    .3    .7    .9    .9    .8    .3    .3    .3    .3    .0    .0
  85.  *   1.4   1.4   1.8   1.8   1.8    .8    .8    .0    .1    .2    .5    .9    .8    .8    .5    .6    .5    .5    .1    .0
  90.  *   1.2   1.4   1.7   1.6   1.6    .7    .7    .0    .0    .2    .5    .6    .6    .6    .7    .7    .6    .8    .1    .0
  95.  *   1.0   1.4   1.2   1.6   1.4    .7    .8    .0    .0    .1    .3    .5    .4    .4    .8    .9    .9   1.1    .2    .1
 100.  *    .6   1.2   1.2   1.7   1.1    .7    .7    .0    .0    .0    .2    .3    .3    .3   1.0    .9   1.0   1.4    .4    .1
 105.  *    .5    .8    .9   1.5   1.0    .7    .8    .0    .0    .0    .1    .2    .2    .2   1.0   1.0   1.0   1.7    .4    .2
 110.  *    .4    .6    .8   1.5    .9    .7    .7    .0    .0    .0    .0    .1    .1    .1   1.0   1.0   1.1   1.7    .4    .2
 115.  *    .3    .5    .7   1.5    .8    .7    .7    .0    .0    .0    .0    .0    .0    .0    .9    .9   1.0   1.9    .5    .2
 120.  *    .2    .4    .7   1.5    .8    .7    .7    .0    .0    .0    .0    .0    .0    .0    .9    .9   1.0   1.9    .5    .2
 125.  *    .2    .4    .6   1.4    .8    .8    .7    .0    .0    .0    .0    .0    .0    .0    .9    .9   1.0   1.9    .6    .3
 130.  *    .3    .3    .6   1.4    .8    .8    .7    .0    .0    .0    .0    .0    .0    .0    .8    .8   1.1   2.0    .6    .3
 135.  *    .2    .3    .6   1.3    .8    .7    .8    .0    .0    .0    .0    .0    .0    .0    .8    .8   1.1   1.9    .7    .3
 140.  *    .2    .3    .6   1.3    .9    .8    .9    .0    .0    .0    .0    .0    .0    .0    .8    .8   1.2   1.8    .8    .3
 145.  *    .2    .3    .5   1.1    .9    .9    .9    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.2   1.7    .8    .3
 150.  *    .2    .3    .5    .9   1.0   1.0    .9    .0    .0    .1    .0    .0    .0    .0    .7    .7   1.4   1.6    .8    .5
 155.  *    .1    .3    .5   1.0    .9    .9    .9    .0    .1    .1    .0    .0    .0    .0    .7    .7   1.5   1.4    .8    .6
 160.  *    .1    .2    .5   1.0   1.0   1.0    .9    .1    .1    .1    .0    .0    .0    .0    .7    .7   1.6   1.4    .8    .6
 165.  *    .0    .2    .5    .9   1.0    .9    .9    .1    .2    .2    .0    .0    .0    .0    .7    .7   1.8   1.2   1.0    .7
 170.  *    .0    .2    .3    .9   1.0    .8    .8    .2    .4    .3    .2    .0    .0    .0    .7    .7   2.0   1.4   1.1   1.0
 175.  *    .0    .1    .2    .7    .8    .8    .7    .5    .5    .6    .4    .1    .0    .0    .7    .7   2.2   1.6   1.4   1.2
 180.  *    .0    .0    .2    .6    .7    .5    .6    .6    .7    .8    .5    .1    .0    .0    .7    .8   2.4   1.6   1.4   1.2
 185.  *    .0    .0    .1    .4    .6    .4    .4    .8    .9   1.0    .6    .4    .1    .0    .7    .8   2.6   1.8   1.7   1.5
 190.  *    .0    .0    .0    .2    .3    .3    .3   1.0   1.1   1.2   1.0    .4    .1    .0    .7    .8   2.8   2.2   1.7   1.8
 195.  *    .0    .0    .0    .1    .1    .2    .1   1.0   1.1   1.2   1.1    .5    .3    .1    .8   1.0   2.9   2.2   1.9   1.7
 200.  *    .0    .0    .0    .0    .1    .1    .1   1.1   1.2   1.2   1.1    .5    .3    .1    .8   1.0   2.9   2.1   1.8   1.5
 205.  *    .0    .0    .0    .0    .0    .0    .0   1.0   1.1   1.1   1.4    .5    .4    .1    .8   1.0   3.1   2.0   1.6   1.4
1
                                                                                                                         PAGE  4
      JOB: Site 4 Existing AM - 4EXAM.DAT                      RUN: Site 4 Existing AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.0   1.0   1.1   1.5    .5    .3    .2    .9   1.1   3.3   1.8   1.5   1.5
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.0   1.0   1.0   1.6    .6    .3    .2    .9   1.3   3.1   1.7   1.6   1.3
 220.  *    .0    .0    .0    .0    .0    .0    .0    .9    .9   1.0   1.6    .6    .4    .2   1.0   1.2   3.2   1.8   1.7   1.4
 225.  *    .0    .0    .0    .0    .0    .0    .0    .9    .9    .9   1.8    .7    .3    .3   1.1   1.5   3.1   1.7   1.5   1.3
 230.  *    .0    .0    .0    .0    .0    .0    .0    .9    .9    .9   1.9    .8    .3    .3   1.1   1.6   2.9   1.6   1.4   1.1
 235.  *    .0    .0    .0    .0    .0    .0    .0    .8    .9    .9   2.0    .8    .4    .2   1.1   1.7   2.8   1.7   1.4   1.1
 240.  *    .0    .0    .0    .0    .0    .0    .0    .9    .8    .9   2.1    .9    .4    .2   1.2   1.8   2.7   1.6   1.3   1.1
 245.  *    .0    .0    .0    .0    .0    .0    .0    .9    .8    .8   2.1    .9    .5    .2   1.3   2.1   2.4   1.8   1.3    .9
 250.  *    .1    .1    .1    .0    .0    .0    .0    .8    .8    .9   2.0   1.0    .5    .3   1.3   2.2   2.4   1.8   1.3    .9
 255.  *    .2    .2    .2    .2    .0    .0    .0    .8    .8    .9   1.9   1.0    .6    .4   1.4   2.1   2.2   2.0   1.1    .9
 260.  *    .3    .3    .2    .2    .0    .0    .0    .8    .8   1.0   2.0   1.2    .9    .6   1.5   1.9   2.2   1.8   1.1    .8
 265.  *    .4    .4    .4    .3    .0    .0    .0    .8    .8   1.2   1.8   1.2   1.1    .8   1.5   1.8   1.9   1.9    .9    .8
 270.  *    .6    .6    .6    .5    .1    .0    .0    .9    .9   1.4   1.9   1.3   1.2    .9   1.4   1.7   1.6   1.8   1.0    .8
 275.  *    .8    .8    .7    .7    .2    .0    .0    .8   1.0   1.7   2.0   1.5   1.5   1.1    .9   1.4   1.2   1.5    .8    .7
 280.  *    .9    .9    .9    .7    .3    .1    .0    .8    .9   1.9   1.6   1.5   1.4   1.4    .6   1.2   1.0   1.4    .7    .7
 285.  *    .9    .9    .9    .9    .3    .2    .0    .8   1.0   2.1   1.7   1.7   1.7   1.3    .5    .8    .9   1.2    .6    .6
 290.  *   1.0   1.0   1.0    .9    .3    .2    .0    .9   1.0   2.3   1.6   1.6   1.8   1.2    .3    .6    .7    .9    .6    .6
 295.  *   1.0   1.0    .9   1.0    .3    .3    .1    .9   1.1   2.6   1.5   1.5   1.7   1.1    .1    .4    .6    .9    .6    .6
 300.  *    .9    .9    .9   1.0    .3    .3    .1    .9   1.1   2.7   1.7   1.8   1.7   1.0    .1    .4    .5    .7    .6    .7
 305.  *    .8    .8    .8   1.0    .3    .3    .1   1.1   1.3   2.9   1.5   1.7   1.6    .9    .1    .4    .4    .7    .7    .7
 310.  *    .8    .8    .8   1.1    .3    .3    .2   1.0   1.3   2.9   1.4   1.9   1.5    .8    .1    .4    .4    .6    .7    .7
 315.  *    .8    .8    .8   1.2    .3    .3    .2   1.1   1.4   2.9   1.5   1.9   1.4    .8    .1    .2    .4    .6    .8    .7
 320.  *    .8    .8    .8   1.3    .3    .3    .2   1.1   1.5   2.9   1.3   2.1   1.3    .9    .1    .2    .4    .7    .8    .8
 325.  *    .8    .7    .7   1.2    .4    .3    .1   1.0   1.7   2.9   1.3   2.1   1.1    .8    .1    .2    .4    .7    .8    .9
 330.  *    .7    .7    .7   1.3    .4    .2    .1   1.2   1.9   2.8   1.5   2.2   1.0    .8    .1    .3    .4    .7    .8    .9
 335.  *    .7    .7    .7   1.3    .4    .2    .1   1.2   1.7   2.7   1.4   2.2   1.0    .8    .1    .3    .4    .8   1.0   1.0
 340.  *    .7    .7    .6   1.3    .5    .3    .1   1.3   1.9   2.4   1.4   2.3    .9    .8    .1    .3    .4    .9   1.0   1.0
 345.  *    .7    .7    .6   1.2    .5    .3    .2   1.4   1.9   2.1   1.4   2.3    .9    .8    .1    .2    .4    .9   1.0   1.0
 350.  *    .7    .7    .7   1.4    .8    .5    .3   1.4   2.0   2.1   1.4   2.3    .8    .7    .0    .1    .4    .9   1.0   1.0
 355.  *    .7    .7    .7   1.3    .9    .6    .6   1.4   1.7   1.9   1.5   2.0    .8    .7    .0    .1    .2    .7    .9    .9
 360.  *    .7    .7    .8   1.5    .9    .9    .6   1.3   1.4   1.5   1.2   1.9    .8    .7    .0    .1    .2    .6    .8    .8
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.4   1.5   2.0   1.9   2.2   1.7   1.4   1.4   2.0   2.9   2.1   2.3   1.8   1.4   1.5   2.2   3.3   2.2   1.9   1.8
 DEGR. *   85    75    75    80    65    30    15   345   350   305   240   340   290   280   260   250   210   190   195   190

1
                                                                                                                         PAGE  5
      JOB: Site 4 Existing AM - 4EXAM.DAT                      RUN: Site 4 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .8    .5    .4    .5    .4    .1    .0    .0
   5.  *    .6    .6    .7    .6    .6    .2    .0    .0
  10.  *    .4    .6    .7    .6    .6    .3    .1    .0
  15.  *    .2    .7    .7    .8    .7    .3    .2    .0
  20.  *    .1    .7    .7    .8    .7    .4    .2    .0
  25.  *    .1    .7    .7    .7    .8    .4    .3    .1
  30.  *    .1    .7    .7    .7    .8    .3    .3    .1
  35.  *    .0    .7    .7    .7    .8    .3    .2    .1
  40.  *    .0    .7    .7    .7    .8    .3    .3    .1
  45.  *    .0    .7    .6    .7    .8    .3    .3    .1
  50.  *    .0    .6    .6    .6    .8    .3    .3    .1
```

```
  55.  *    .0    .6    .6    .5    .9    .3    .3    .1
  60.  *    .0    .6    .5    .5   1.0    .4    .3    .1
  65.  *    .0    .6    .5    .5   1.1    .4    .4    .2
  70.  *    .0    .6    .5    .5   1.2    .5    .4    .2
  75.  *    .0    .6    .5    .5   1.4    .7    .4    .3
  80.  *    .0    .6    .5    .5   1.7    .9    .7    .4
  85.  *    .0    .5    .5    .6   1.9   1.1   1.0    .7
  90.  *    .0    .5    .5    .6   2.1   1.3   1.3   1.0
  95.  *    .0    .5    .6    .8   2.2   1.7   1.5   1.6
 100.  *    .0    .7    .6    .9   2.4   1.9   1.6   1.5
 105.  *    .0    .7    .7    .9   2.3   1.9   1.8   1.3
 110.  *    .1    .7    .7   1.1   2.1   2.1   1.6   1.3
 115.  *    .1    .7    .8   1.2   2.1   2.1   1.8   1.4
 120.  *    .1    .8    .9   1.1   2.1   1.9   1.5   1.3
 125.  *    .2    .9    .9   1.2   2.0   1.9   1.5   1.1
 130.  *    .2    .9    .8   1.3   1.8   1.9   1.4   1.1
 135.  *    .2   1.0   1.0   1.6   1.9   1.9   1.2   1.1
 140.  *    .2   1.0   1.1   1.6   1.9   1.9   1.2   1.0
 145.  *    .3    .9   1.2   1.5   1.8   1.9   1.2   1.0
 150.  *    .1    .8   1.2   1.7   1.8   1.7   1.1   1.0
 155.  *    .3   1.0   1.4   1.7   1.9   1.6   1.0    .9
 160.  *    .3   1.0   1.3   1.8   2.0   1.5   1.0    .8
 165.  *    .4   1.2   1.4   1.8   2.0   1.2    .9    .7
 170.  *    .5   1.2   1.2   1.6   2.0   1.3    .9    .7
 175.  *   1.0   1.0   1.3   1.6   1.7   1.1    .9    .7
 180.  *   1.1    .8   1.3   1.2   1.7    .9    .8    .8
 185.  *   1.4    .8   1.1   1.1   1.5    .9    .7    .8
 190.  *   1.4    .4    .8   1.0   1.4    .7    .7    .7
 195.  *   1.4    .2    .6    .7   1.3    .7    .7    .7
 200.  *   1.3    .3    .5    .5   1.2    .7    .7    .7
 205.  *   1.1    .2    .3    .4   1.2    .7    .7    .7
1
                                                                                                                  PAGE  6
      JOB: Site 4 Existing AM - 4EXAM.DAT                        RUN: Site 4 Existing AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.0    .2    .3    .4   1.2    .7    .7    .7
 215.  *   1.1    .2    .3    .5   1.2    .7    .8    .8
 220.  *   1.1    .2    .3    .5   1.2    .8    .8    .8
 225.  *   1.0    .2    .3    .4   1.1    .8    .8    .8
 230.  *    .9    .2    .3    .4   1.1    .8    .8    .8
 235.  *    .9    .2    .3    .4   1.0    .9    .9    .9
 240.  *    .9    .2    .3    .4   1.0    .9   1.0   1.0
 245.  *    .8    .1    .3    .4   1.0   1.0   1.1   1.0
 250.  *    .7    .1    .3    .4   1.1   1.1   1.1   1.1
 255.  *    .8    .1    .3    .4   1.1   1.1   1.1   1.1
 260.  *    .8    .0    .2    .4   1.0   1.0   1.1   1.0
 265.  *    .8    .0    .1    .3    .9   1.0   1.0   1.0
 270.  *    .7    .0    .1    .3    .8    .9    .9    .9
 275.  *    .7    .0    .0    .1    .6    .6    .7    .6
 280.  *    .7    .0    .0    .1    .5    .5    .5    .5
 285.  *    .6    .0    .0    .0    .3    .3    .4    .3
 290.  *    .6    .0    .0    .0    .1    .1    .2    .2
 295.  *    .6    .0    .0    .0    .1    .1    .1    .1
 300.  *    .7    .0    .0    .0    .0    .1    .1    .1
 305.  *    .7    .0    .0    .0    .0    .0    .0    .0
 310.  *    .7    .0    .0    .0    .0    .0    .0    .0
 315.  *    .8    .0    .0    .0    .0    .0    .0    .0
 320.  *    .9    .0    .0    .0    .0    .0    .0    .0
 325.  *    .9    .0    .0    .0    .0    .0    .0    .0
 330.  *    .9    .0    .0    .0    .0    .0    .0    .0
 335.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 340.  *   1.0    .1    .0    .0    .0    .0    .0    .0
 345.  *   1.0    .1    .1    .1    .0    .0    .0    .0
 350.  *    .9    .2    .3    .3    .2    .0    .0    .0
 355.  *    .9    .3    .3    .3    .3    .0    .0    .0
 360.  *    .8    .5    .4    .5    .4    .1    .0    .0
 ------*------------------------------------------------
 MAX   *   1.4   1.2   1.4   1.8   2.4   2.1   1.8   1.6
 DEGR. *  185   165   155   160   100   110   105    95

 THE HIGHEST CONCENTRATION IS    3.30 PPM AT  210 DEGREES FROM REC17.
 THE 2ND HIGHEST CONCENTRATION IS    2.90 PPM AT  305 DEGREES FROM REC10.
 THE 3RD HIGHEST CONCENTRATION IS    2.40 PPM AT  100 DEGREES FROM REC25.
```

```
Site 4 Existing PM - 4EXPM.DAT          60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Existing PM                       15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.     56515.5   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.     56515.5   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       154.5      117      2.0  565  141.4  889 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.     64515.5   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.     74015.5   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.     74015.5   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       154.5      121      2.0  740  141.4 1219 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.     64015.5   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    111515.5   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
       154.5      132      2.0 1115  141.4 3359 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.    123015.5   0  32   30.
```

```
  1
WB        Rt7A aprchAG  1388.  2708.   655.  2720.     87015.5   0  44   30.
  1
WB        Rt7A aprchAG   655.  2720.   387.  2730.     87015.5   0  56   30.
  2
WB        Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       154.5      132      2.0  870  141.4 2209 1 3
  1
WB        Rt7A deparAG   386.  2733.  -609.  2763.     77515.5   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 4 Existing PM - 4EXPM.DAT                       RUN: Site 4 Existing PM
      DATE: 05/07/2009   TIME: 08:25:09.31


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2      *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG    565.  15.5    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG    565.  15.5    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     392.8    2650.5 *       8.   181. AG    108. 100.0    .0 48.0  .18    .4
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG    645.  15.5    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG    740.  15.5    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG    740.  15.5    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     356.2    2776.1 *      12.     1. AG    118. 100.0    .0 48.0  .17    .6
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG    640.  15.5    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1115.  15.5    .0 44.0
      10. EB        Rt7A aprch*    309.0    2719.0     269.4    2720.2 *      40.   272. AG     64. 100.0    .0 24.0  .19   2.0
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG   1230.  15.5    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG    870.  15.5    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG    870.  15.5    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     479.6    2726.4 *      21.    92. AG     96. 100.0    .0 36.0  .15   1.0
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG    775.  15.5    .0 44.0
1
                                                                                                                 PAGE  2
      JOB: Site 4 Existing PM - 4EXPM.DAT                       RUN: Site 4 Existing PM
      DATE: 05/07/2009   TIME: 08:25:09.31

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME     VOL    FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     154       11         2.0       565        889     141.40      1        3
       7. SB        Rt4 aprch *     154       12         2.0       740       1219     141.40      1        3
      10. EB        Rt7A aprch*     154       13         2.0      1115       3359     141.40      1        3
      14. WB        Rt7A aprch*     154       13         2.0       870       2209     141.40      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0        5.0   *
      2. SW 164 W             *       151.0     2697.0        5.0   *
      3. SW 82 W              *       234.0     2693.0        5.0   *
      4. SW CNR               *       310.0     2683.0        5.0   *
      5. SW 82 S              *       316.0     2608.0        5.0   *
      6. SW 164 S             *       313.0     2527.0        5.0   *
      7. SW MID S             *       311.0     2362.0        5.0   *
      8. SE MID S             *       428.0     2361.0        5.0   *
      9. SE 164 S             *       431.0     2516.0        5.0   *
     10. SE 82 S              *       432.0     2598.0        5.0   *
     11. SE CNR               *       448.0     2662.0        5.0   *
     12. SE 82 E              *       506.0     2676.0        5.0   *
     13. SE 164 E             *       589.0     2673.0        5.0   *
     14. SE MID E             *       744.0     2669.0        5.0   *
     15. NE MID E             *       744.0     2746.0        5.0   *
     16. NE 164 E             *       588.0     2753.0        5.0   *
     17. NE 82 E              *       506.0     2757.0        5.0   *
     18. NE CNR               *       440.0     2763.0        5.0   *
     19. NE 82 N              *       433.0     2827.0        5.0   *
     20. NE 164 N             *       433.0     2911.0        5.0   *
     21. NE MID N             *       436.0     3044.0        5.0   *
     22. NW MID N             *       328.0     3045.0        5.0   *
     23. NW 164 N             *       323.0     2917.0        5.0   *
     24. NW 82 N              *       320.0     2833.0        5.0   *
     25. NW CNR               *       313.0     2765.0        5.0   *
     26. NW 82 W              *       247.0     2766.0        5.0   *
     27. NW 164 W             *       166.0     2767.0        5.0   *
     28. NW MID W             *       -36.0     2773.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 4 Existing PM - 4EXPM.DAT                       RUN: Site 4 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .9    .9    .9   1.3    .8    .7    .7    .7    .7    .9   1.1   1.0    .9    .9    .0    .0    .2    .4    .4    .5
   5.  *    .9    .9   1.0   1.3   1.0    .7    .7    .5    .5    .9   1.0   1.0    .9    .9    .0    .0    .1    .3    .4    .4
  10.  *    .9    .9   1.1   1.4   1.0    .9    .8    .4    .5    .6    .9    .9    .9    .9    .0    .0    .0    .1    .2    .3
  15.  *    .8   1.0   1.1   1.4   1.0    .9    .7    .3    .5    .5    .9    .9    .9    .9    .0    .0    .0    .1    .1    .1
  20.  *    .8   1.0   1.1   1.4   1.1    .9    .9    .2    .3    .4    .8    .9    .9    .9    .0    .0    .0    .0    .1    .1
  25.  *    .8   1.0   1.1   1.4   1.1    .8    .8    .2    .3    .4    .8    .9    .9    .9    .0    .0    .0    .0    .0    .1
  30.  *   1.0   1.1   1.0   1.4   1.0    .7    .8    .1    .3    .4    .8    .9    .9    .9    .0    .0    .0    .0    .0    .0
  35.  *   1.1   1.1   1.2   1.3   1.0    .7    .8    .1    .3    .4    .7    .9    .9    .9    .0    .0    .0    .0    .0    .0
```

```
  40.  *   1.1   1.1   1.2   1.3    .9    .8    .7    .2    .3    .4    .8    .9   1.0    .9    .0    .0    .0    .0    .0    .0
  45.  *   1.0   1.1   1.3   1.4    .8    .8    .6    .2    .4    .5    .8   1.0   1.0   1.0    .0    .0    .0    .0    .0    .0
  50.  *   1.1   1.1   1.3   1.2    .9    .8    .7    .2    .4    .5    .8   1.1   1.0   1.0    .0    .0    .0    .0    .0    .0
  55.  *   1.2   1.2   1.2   1.2   1.0    .8    .7    .2    .3    .5    .8   1.0   1.1   1.1    .0    .0    .0    .0    .0    .0
  60.  *   1.3   1.2   1.3   1.4   1.0    .9    .7    .2    .3    .5    .9   1.1   1.1   1.1    .0    .0    .0    .0    .0    .0
  65.  *   1.4   1.2   1.4   1.4   1.0    .9    .7    .2    .3    .5   1.0   1.2   1.3   1.2    .1    .0    .1    .0    .0    .0
  70.  *   1.3   1.4   1.4   1.4   1.0    .8    .6    .2    .3    .5    .9   1.3   1.2   1.2    .1    .2    .1    .1    .0    .0
  75.  *   1.4   1.4   1.6   1.6   1.0    .8    .5    .1    .3    .4   1.0   1.3   1.2   1.3    .2    .2    .2    .1    .0    .0
  80.  *   1.2   1.5   1.8   1.3   1.0    .7    .5    .0    .2    .3    .9   1.3   1.2   1.1    .4    .4    .3    .3    .0    .0
  85.  *   1.4   1.2   1.4   1.3    .8    .7    .5    .0    .2    .3    .8   1.1   1.1   1.1    .6    .5    .6    .5    .1    .0
  90.  *   1.2   1.2   1.2   1.3    .8    .6    .5    .0    .1    .2    .6   1.0   1.0    .8    .7    .7    .7    .7    .2    .0
  95.  *    .8   1.1   1.1   1.1    .7    .5    .5    .0    .0    .1    .4    .8    .7    .7    .9    .9    .9    .8    .2    .2
 100.  *    .6    .9    .9   1.0    .6    .5    .4    .0    .0    .1    .3    .5    .5    .5   1.0   1.1   1.0   1.0    .3    .2
 105.  *    .6    .5    .6    .7    .5    .5    .4    .0    .0    .0    .1    .4    .3    .3   1.1   1.1   1.1   1.0    .4    .2
 110.  *    .3    .4    .4    .6    .5    .5    .4    .0    .0    .0    .1    .1    .1    .1   1.1   1.1   1.2   1.0    .4    .2
 115.  *    .2    .3    .4    .6    .5    .5    .5    .0    .0    .0    .0    .1    .1    .1   1.1   1.2   1.0   1.1    .5    .3
 120.  *    .2    .3    .2    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0    .0   1.1   1.0   1.0   1.0    .6    .3
 125.  *    .2    .2    .2    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0    .0    .9    .9    .9   1.0    .5    .4
 130.  *    .1    .2    .2    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0    .0    .9    .9    .9   1.0    .4    .4
 135.  *    .1    .2    .2    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0    .0    .9    .9    .9   1.0    .4    .4
 140.  *    .1    .2    .2    .5    .5    .5    .5    .0    .0    .0    .0    .0    .0    .0    .9    .8    .9    .9    .4    .3
 145.  *    .1    .1    .3    .5    .6    .5    .6    .0    .0    .0    .0    .0    .0    .0    .8    .8    .8    .9    .4    .3
 150.  *    .1    .1    .3    .5    .6    .6    .6    .0    .0    .0    .0    .0    .0    .0    .8    .8    .8    .8    .4    .3
 155.  *    .0    .2    .4    .5    .6    .6    .6    .0    .0    .0    .0    .0    .0    .0    .8    .8    .8    .8    .4    .2
 160.  *    .0    .2    .3    .5    .6    .6    .6    .0    .0    .0    .0    .0    .0    .0    .8    .8    .8    .8    .4    .2
 165.  *    .0    .2    .2    .6    .6    .6    .6    .0    .0    .1    .0    .0    .0    .0    .8    .8    .8    .8    .4    .3
 170.  *    .0    .1    .2    .6    .6    .5    .6    .1    .2    .1    .0    .0    .0    .0    .8    .8    .8    .8    .6    .3
 175.  *    .0    .0    .2    .5    .6    .5    .5    .2    .3    .3    .3    .0    .0    .0    .8    .8    .8    .9    .7    .5
 180.  *    .0    .0    .1    .4    .4    .4    .4    .3    .3    .4    .3    .0    .0    .0    .8    .8    .8   1.1    .8    .6
 185.  *    .0    .0    .0    .2    .4    .3    .3    .3    .4    .4    .3    .2    .0    .0    .8    .8   1.0   1.1   1.1    .7
 190.  *    .0    .0    .0    .1    .2    .2    .2    .5    .5    .6    .5    .2    .0    .0    .8    .8   1.1   1.2   1.0    .8
 195.  *    .0    .0    .0    .1    .1    .1    .1    .5    .5    .6    .5    .3    .2    .0    .8   1.0   1.1   1.2   1.0   1.0
 200.  *    .0    .0    .0    .0    .1    .1    .1    .5    .6    .6    .5    .3    .2    .0    .8   1.0   1.0   1.2   1.1   1.0
 205.  *    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .4    .2    .2    .0    .8    .9   1.1   1.2   1.1    .9
1
                                                                                                                  PAGE  4
      JOB: Site 4 Existing PM - 4EXPM.DAT                      RUN: Site 4 Existing PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .5    .6    .5    .5    .2    .2    .1    .9   1.0   1.1   1.2   1.0    .9
 215.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .2    .2    .1    .9   1.0   1.1   1.3   1.1    .8
 220.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .2    .2    .1   1.0   1.0   1.1   1.3    .9    .8
 225.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .4    .2    .2    .1   1.0   1.1   1.2   1.1   1.0    .8
 230.  *    .0    .0    .0    .0    .0    .0    .0    .4    .5    .5    .4    .2    .2    .1   1.0   1.1   1.2   1.3    .9    .8
 235.  *    .0    .0    .0    .0    .0    .0    .0    .4    .5    .5    .4    .2    .2    .1   1.1   1.1   1.2   1.3    .9    .8
 240.  *    .1    .1    .0    .0    .0    .0    .0    .4    .4    .5    .4    .2    .2    .1   1.2   1.1   1.3   1.4   1.0    .8
 245.  *    .1    .1    .1    .0    .0    .0    .0    .4    .4    .4    .4    .2    .2    .2   1.2   1.2   1.5   1.3   1.0    .8
 250.  *    .1    .1    .1    .1    .0    .0    .0    .4    .4    .4    .4    .2    .3    .3   1.3   1.2   1.4   1.3   1.0    .8
 255.  *    .2    .2    .2    .1    .0    .0    .0    .4    .4    .4    .5    .4    .4    .3   1.2   1.3   1.6   1.4   1.0    .7
 260.  *    .4    .4    .4    .3    .0    .0    .0    .5    .4    .4    .6    .5    .6    .6   1.2   1.0   1.2   1.6    .9    .7
 265.  *    .6    .7    .6    .4    .1    .0    .0    .5    .4    .6    .7    .7    .9    .6   1.1   1.3   1.3   1.5    .9    .7
 270.  *    .8    .8    .8    .6    .2    .0    .0    .4    .5    .7    .8   1.0   1.0    .8    .9   1.1   1.1   1.3    .7    .6
 275.  *   1.1   1.1   1.0    .8    .2    .1    .0    .4    .6    .7    .9   1.2   1.2   1.1    .8   1.0    .8   1.2    .7    .5
 280.  *   1.1   1.1   1.1    .9    .3    .2    .0    .4    .6    .7   1.0   1.3   1.3   1.2    .7    .6    .8   1.0    .5    .5
 285.  *   1.3   1.3   1.2   1.0    .3    .2    .0    .5    .6    .7   1.1   1.6   1.5   1.3    .6    .6    .5    .7    .5    .5
 290.  *   1.3   1.3   1.2   1.0    .5    .3    .1    .6    .7    .9   1.2   1.6   1.4   1.5    .4    .3    .5    .7    .5    .5
 295.  *   1.2   1.2   1.2   1.0    .5    .3    .1    .6    .7    .9   1.1   1.7   1.4   1.4    .2    .3    .3    .5    .5    .5
 300.  *   1.2   1.2   1.1    .9    .5    .3    .2    .6    .7    .9   1.3   1.4   1.5   1.4    .2    .3    .2    .5    .5    .5
 305.  *   1.1   1.1   1.1   1.0    .5    .3    .2    .6    .8    .9   1.3   1.4   1.3   1.2    .1    .2    .2    .5    .5    .5
 310.  *   1.1   1.0   1.0   1.0    .5    .3    .2    .6    .8    .9   1.3   1.4   1.3   1.2    .1    .2    .2    .5    .5    .5
 315.  *   1.0    .9    .9    .9    .5    .3    .2    .6    .8    .8   1.1   1.3   1.3   1.2    .2    .2    .3    .5    .5    .5
 320.  *    .9    .9    .9    .9    .4    .3    .2    .7    .8    .9   1.2   1.2   1.2   1.0    .2    .2    .3    .5    .5    .7
 325.  *    .9    .9    .9    .9    .3    .3    .2    .7    .7    .9   1.3   1.3   1.1   1.1    .2    .2    .3    .5    .6    .7
 330.  *    .9    .9    .8    .9    .3    .3    .2    .7    .8    .9   1.2   1.3   1.2   1.1    .2    .2    .4    .5    .7    .6
 335.  *    .8    .8    .8    .9    .3    .3    .2    .7    .8   1.0   1.1   1.4   1.1   1.1    .2    .2    .4    .6    .7    .7
 340.  *    .8    .8    .8    .9    .3    .3    .2    .7    .9   1.0   1.2   1.4   1.1    .9    .0    .2    .4    .7    .7    .7
 345.  *    .8    .8    .8    .9    .3    .2    .3    .8    .9   1.2   1.2   1.3   1.1    .9    .0    .2    .3    .6    .6    .8
 350.  *    .8    .8    .8   1.0    .5    .4    .3    .7   1.0    .9   1.2   1.1   1.1    .9    .0    .2    .2    .6    .6    .7
 355.  *    .9    .9    .8   1.2    .7    .6    .5    .7    .8    .9   1.1   1.1   1.0    .9    .0    .0    .2    .5    .6    .6
 360.  *    .9    .9    .9   1.3    .8    .7    .7    .7    .7    .9   1.1   1.0    .9    .9    .0    .0    .2    .4    .4    .5
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.4   1.5   1.8   1.6   1.1    .9    .9    .8   1.0   1.2   1.3   1.7   1.5   1.5   1.3   1.3   1.6   1.6   1.1   1.0
 DEGR. *   85    80    80    75    25    10    20   345   350   345   300   295   285   290   250   255   255   260   185   195

1
                                                                                                                  PAGE  5
      JOB: Site 4 Existing PM - 4EXPM.DAT                      RUN: Site 4 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .5    .5    .5    .5    .4    .1    .0    .0
   5.  *    .4    .6    .6    .6    .5    .2    .0    .0
  10.  *    .2    .7    .7    .8    .6    .2    .1    .0
  15.  *    .1    .7    .7    .7    .7    .3    .2    .0
  20.  *    .1    .7    .7    .7    .7    .3    .2    .0
  25.  *    .0    .7    .7    .7    .6    .3    .2    .0
  30.  *    .0    .7    .7    .6    .6    .3    .2    .1
  35.  *    .0    .6    .7    .6    .6    .3    .3    .2
  40.  *    .0    .6    .6    .6    .6    .3    .2    .2
  45.  *    .0    .6    .6    .6    .6    .3    .2    .2
  50.  *    .0    .6    .6    .6    .5    .3    .2    .1
```

```
  55.  *    .0    .6    .6    .6    .5    .3    .2    .1
  60.  *    .0    .5    .5    .5    .6    .3    .2    .1
  65.  *    .0    .5    .5    .5    .6    .3    .2    .2
  70.  *    .0    .5    .5    .5    .6    .3    .3    .3
  75.  *    .0    .5    .5    .5    .7    .4    .3    .4
  80.  *    .0    .5    .5    .5    .9    .6    .6    .5
  85.  *    .0    .5    .5    .5   1.2    .8    .8    .7
  90.  *    .0    .5    .6    .8   1.3   1.0   1.1    .9
  95.  *    .0    .6    .8    .8   1.4   1.2   1.2   1.1
 100.  *    .0    .6    .7    .9   1.6   1.3   1.2   1.1
 105.  *    .0    .6    .7    .9   1.7   1.4   1.4   1.2
 110.  *    .2    .8    .7    .9   1.7   1.5   1.4   1.2
 115.  *    .2    .8    .9   1.1   1.6   1.4   1.4   1.1
 120.  *    .2    .7    .9    .9   1.5   1.5   1.3   1.1
 125.  *    .2    .7   1.0    .9   1.5   1.2   1.2   1.1
 130.  *    .2    .8    .9   1.0   1.5   1.2   1.2   1.1
 135.  *    .2    .8    .9   1.0   1.4   1.1   1.1   1.0
 140.  *    .2    .8    .9   1.0   1.3   1.1   1.1   1.0
 145.  *    .1    .8    .8   1.1   1.5   1.2   1.0    .9
 150.  *    .2    .9    .8   1.1   1.4   1.2   1.0    .9
 155.  *    .2    .9    .9   1.1   1.3   1.2    .9    .8
 160.  *    .3    .8   1.1    .9   1.3   1.1   1.0    .8
 165.  *    .3   1.0   1.0   1.1   1.2   1.2   1.0    .8
 170.  *    .3    .8   1.0   1.0   1.4   1.0    .9    .8
 175.  *    .5    .9    .9   1.0   1.4    .9    .9    .8
 180.  *    .8    .8    .7    .9   1.3    .9    .8    .8
 185.  *    .8    .6    .5    .8   1.1    .9    .8    .8
 190.  *    .9    .5    .5    .6   1.0    .8    .8    .8
 195.  *    .9    .4    .4    .6   1.0    .8    .8    .8
 200.  *    .9    .3    .3    .5    .9    .8    .8    .8
 205.  *    .8    .3    .4    .4    .9    .8    .8    .8
1
                                                                                                                 PAGE  6
      JOB: Site 4 Existing PM - 4EXPM.DAT                         RUN: Site 4 Existing PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .8    .2    .3    .4    .9    .8    .8    .8
 215.  *    .8    .2    .3    .4    .9    .8    .8    .8
 220.  *    .8    .2    .3    .4    .9    .8    .8    .8
 225.  *    .7    .2    .3    .4   1.0    .9    .9    .9
 230.  *    .7    .2    .3    .4   1.0    .9    .9    .9
 235.  *    .7    .2    .3    .5    .9   1.0   1.0   1.0
 240.  *    .7    .2    .3    .5   1.0   1.0   1.0   1.0
 245.  *    .7    .2    .3    .5   1.0   1.0   1.0   1.0
 250.  *    .8    .2    .3    .5   1.0   1.0   1.2   1.0
 255.  *    .7    .1    .2    .5   1.1   1.2   1.2   1.1
 260.  *    .5    .0    .2    .4   1.1   1.1   1.1   1.1
 265.  *    .5    .0    .2    .3   1.0   1.0   1.1    .9
 270.  *    .5    .0    .0    .2    .8    .9    .9    .9
 275.  *    .5    .0    .0    .2    .7    .7    .7    .7
 280.  *    .5    .0    .0    .0    .5    .5    .5    .5
 285.  *    .5    .0    .0    .0    .3    .3    .3    .3
 290.  *    .5    .0    .0    .0    .2    .2    .2    .1
 295.  *    .5    .0    .0    .0    .1    .1    .1    .1
 300.  *    .5    .0    .0    .0    .0    .0    .0    .0
 305.  *    .5    .0    .0    .0    .0    .0    .0    .0
 310.  *    .5    .0    .0    .0    .0    .0    .0    .0
 315.  *    .5    .0    .0    .0    .0    .0    .0    .0
 320.  *    .6    .0    .0    .0    .0    .0    .0    .0
 325.  *    .6    .0    .0    .0    .0    .0    .0    .0
 330.  *    .7    .0    .0    .0    .0    .0    .0    .0
 335.  *    .7    .1    .0    .0    .0    .0    .0    .0
 340.  *    .6    .1    .1    .1    .0    .0    .0    .0
 345.  *    .7    .1    .2    .1    .1    .0    .0    .0
 350.  *    .6    .2    .2    .2    .2    .0    .0    .0
 355.  *    .6    .4    .5    .4    .4    .0    .0    .0
 360.  *    .5    .5    .5    .5    .4    .1    .0    .0
 ------*------------------------------------------------
 MAX   *    .9   1.0   1.1   1.1   1.7   1.5   1.4   1.2
 DEGR. *  190   165   160   150   105   120   105   105

 THE HIGHEST CONCENTRATION IS    1.80 PPM AT   80 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    1.70 PPM AT  295 DEGREES FROM REC12.
 THE 3RD HIGHEST CONCENTRATION IS    1.70 PPM AT  105 DEGREES FROM REC25.
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Site 4 No Build 2014 AM - 4NBAM14.DAT   60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 No Build 2014 AM                  15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.    128811.4   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.    128811.4   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        63       2.0 1288  102.2 1336 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    157111.4   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    124311.4   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    124311.4   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        63       2.0 1243  102.2 1211 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.     40111.4   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.     84811.4   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
       120        61       2.0  848  102.2 1207 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.     70611.4   0  32   30.
```

```
  1
WB         Rt7A aprchAG  1388.  2708.   655.  2720.     68311.4   0  44   30.
  1
WB         Rt7A aprchAG   655.  2720.   387.  2730.     68311.4   0  56   30.
  2
WB         Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        61       2.0  683  102.2 1264 1 3
  1
WB         Rt7A deparAG   386.  2733.  -609.  2763.    138411.4   0  44   30.
1.0   04 1000.   0Y  5  0 72
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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 4 No Build 2014 AM - 4NBAM14.DAT               RUN: Site 4 No Build 2014 AM
      DATE: 05/07/2009   TIME: 16:07:51.90


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)        (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. NB        Rt4 aprch *   373.0    1724.0     386.0    2364.0 *     640.     1. AG  1288.  11.4    .0 56.0
       2. NB        Rt4 aprch *   386.0    2364.0     395.0    2721.0 *     357.     1. AG  1288.  11.4    .0 68.0
       3. NB        Rt4 aprch *   393.0    2659.0     390.5    2548.1 *     111.   181. AG   576. 100.0    .0 48.0  .55   5.6
       4. NB        Rt4 depart*   395.0    2719.0     416.0    3717.0 *     998.     1. AG  1571.  11.4    .0 56.0
       5. SB        Rt4 aprch *   364.0    3714.0     361.0    3032.0 *     682.   180. AG  1243.  11.4    .0 56.0
       6. SB        Rt4 aprch *   361.0    3032.0     355.0    2722.0 *     310.   181. AG  1243.  11.4    .0 68.0
       7. SB        Rt4 aprch *   356.0    2764.0     357.8    2870.8 *     107.     1. AG   576. 100.0    .0 48.0  .58   5.4
       8. SB        Rt4 depart*   354.0    2716.0     337.0    1722.0 *     994.   181. AG   401.  11.4    .0 56.0
       9. EB        Rt7A aprch*  -612.0    2747.0     375.0    2717.0 *     987.    92. AG   848.  11.4    .0 44.0
      10. EB        Rt7A aprch*   309.0    2719.0     167.6    2723.1 *     141.   272. AG   279. 100.0    .0 24.0  .77   7.2
      11. EB        Rt7A depar*   376.0    2705.0    1385.0    2675.0 *    1009.    92. AG   706.  11.4    .0 32.0
      12. WB        Rt7A aprch*  1388.0    2708.0     655.0    2720.0 *     733.   271. AG   683.  11.4    .0 44.0
      13. WB        Rt7A aprch*   655.0    2720.0     387.0    2730.0 *     268.   272. AG   683.  11.4    .0 56.0
      14. WB        Rt7A aprch*   459.0    2727.0     534.7    2724.7 *      76.    92. AG   418. 100.0    .0 36.0  .39   3.8
      15. WB        Rt7A depar*   386.0    2733.0    -609.0    2763.0 *     995.   272. AG  1384.  11.4    .0 44.0
1
                                                                                                                PAGE  2
      JOB: Site 4 No Build 2014 AM - 4NBAM14.DAT               RUN: Site 4 No Build 2014 AM
      DATE: 05/07/2009   TIME: 16:07:51.90

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE      RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       63       2.0      1288       1336     102.20      1        3
       7. SB        Rt4 aprch *     120       63       2.0      1243       1211     102.20      1        3
      10. EB        Rt7A aprch*     120       61       2.0       848       1207     102.20      1        3
      14. WB        Rt7A aprch*     120       61       2.0       683       1264     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X           Y          Z        *
     -------------------------*--------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0     *
      2. SW 164 W             *       151.0     2697.0       5.0     *
      3. SW 82 W              *       234.0     2693.0       5.0     *
      4. SW CNR               *       310.0     2683.0       5.0     *
      5. SW 82 S              *       316.0     2608.0       5.0     *
      6. SW 164 S             *       313.0     2527.0       5.0     *
      7. SW MID S             *       311.0     2362.0       5.0     *
      8. SE MID S             *       428.0     2361.0       5.0     *
      9. SE 164 S             *       431.0     2516.0       5.0     *
     10. SE 82 S              *       432.0     2598.0       5.0     *
     11. SE CNR               *       448.0     2662.0       5.0     *
     12. SE 82 E              *       506.0     2676.0       5.0     *
     13. SE 164 E             *       589.0     2673.0       5.0     *
     14. SE MID E             *       744.0     2669.0       5.0     *
     15. NE MID E             *       744.0     2746.0       5.0     *
     16. NE 164 E             *       588.0     2753.0       5.0     *
     17. NE 82 E              *       506.0     2757.0       5.0     *
     18. NE CNR               *       440.0     2763.0       5.0     *
     19. NE 82 N              *       433.0     2827.0       5.0     *
     20. NE 164 N             *       433.0     2911.0       5.0     *
     21. NE MID N             *       436.0     3044.0       5.0     *
     22. NW MID N             *       328.0     3045.0       5.0     *
     23. NW 164 N             *       323.0     2917.0       5.0     *
     24. NW 82 N              *       320.0     2833.0       5.0     *
     25. NW CNR               *       313.0     2765.0       5.0     *
     26. NW 82 W              *       247.0     2766.0       5.0     *
     27. NW 164 W             *       166.0     2767.0       5.0     *
     28. NW MID W             *       -36.0     2773.0       5.0     *
1
                                                                                                                PAGE  3
      JOB: Site 4 No Build 2014 AM - 4NBAM14.DAT               RUN: Site 4 No Build 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .7    .7   1.6   1.8   1.3   1.0    .9   1.3   1.7   1.3   1.3   1.5    .5    .4    .0    .1    .2    .7    .7    .9
   5.  *    .7    .9   1.6   2.0   1.4   1.2   1.0    .8   1.3   1.2   1.1   1.3    .4    .4    .0    .0    .1    .4    .6    .6
  10.  *    .7   1.0   1.7   2.1   1.5   1.2   1.2    .5    .9    .7   1.0   1.3    .4    .4    .0    .0    .0    .2    .4    .5
  15.  *    .7   1.1   1.9   2.3   1.5   1.2   1.0    .4    .7    .6    .9   1.1    .4    .4    .0    .0    .0    .1    .2    .2
  20.  *    .7   1.1   1.9   2.3   1.2   1.3   1.1    .2    .5    .7    .9   1.0    .4    .4    .0    .0    .0    .1    .1    .1
  25.  *    .9   1.4   2.1   2.1   1.2   1.4   1.0    .0    .3    .5   1.0   1.0    .4    .4    .0    .0    .0    .0    .1    .1
  30.  *    .9   1.4   2.1   1.9   1.1   1.5    .8    .0    .3    .5   1.0    .9    .4    .4    .0    .0    .0    .0    .0    .1
  35.  *    .9   1.6   2.2   1.7   1.2   1.6    .8    .0    .3    .5   1.0    .9    .5    .5    .0    .0    .0    .0    .0    .0
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   40.  *    .9   1.6   2.2   1.6   1.1   1.6    .6    .0    .3    .4   1.0    .8    .5    .5    .0    .0    .0    .0    .0    .0
   45.  *   1.0   1.8   2.3   1.5   1.0   1.5    .5    .0    .1    .4    .9    .7    .6    .5    .0    .0    .0    .0    .0    .0
   50.  *   1.0   1.9   2.3   1.5   1.3   1.5    .4    .0    .1    .3    .9    .7    .5    .5    .0    .0    .0    .0    .0    .0
   55.  *   1.1   2.0   2.3   1.4   1.3   1.5    .4    .0    .2    .3    .8    .6    .5    .5    .0    .0    .0    .0    .0    .0
   60.  *   1.2   2.1   2.2   1.3   1.4   1.3    .4    .0    .2    .2    .7    .6    .5    .5    .0    .0    .0    .0    .0    .0
   65.  *   1.2   2.1   2.1   1.3   1.4   1.2    .4    .0    .2    .2    .7    .6    .6    .5    .0    .0    .0    .0    .0    .0
   70.  *   1.3   2.0   1.9   1.3   1.5   1.2    .3    .0    .2    .2    .6    .6    .6    .5    .1    .0    .0    .0    .0    .0
   75.  *   1.4   2.1   1.7   1.1   1.7   1.1    .4    .0    .2    .2    .5    .6    .7    .6    .1    .1    .1    .0    .0    .0
   80.  *   1.3   2.0   1.5   1.1   1.6    .9    .4    .0    .1    .2    .5    .6    .5    .5    .1    .2    .2    .2    .0    .0
   85.  *   1.3   2.1   1.5   1.1   1.6    .7    .4    .0    .0    .2    .4    .5    .5    .5    .3    .3    .3    .4    .0    .0
   90.  *   1.1   1.6   1.2   1.0   1.5    .6    .3    .0    .0    .1    .3    .5    .4    .4    .4    .4    .4    .6    .0    .0
   95.  *    .9   1.1   1.1   1.1   1.4    .5    .4    .0    .0    .0    .2    .3    .3    .3    .4    .4    .4    .7    .2    .0
  100.  *    .6    .9   1.0    .9   1.4    .5    .4    .0    .0    .0    .1    .3    .3    .3    .6    .6    .6    .9    .2    .0
  105.  *    .6    .6    .8    .9   1.3    .4    .3    .0    .0    .0    .1    .1    .1    .1    .6    .6    .8   1.2    .2    .1
  110.  *    .3    .6    .7   1.0   1.3    .4    .3    .0    .0    .0    .0    .1    .1    .1    .6    .6    .8   1.3    .3    .2
  115.  *    .3    .4    .7   1.0   1.2    .4    .4    .0    .0    .0    .0    .0    .0    .0    .5    .5    .9   1.3    .4    .2
  120.  *    .2    .3    .7   1.1   1.1    .4    .4    .0    .0    .0    .0    .0    .0    .0    .5    .5    .9   1.3    .3    .2
  125.  *    .1    .3    .7   1.1   1.0    .4    .4    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.0   1.3    .4    .2
  130.  *    .0    .2    .7   1.2    .9    .4    .4    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1   1.3    .4    .1
  135.  *    .1    .2    .6   1.2    .8    .4    .4    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.1   1.3    .5    .2
  140.  *    .1    .1    .5   1.1    .8    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.2   1.2    .5    .3
  145.  *    .1    .2    .3   1.1    .7    .6    .5    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.3   1.0    .6    .3
  150.  *    .1    .2    .4   1.1    .7    .5    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.3    .9    .6    .4
  155.  *    .1    .1    .3   1.0    .7    .5    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.3    .8    .5    .5
  160.  *    .0    .1    .3    .8    .5    .6    .5    .0    .0    .1    .0    .0    .0    .0    .4    .4   1.4    .7    .5    .5
  165.  *    .0    .1    .3    .7    .5    .5    .5    .1    .2    .1    .0    .0    .0    .0    .4    .4   1.4    .8    .8    .6
  170.  *    .0    .1    .2    .6    .5    .5    .5    .1    .2    .2    .2    .0    .0    .0    .4    .4   1.5    .7    .7    .8
  175.  *    .0    .0    .1    .4    .5    .5    .4    .2    .4    .3    .3    .0    .0    .0    .4    .4   1.4    .9   1.1   1.0
  180.  *    .0    .0    .1    .3    .4    .3    .3    .3    .4    .6    .4    .1    .0    .0    .4    .5   1.5   1.1   1.2   1.2
  185.  *    .0    .0    .0    .2    .2    .2    .2    .5    .6    .8    .6    .1    .1    .0    .4    .6   1.6   1.2   1.4   1.5
  190.  *    .0    .0    .0    .1    .2    .2    .2    .6    .6    .9    .8    .2    .1    .0    .4    .5   1.7   1.5   1.5   1.6
  195.  *    .0    .0    .0    .0    .1    .0    .0    .6    .7   1.1   1.1    .2    .1    .0    .4    .5   2.0   1.6   1.5   1.5
  200.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.2   1.2    .4    .1    .1    .5    .6   2.0   1.6   1.5   1.8
  205.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.4   1.4    .5    .2    .1    .5    .7   2.1   1.5   1.5   2.0
1
                                                                                                                 PAGE  4
      JOB: Site 4 No Build 2014 AM - 4NBAM14.DAT                RUN: Site 4 No Build 2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
  210.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.4   1.4    .6    .2    .1    .5    .8   2.1   1.3   1.4   2.1
  215.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.5   1.5    .6    .2    .1    .6    .8   2.1   1.2   1.6   1.9
  220.  *    .0    .0    .0    .0    .0    .0    .0    .6    .6   1.6   1.6    .7    .2    .1    .6    .9   2.2   1.3   1.7   2.0
  225.  *    .0    .0    .0    .0    .0    .0    .0    .5    .6   1.7   1.7    .8    .2    .1    .6   1.1   2.2   1.3   1.6   2.1
  230.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.8   1.7    .9    .3    .1    .7   1.2   1.9   1.3   1.8   2.0
  235.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.8   1.7    .9    .3    .1    .7   1.3   1.8   1.2   2.1   1.9
  240.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.8   1.7    .9    .4    .2    .8   1.4   1.9   1.4   2.2   1.7
  245.  *    .1    .0    .0    .0    .0    .0    .0    .5    .5   1.9   1.6    .9    .4    .2   1.0   1.5   1.7   1.5   2.3   1.6
  250.  *    .1    .1    .1    .0    .0    .0    .0    .5    .5   1.9   1.4    .9    .4    .2    .9   1.6   1.7   1.7   2.4   1.4
  255.  *    .2    .2    .2    .1    .0    .0    .0    .5    .5   1.9   1.3    .7    .4    .4    .9   1.6   1.9   1.8   2.2   1.3
  260.  *    .3    .3    .3    .3    .0    .0    .0    .5    .5   2.0   1.4   1.0    .7    .5    .9   1.9   1.6   2.0   2.3   1.1
  265.  *    .5    .5    .5    .5    .0    .0    .0    .5    .5   2.0   1.4   1.0    .9    .8   1.1   1.7   1.5   2.0   2.1   1.0
  270.  *    .6    .6    .7    .7    .2    .0    .0    .5    .5   2.2   1.5   1.0   1.1    .8   1.0   1.4   1.5   2.1   2.1    .9
  275.  *    .8    .8   1.0    .9    .2    .0    .0    .5    .5   2.2   1.6   1.1   1.2   1.1    .9   1.3   1.3   2.0   1.9    .8
  280.  *    .9   1.0   1.0   1.1    .3    .2    .0    .5    .8   2.4   1.4   1.5   1.5   1.1    .8   1.3   1.3   2.0   1.8    .8
  285.  *   1.0   1.0   1.3   1.2    .3    .2    .0    .5    .9   2.3   1.4   1.3   1.6   1.1    .6    .9   1.3   1.8   1.6    .8
  290.  *   1.0   1.0   1.4   1.3    .3    .2    .0    .6   1.0   2.3   1.4   1.4   1.7   1.0    .3    .9   1.0   1.7   1.5    .8
  295.  *   1.0    .9   1.4   1.4    .5    .2    .1    .6   1.1   2.3   1.4   1.4   1.6    .9    .3    .5   1.0   1.7   1.4    .8
  300.  *    .9    .9   1.5   1.3    .5    .2    .2    .6   1.3   2.4   1.3   1.8   1.6    .9    .3    .5    .9   1.7   1.3    .8
  305.  *    .9    .9   1.5   1.4    .5    .3    .2    .7   1.4   2.4   1.4   1.6   1.5    .8    .2    .4    .9   1.6   1.2    .9
  310.  *    .9    .9   1.5   1.4    .5    .2    .2    .7   1.6   2.4   1.5   1.8   1.4    .9    .1    .4    .8   1.6   1.2    .9
  315.  *    .8    .8   1.4   1.4    .5    .3    .2    .7   1.8   2.5   1.5   1.8   1.4    .6    .2    .3    .7   1.5   1.1   1.0
  320.  *    .7    .7   1.4   1.3    .6    .3    .2    .7   1.9   2.4   1.5   1.9   1.2    .7    .2    .4    .6   1.4   1.1    .9
  325.  *    .7    .7   1.4   1.3    .6    .3    .2   1.0   2.1   2.5   1.5   1.9   1.2    .7    .2    .4    .6   1.4   1.0   1.0
  330.  *    .7    .7   1.4   1.3    .6    .3    .2   1.0   2.3   2.2   1.6   1.9   1.0    .7    .2    .3    .5   1.3   1.2   1.1
  335.  *    .7    .7   1.4   1.1    .6    .4    .3   1.2   2.5   2.3   1.5   1.8    .8    .6    .2    .3    .5   1.2   1.0   1.0
  340.  *    .7    .7   1.4   1.1    .6    .4    .3   1.3   2.3   2.1   1.5   1.8    .8    .6    .1    .3    .5   1.1   1.1   1.1
  345.  *    .7    .7   1.4   1.3    .7    .5    .3   1.3   2.2   2.2   1.6   1.7    .7    .5    .1    .3    .4   1.1   1.2   1.1
  350.  *    .7    .7   1.4   1.4    .9    .6    .5   1.4   2.1   1.9   1.5   1.6    .6    .4    .0    .2    .4    .9   1.1   1.0
  355.  *    .7    .7   1.4   1.6   1.0    .7    .8   1.3   2.0   1.7   1.2   1.5    .5    .4    .0    .1    .3    .8   1.0   1.0
  360.  *    .7    .7   1.6   1.8   1.3   1.0    .9   1.3   1.7   1.3   1.3   1.5    .5    .4    .0    .1    .2    .7    .7    .9
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.4   2.1   2.3   2.3   1.7   1.6   1.2   1.4   2.5   2.5   1.7   1.9   1.7   1.1   1.1   1.9   2.2   2.1   2.4   2.1
 DEGR. *   75    65    45    15    75    35    10   350   335   315   225   320   290   285   265   260   220   270   250   225

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                                                                                                                 PAGE  5
      JOB: Site 4 No Build 2014 AM - 4NBAM14.DAT                RUN: Site 4 No Build 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
    0.  *    .8    .7    .8    .8    .9    .2    .0    .0
    5.  *    .6    .8    .9   1.0   1.2    .2    .1    .0
   10.  *    .4    .9   1.0   1.2   1.4    .4    .2    .0
   15.  *    .2   1.1   1.1   1.4   1.8    .4    .2    .0
   20.  *    .1   1.0   1.0   1.4   2.0    .4    .2    .0
   25.  *    .1   1.0   1.1   1.6   2.2    .6    .3    .2
   30.  *    .1   1.0   1.0   1.6   2.2    .6    .4    .2
   35.  *    .0    .9   1.0   1.7   2.3    .6    .4    .2
   40.  *    .0    .9    .9   1.8   2.3    .7    .4    .2
   45.  *    .0    .9    .9   1.9   2.2    .8    .4    .2
   50.  *    .0    .9    .9   1.9   2.2    .9    .4    .2
```

```
  55.  *    .0    .7    .7   1.9   2.2   1.0    .5    .1
  60.  *    .0    .7    .7   2.0   2.1   1.0    .5    .2
  65.  *    .0    .7    .7   2.1   2.0   1.1    .7    .4
  70.  *    .0    .7    .7   2.1   1.9   1.2    .7    .4
  75.  *    .0    .7    .7   2.2   1.8   1.1    .7    .5
  80.  *    .0    .7    .7   2.2   2.0   1.2    .8    .7
  85.  *    .0    .7    .7   2.3   2.0   1.4   1.2    .9
  90.  *    .0    .8    .7   2.3   2.1   1.5   1.4   1.1
  95.  *    .0    .8    .7   2.5   2.0   1.6   1.5   1.3
 100.  *    .0    .7    .7   2.5   2.2   1.5   1.8   1.3
 105.  *    .0    .8    .9   2.6   2.0   1.5   1.9   1.3
 110.  *    .0    .7   1.0   2.6   2.1   1.7   1.7   1.3
 115.  *    .0    .7    .9   2.6   1.8   1.8   1.9   1.3
 120.  *    .0    .8   1.1   2.7   1.7   1.6   1.7   1.3
 125.  *    .0    .7   1.3   2.7   1.7   1.7   1.8   1.1
 130.  *    .0    .7   1.5   2.7   1.8   1.8   1.8   1.0
 135.  *    .0    .9   1.6   2.8   1.7   1.8   1.8    .9
 140.  *    .0   1.0   1.8   2.8   1.7   1.7   1.8   1.0
 145.  *    .0   1.1   2.0   2.8   1.7   1.8   1.5    .8
 150.  *    .0   1.2   2.2   2.7   1.8   1.8   1.6    .8
 155.  *    .2   1.4   2.3   2.4   1.8   1.7   1.5    .8
 160.  *    .2   1.4   2.1   2.4   1.7   1.6   1.2    .7
 165.  *    .2   1.4   2.3   2.3   1.7   1.6   1.2    .7
 170.  *    .5   1.3   2.3   1.9   1.6   1.5   1.2    .7
 175.  *    .7   1.4   2.1   1.8   1.6   1.4   1.1    .7
 180.  *   1.1   1.3   1.7   1.5   1.4   1.3    .9    .7
 185.  *   1.3   1.1   1.5   1.2   1.4   1.2    .9    .7
 190.  *   1.6    .8    .9    .9   1.1   1.2    .8    .7
 195.  *   1.5    .6    .7    .7   1.1   1.2    .8    .7
 200.  *   1.7    .5    .6    .6   1.1   1.2    .8    .7
 205.  *   1.6    .4    .5    .7   1.2   1.2    .7    .7
1
                                                                                                                           PAGE  6
      JOB: Site 4 No Build 2014 AM - 4NBAM14.DAT                RUN: Site 4 No Build 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.6    .4    .4    .6   1.2   1.2    .7    .7
 215.  *   1.5    .2    .5    .6   1.2   1.2    .7    .7
 220.  *   1.3    .2    .4    .6   1.2   1.2    .7    .8
 225.  *   1.2    .2    .4    .5   1.4   1.3    .9    .9
 230.  *   1.1    .2    .3    .6   1.5   1.4    .9    .9
 235.  *   1.1    .2    .3    .6   1.5   1.3    .9    .9
 240.  *    .9    .2    .3    .5   1.4   1.3   1.0   1.0
 245.  *    .9    .2    .3    .5   1.5   1.3   1.0   1.0
 250.  *    .9    .1    .3    .5   1.4   1.2   1.0   1.0
 255.  *    .9    .1    .2    .4   1.4   1.3   1.1   1.1
 260.  *    .7    .0    .2    .3   1.3   1.1   1.1   1.1
 265.  *    .8    .0    .1    .3   1.2   1.1   1.0    .9
 270.  *    .8    .0    .1    .2    .9    .8    .8    .8
 275.  *    .8    .0    .0    .1    .8    .7    .7    .6
 280.  *    .7    .0    .0    .1    .4    .4    .5    .5
 285.  *    .7    .0    .0    .0    .3    .3    .4    .3
 290.  *    .8    .0    .0    .0    .1    .1    .2    .1
 295.  *    .8    .0    .0    .0    .1    .1    .1    .1
 300.  *    .8    .0    .0    .0    .0    .0    .1    .1
 305.  *    .9    .0    .0    .0    .0    .0    .0    .0
 310.  *    .9    .0    .0    .0    .0    .0    .0    .0
 315.  *    .9    .0    .0    .0    .0    .0    .0    .0
 320.  *    .9    .0    .0    .0    .0    .0    .0    .0
 325.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 330.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 335.  *   1.0    .1    .1    .1    .0    .0    .0    .0
 340.  *   1.1    .1    .1    .1    .1    .0    .0    .0
 345.  *   1.1    .2    .2    .2    .1    .0    .0    .0
 350.  *   1.1    .4    .3    .4    .4    .0    .0    .0
 355.  *    .9    .5    .5    .4    .5    .1    .0    .0
 360.  *    .8    .7    .8    .8    .9    .2    .0    .0
 ------*------------------------------------------------
 MAX   *   1.7   1.4   2.3   2.8   2.3   1.8   1.9   1.3
 DEGR. *  200   155   155   135    35   115   105    95

 THE HIGHEST CONCENTRATION IS    2.80 PPM AT  135 DEGREES FROM REC24.
 THE 2ND HIGHEST CONCENTRATION IS    2.50 PPM AT  335 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    2.50 PPM AT  315 DEGREES FROM REC10.
```

```
Site 4 No Build 2030 AM - 4NBAM30.DAT   60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 No Build 2030 AM                  15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.    1770 9.2   0  56    30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.    1770 9.2   0  68    30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
        45        26       2.0 1770   84.1 1388 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    2155 9.2   0  56    30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    1475 9.2   0  56    30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    1475 9.2   0  68    30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
        45        26       2.0 1475   84.1 1290 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.     590 9.2   0  56    30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    1010 9.2   0  44    30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
        45        27       2.0 1010   84.1 1950 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.     930 9.2   0  32    30.
```

```
  1
WB         Rt7A aprchAG  1388.  2708.   655.  2720.     785 9.2   0  44   30.
  1
WB         Rt7A aprchAG   655.  2720.   387.  2730.     785 9.2   0  56   30.
  2
WB         Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
        45        27       2.0  785   84.1 1162 1 3
  1
WB         Rt7A deparAG   386.  2733.  -609.  2763.    1365 9.2   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 4 No Build 2030 AM - 4NBAM30.DAT                RUN: Site 4 No Build 2030 AM
      DATE: 05/07/2009   TIME: 20:14:19.10


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH     EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)        (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG  1770.   9.2    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG  1770.   9.2    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     390.0    2526.0 *     133.   181. AG   521. 100.0    .0 48.0  .96   6.8
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG  2155.   9.2    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG  1475.   9.2    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG  1475.   9.2    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     357.3    2842.3 *      78.     1. AG   521. 100.0    .0 48.0  .86   4.0
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG   590.   9.2    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG  1010.   9.2    .0 44.0
      10. EB        Rt7A aprch*    309.0    2719.0     214.3    2721.8 *      95.   272. AG   271. 100.0    .0 24.0  .83   4.8
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG   930.   9.2    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   785.   9.2    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   785.   9.2    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     503.2    2725.6 *      44.    92. AG   406. 100.0    .0 36.0  .72   2.2
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG  1365.   9.2    .0 44.0
1
                                                                                                                PAGE  2
      JOB: Site 4 No Build 2030 AM - 4NBAM30.DAT                RUN: Site 4 No Build 2030 AM
      DATE: 05/07/2009   TIME: 20:14:19.10

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *   CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *   LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*------------------------------------------------------------------------------
       3. NB        Rt4 aprch *      45       26       2.0      1770       1388      84.10      1        3
       7. SB        Rt4 aprch *      45       26       2.0      1475       1290      84.10      1        3
      10. EB        Rt7A aprch*      45       27       2.0      1010       1950      84.10      1        3
      14. WB        Rt7A aprch*      45       27       2.0       785       1162      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0    *
      2. SW 164 W             *       151.0     2697.0       5.0    *
      3. SW 82 W              *       234.0     2693.0       5.0    *
      4. SW CNR               *       310.0     2683.0       5.0    *
      5. SW 82 S              *       316.0     2608.0       5.0    *
      6. SW 164 S             *       313.0     2527.0       5.0    *
      7. SW MID S             *       311.0     2362.0       5.0    *
      8. SE MID S             *       428.0     2361.0       5.0    *
      9. SE 164 S             *       431.0     2516.0       5.0    *
     10. SE 82 S              *       432.0     2598.0       5.0    *
     11. SE CNR               *       448.0     2662.0       5.0    *
     12. SE 82 E              *       506.0     2676.0       5.0    *
     13. SE 164 E             *       589.0     2673.0       5.0    *
     14. SE MID E             *       744.0     2669.0       5.0    *
     15. NE MID E             *       744.0     2746.0       5.0    *
     16. NE 164 E             *       588.0     2753.0       5.0    *
     17. NE 82 E              *       506.0     2757.0       5.0    *
     18. NE CNR               *       440.0     2763.0       5.0    *
     19. NE 82 N              *       433.0     2827.0       5.0    *
     20. NE 164 N             *       433.0     2911.0       5.0    *
     21. NE MID N             *       436.0     3044.0       5.0    *
     22. NW MID N             *       328.0     3045.0       5.0    *
     23. NW 164 N             *       323.0     2917.0       5.0    *
     24. NW 82 N              *       320.0     2833.0       5.0    *
     25. NW CNR               *       313.0     2765.0       5.0    *
     26. NW 82 W              *       247.0     2766.0       5.0    *
     27. NW 164 W             *       166.0     2767.0       5.0    *
     28. NW MID W             *       -36.0     2773.0       5.0    *
1
                                                                                                                PAGE  3
      JOB: Site 4 No Build 2030 AM - 4NBAM30.DAT                RUN: Site 4 No Build 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
   0.  *    .6    .6   1.5   1.6   1.1    .9    .9   1.2   1.7   1.4   1.1   1.2    .6    .5    .0    .1    .3    .7    .8    .9
   5.  *    .6    .6   1.5   1.8   1.3   1.3   1.1    .7   1.3   1.2   1.0    .9    .5    .5    .0    .0    .1    .5    .6    .7
  10.  *    .6    .8   1.7   1.9   1.4   1.2   1.1    .5    .9    .7    .8    .8    .5    .5    .0    .0    .1    .3    .5    .5
  15.  *    .6    .8   1.7   2.0   1.4   1.3   1.2    .3    .6    .6    .8    .6    .5    .5    .0    .0    .0    .2    .2    .3
  20.  *    .6    .8   1.8   2.0   1.2   1.2    .9    .2    .5    .6    .7    .6    .5    .5    .0    .0    .0    .1    .1    .2
  25.  *    .8   1.0   1.9   1.7   1.2   1.2    .9    .1    .4    .4    .8    .5    .5    .5    .0    .0    .0    .0    .1    .1
  30.  *    .8   1.0   2.0   1.7   1.3   1.4    .9    .0    .3    .4    .7    .5    .5    .5    .0    .0    .0    .0    .1    .1
  35.  *    .8   1.0   2.0   1.7   1.2   1.6    .8    .0    .2    .3    .7    .5    .5    .5    .0    .0    .0    .0    .0    .0
```

```
  40.  *    .8   1.0   2.0   1.6   1.3   1.6    .8    .0    .1    .3    .7    .5    .5    .5    .0    .0    .0    .0    .0    .0
  45.  *    .8   1.1   2.0   1.2   1.2   1.6    .7    .1    .1    .3    .7    .5    .5    .5    .0    .0    .0    .0    .0    .0
  50.  *    .9   1.3   2.0   1.4   1.3   1.7    .6    .1    .1    .2    .6    .5    .5    .5    .0    .0    .0    .0    .0    .0
  55.  *   1.0   1.5   2.0   1.4   1.3   1.6    .6    .1    .1    .2    .6    .5    .5    .5    .0    .0    .0    .0    .0    .0
  60.  *   1.0   1.5   1.9   1.2   1.4   1.5    .5    .0    .2    .2    .4    .5    .5    .5    .0    .0    .0    .0    .0    .0
  65.  *   1.1   1.5   1.7   1.1   1.5   1.4    .5    .0    .2    .2    .4    .7    .5    .6    .0    .0    .0    .0    .0    .0
  70.  *   1.1   1.4   1.9   1.2   1.4   1.3    .4    .0    .2    .2    .5    .7    .7    .6    .1    .0    .0    .0    .0    .0
  75.  *   1.3   1.5   1.6   1.0   1.5   1.2    .4    .0    .2    .2    .5    .6    .7    .6    .1    .1    .1    .0    .0    .0
  80.  *   1.2   1.6   1.5   1.0   1.5   1.2    .5    .0    .1    .2    .5    .6    .6    .6    .1    .2    .2    .1    .0    .0
  85.  *   1.1   1.6   1.3   1.1   1.6   1.1    .5    .0    .0    .2    .4    .6    .5    .5    .3    .3    .3    .3    .0    .0
  90.  *   1.1   1.3   1.3   1.0   1.5   1.0    .5    .0    .0    .1    .3    .5    .4    .4    .4    .4    .4    .4    .0    .0
  95.  *    .9    .9   1.2   1.0   1.5    .9    .5    .0    .0    .0    .2    .3    .3    .3    .4    .4    .4    .6    .2    .0
 100.  *    .5    .8    .8    .8   1.4    .8    .5    .0    .0    .0    .1    .3    .3    .3    .5    .5    .5    .7    .2    .0
 105.  *    .4    .6    .8    .9   1.4    .6    .6    .0    .0    .0    .1    .1    .1    .1    .6    .6    .5    .8    .2    .2
 110.  *    .3    .5    .7   1.0   1.4    .5    .4    .0    .0    .0    .0    .1    .1    .1    .5    .6    .6   1.0    .3    .2
 115.  *    .3    .4    .7   1.0   1.4    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6   1.0    .3    .2
 120.  *    .2    .5    .7   1.0   1.3    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5   1.1    .2    .2
 125.  *    .1    .4    .7   1.1   1.3    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5   1.1    .3    .1
 130.  *    .0    .4    .7   1.2   1.2    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5   1.2    .3    .1
 135.  *    .1    .3    .6   1.3   1.1    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .4    .5   1.1    .3    .1
 140.  *    .1    .4    .6   1.2   1.0    .6    .5    .0    .0    .0    .0    .0    .0    .0    .5    .4    .4   1.1    .4    .2
 145.  *    .1    .3    .5   1.2    .9    .6    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4   1.0    .4    .3
 150.  *    .1    .3    .4   1.1    .9    .6    .6    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .9    .4    .3
 155.  *    .1    .2    .4   1.1    .8    .6    .6    .0    .0    .1    .0    .0    .0    .0    .4    .4    .5    .9    .5    .4
 160.  *    .0    .2    .3   1.0    .7    .6    .6    .1    .1    .1    .0    .0    .0    .0    .4    .4    .5    .8    .4    .4
 165.  *    .0    .1    .3    .8    .7    .5    .5    .1    .2    .1    .0    .0    .0    .0    .4    .4    .6    .9    .7    .6
 170.  *    .0    .1    .2    .7    .6    .5    .5    .2    .2    .3    .2    .0    .0    .0    .4    .4    .7    .9    .8    .7
 175.  *    .0    .0    .2    .5    .5    .5    .4    .3    .4    .4    .3    .1    .0    .0    .4    .4    .8   1.0   1.0   1.0
 180.  *    .0    .0    .1    .3    .4    .4    .4    .4    .5    .7    .4    .1    .0    .0    .4    .4   1.0   1.3   1.2   1.3
 185.  *    .0    .0    .0    .2    .2    .2    .2    .6    .7   1.0    .6    .1    .1    .0    .4    .5   1.2   1.4   1.4   1.6
 190.  *    .0    .0    .0    .2    .2    .2    .2    .6    .8   1.2    .9    .2    .1    .0    .4    .5   1.3   1.5   1.5   1.5
 195.  *    .0    .0    .0    .0    .1    .1    .1    .7    .7   1.4   1.1    .4    .1    .0    .4    .5   1.7   1.6   1.6   1.7
 200.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.5   1.3    .5    .1    .1    .5    .6   1.9   1.6   1.6   1.7
 205.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.7   1.6    .6    .2    .1    .5    .7   2.1   1.5   1.6   1.8
1
                                                                                                                   PAGE  4
      JOB: Site 4 No Build 2030 AM - 4NBAM30.DAT                RUN: Site 4 No Build 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.7   1.6    .7    .2    .1    .5    .8   2.0   1.4   1.5   1.9
 215.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.8   1.7    .7    .3    .1    .5    .8   2.1   1.2   1.6   1.8
 220.  *    .0    .0    .0    .0    .0    .0    .0    .6    .6   1.8   1.7    .8    .3    .1    .5    .9   2.1   1.3   1.6   1.8
 225.  *    .0    .0    .0    .0    .0    .0    .0    .6    .6   1.9   1.6    .9    .2    .1    .6   1.1   2.0   1.2   1.6   1.7
 230.  *    .0    .0    .0    .0    .0    .0    .0    .6    .6   2.0   1.6   1.0    .4    .2    .7   1.1   2.0   1.4   1.7   1.6
 235.  *    .0    .0    .0    .0    .0    .0    .0    .5    .6   2.0   1.6    .9    .5    .2    .7   1.1   1.8   1.5   1.9   1.5
 240.  *    .0    .0    .0    .0    .0    .0    .0    .5    .6   2.0   1.5    .9    .5    .2    .7   1.2   1.9   1.3   2.0   1.3
 245.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.8   1.5    .9    .5    .2    .8   1.0   1.7   1.4   2.1   1.2
 250.  *    .1    .1    .1    .0    .0    .0    .0    .6    .5   1.8   1.4    .8    .6    .3    .8   1.3   1.5   1.7   2.0   1.2
 255.  *    .1    .2    .2    .1    .0    .0    .0    .5    .6   1.8   1.3    .7    .5    .4    .9   1.3   1.7   1.8   2.0   1.1
 260.  *    .3    .3    .3    .2    .0    .0    .0    .5    .6   1.8   1.4   1.0    .8    .4   1.0   1.6   1.6   1.8   2.0   1.1
 265.  *    .4    .5    .4    .3    .0    .0    .0    .6    .8   1.9   1.3   1.0    .6    .8   1.1   1.4   1.6   1.8   1.9   1.0
 270.  *    .5    .5    .5    .5    .2    .0    .0    .6    .9   2.2   1.3   1.1   1.0    .8    .8   1.3   1.4   1.9   1.8    .9
 275.  *    .7    .7    .7    .7    .2    .0    .0    .5   1.0   2.2   1.4   1.0   1.1   1.0    .9   1.3   1.3   1.7   1.6    .9
 280.  *    .7    .8    .8    .8    .2    .1    .0    .6   1.4   2.1   1.3   1.3   1.5   1.0    .7    .9   1.2   1.6   1.4    .9
 285.  *    .9    .9    .8   1.0    .3    .2    .0    .5   1.4   2.0   1.4   1.4   1.4   1.1    .5    .8   1.2   1.6   1.3    .9
 290.  *    .9    .9    .8   1.2    .3    .2    .0    .5   1.5   2.2   1.4   1.3   1.3   1.1    .3    .6   1.0   1.5   1.2    .9
 295.  *    .8    .8    .9   1.2    .3    .2    .0    .7   1.6   2.2   1.5   1.5   1.3    .9    .2    .4    .8   1.4   1.1    .9
 300.  *    .8    .8    .9   1.1    .3    .2    .1    .8   1.9   2.2   1.2   1.5   1.3    .8    .2    .4    .8   1.5   1.0    .9
 305.  *    .8    .8   1.0   1.2    .4    .2    .2    .7   2.0   2.3   1.3   1.6   1.2    .7    .1    .4    .7   1.4   1.0    .9
 310.  *    .8    .8   1.0   1.2    .4    .2    .2    .7   2.1   2.3   1.4   1.7   1.1    .7    .1    .3    .7   1.5    .9    .9
 315.  *    .8    .7    .9   1.2    .4    .2    .2    .8   2.2   2.4   1.5   1.7   1.0    .6    .2    .3    .6   1.4   1.0   1.0
 320.  *    .6    .6    .9   1.2    .5    .2    .2    .8   2.2   2.3   1.5   1.7   1.0    .7    .2    .4    .5   1.3   1.0   1.0
 325.  *    .6    .6   1.0   1.2    .5    .3    .2    .9   2.4   2.3   1.4   1.8   1.0    .7    .2    .4    .5   1.2   1.0   1.0
 330.  *    .6    .6   1.0   1.2    .5    .3    .2   1.0   2.6   2.1   1.5   1.6    .9    .7    .2    .3    .5   1.1   1.2   1.1
 335.  *    .6    .6   1.1   1.1    .5    .3    .2   1.0   2.6   2.2   1.4   1.7    .8    .7    .2    .3    .5   1.1   1.1   1.1
 340.  *    .6    .6   1.1   1.0    .4    .3    .2   1.3   2.4   2.0   1.5   1.6    .8    .7    .1    .3    .5   1.1   1.1   1.2
 345.  *    .6    .6   1.2   1.2    .6    .3    .2   1.5   2.3   2.1   1.5   1.6    .8    .6    .1    .3    .4   1.0   1.3   1.2
 350.  *    .6    .6   1.2   1.3    .7    .6    .5   1.6   2.0   1.9   1.3   1.4    .7    .5    .0    .2    .4    .9   1.2   1.1
 355.  *    .6    .6   1.3   1.5   1.0    .8    .8   1.4   1.8   1.5   1.2   1.2    .6    .5    .0    .1    .3    .8   1.1   1.0
 360.  *    .6    .6   1.5   1.6   1.1    .9    .9   1.2   1.7   1.4   1.1   1.2    .6    .5    .0    .1    .3    .7    .8    .9
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.3   1.6   2.0   2.0   1.6   1.7   1.2   1.6   2.6   2.4   1.7   1.8   1.5   1.1   1.1   1.6   2.1   1.9   2.1   1.9
 DEGR. *   75    80    30    15    85    50    15   350   330   315   215   325   280   290   265   260   205   270   245   210

1
                                                                                                                   PAGE  5
      JOB: Site 4 No Build 2030 AM - 4NBAM30.DAT                RUN: Site 4 No Build 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .8    .7    .7    .7    .7    .2    .0    .0
   5.  *    .6    .9    .9    .9    .9    .2    .2    .0
  10.  *    .5    .9   1.0   1.0   1.1    .4    .2    .0
  15.  *    .3   1.0   1.1   1.1   1.4    .4    .2    .0
  20.  *    .2   1.0   1.0   1.0   1.7    .4    .3    .0
  25.  *    .1   1.0   1.0   1.0   1.8    .5    .3    .2
  30.  *    .1    .9   1.0   1.0   1.9    .6    .4    .2
  35.  *    .0    .9   1.0   1.0   2.0    .6    .4    .2
  40.  *    .0    .9    .9   1.0   2.0    .6    .4    .2
  45.  *    .0    .9    .8   1.1   2.0    .6    .3    .2
  50.  *    .0    .8    .8   1.0   2.1    .7    .4    .2
```

```
  55.  *    .0    .8    .8   1.1   2.1    .8    .4    .1
  60.  *    .0    .8    .8   1.2   1.9    .8    .4    .2
  65.  *    .0    .8    .8   1.2   1.9    .9    .5    .3
  70.  *    .0    .8    .8   1.4   1.8    .9    .6    .4
  75.  *    .0    .8    .8   1.5   1.7   1.0    .7    .4
  80.  *    .0    .8    .8   1.6   1.7   1.0    .8    .6
  85.  *    .0    .8    .8   1.8   1.9   1.3   1.0    .7
  90.  *    .0    .9    .8   1.9   1.9   1.3   1.1   1.0
  95.  *    .0    .8    .8   2.2   1.9   1.5   1.4   1.2
 100.  *    .0    .8    .8   2.2   1.8   1.5   1.7   1.2
 105.  *    .0    .9    .9   2.5   1.8   1.3   1.7   1.2
 110.  *    .0    .8   1.0   2.4   1.6   1.5   1.3   1.2
 115.  *    .0    .8    .9   2.4   1.6   1.6   1.5   1.1
 120.  *    .0    .9    .9   2.5   1.7   1.5   1.5   1.0
 125.  *    .0    .9   1.1   2.4   1.6   1.7   1.4   1.0
 130.  *    .1    .9   1.2   2.5   1.6   1.6   1.5   1.0
 135.  *    .1    .9   1.4   2.6   1.6   1.6   1.4    .8
 140.  *    .1   1.0   1.5   2.6   1.7   1.7   1.2    .7
 145.  *    .0    .9   1.8   2.6   1.6   1.7   1.0    .7
 150.  *    .0   1.0   1.8   2.4   1.7   1.7   1.1    .7
 155.  *    .1   1.2   1.6   2.4   1.7   1.7   1.0    .7
 160.  *    .1   1.3   1.7   2.2   1.7   1.6    .8    .7
 165.  *    .2   1.2   2.0   2.2   1.8   1.5    .8    .6
 170.  *    .6   1.3   1.8   1.9   1.6   1.4    .7    .6
 175.  *    .9   1.4   1.9   1.7   1.5   1.3    .7    .6
 180.  *   1.0   1.2   1.7   1.4   1.3   1.2    .6    .6
 185.  *   1.2   1.1   1.3   1.2   1.3   1.1    .6    .6
 190.  *   1.5    .8   1.0   1.0   1.0   1.1    .6    .6
 195.  *   1.5    .6    .5    .6   1.0   1.1    .6    .6
 200.  *   1.6    .4    .5    .6   1.0   1.0    .6    .6
 205.  *   1.5    .3    .4    .6   1.0   1.0    .6    .6
1
                                                                                                                 PAGE  6
      JOB: Site 4 No Build 2030 AM - 4NBAM30.DAT                RUN: Site 4 No Build 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.5    .3    .4    .5   1.1    .9    .6    .6
 215.  *   1.3    .2    .3    .5   1.1    .9    .6    .6
 220.  *   1.3    .2    .2    .5   1.1    .8    .6    .6
 225.  *   1.2    .2    .2    .4   1.1    .8    .7    .7
 230.  *   1.1    .2    .2    .4   1.2    .9    .8    .8
 235.  *   1.0    .2    .2    .4   1.3    .9    .8    .8
 240.  *   1.0    .2    .2    .3   1.2    .9    .8    .8
 245.  *   1.0    .2    .2    .3   1.2    .8    .8    .8
 250.  *   1.0    .1    .2    .3   1.2    .9    .9    .9
 255.  *   1.0    .0    .2    .3   1.1    .9    .9    .9
 260.  *    .8    .0    .2    .3   1.0    .9    .9    .9
 265.  *    .8    .0    .1    .3    .8    .8    .9    .8
 270.  *    .9    .0    .0    .2    .8    .7    .7    .7
 275.  *    .9    .0    .0    .1    .6    .6    .6    .5
 280.  *    .8    .0    .0    .0    .4    .4    .4    .4
 285.  *    .8    .0    .0    .0    .3    .3    .3    .3
 290.  *    .8    .0    .0    .0    .1    .1    .1    .1
 295.  *    .8    .0    .0    .0    .1    .1    .1    .1
 300.  *    .9    .0    .0    .0    .0    .0    .0    .0
 305.  *    .9    .0    .0    .0    .0    .0    .0    .0
 310.  *    .9    .0    .0    .0    .0    .0    .0    .0
 315.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 320.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 325.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 330.  *   1.1    .0    .0    .0    .0    .0    .0    .0
 335.  *   1.1    .1    .1    .1    .0    .0    .0    .0
 340.  *   1.2    .1    .1    .1    .0    .0    .0    .0
 345.  *   1.2    .2    .2    .2    .1    .0    .0    .0
 350.  *   1.1    .4    .3    .4    .3    .0    .0    .0
 355.  *   1.0    .5    .5    .4    .5    .1    .0    .0
 360.  *    .8    .7    .7    .7    .7    .2    .0    .0
 ------*------------------------------------------------
 MAX   *   1.6   1.4   2.0   2.6   2.1   1.7   1.7   1.2
 DEGR. *  200   175   165   135    50   125   100    95

 THE HIGHEST CONCENTRATION IS    2.60 PPM AT  135 DEGREES FROM REC24.
 THE 2ND HIGHEST CONCENTRATION IS    2.60 PPM AT  330 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    2.40 PPM AT  315 DEGREES FROM REC10.
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Site 4 No Build 2014 PM - 4NBPM14.DAT   60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 No Build 2014 PM                  15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.     60711.4   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.     60711.4   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        65       2.0  607  102.2 1268 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    121311.4   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    190611.4   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    190611.4   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        65       2.0 1906  102.2 1394 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.    130911.4   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    134511.4   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
       120        59       2.0 1345  102.2 1166 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.    100211.4   0  32   30.
```

```
  1
WB        Rt7A aprchAG  1388.  2708.   655.  2720.     81411.4   0  44   30.
  1
WB        Rt7A aprchAG   655.  2720.   387.  2730.     81411.4   0  56   30.
  2
WB        Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        59       2.0  814  102.2  764 1 3
  1
WB        Rt7A deparAG   386.  2733.  -609.  2763.    114811.4   0  44   30.
1.0   04 1000.   0Y  5  0 72
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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 4 No Build 2014 PM - 4NBPM14.DAT                RUN: Site 4 No Build 2014 PM
      DATE: 05/07/2009   TIME: 19:36:29.74


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG    607.  11.4    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG    607.  11.4    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     391.8    2605.3 *      54.   181. AG    594. 100.0    .0 48.0  .28   2.7
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1213.  11.4    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG   1906.  11.4    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG   1906.  11.4    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     359.0    2938.9 *     175.     1. AG    594. 100.0    .0 48.0  .80   8.9
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG   1309.  11.4    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1345.  11.4    .0 44.0
      10. EB        Rt7A aprch*    309.0    2719.0   -1217.7    2763.6 *    1527.   272. AG    270. 100.0    .0 24.0 1.22  77.6
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG   1002.  11.4    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG    814.  11.4    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG    814.  11.4    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     548.0    2724.3 *      89.    92. AG    404. 100.0    .0 36.0  .75   4.5
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1148.  11.4    .0 44.0
1
                                                                                                                 PAGE  2
      JOB: Site 4 No Build 2014 PM - 4NBPM14.DAT                RUN: Site 4 No Build 2014 PM
      DATE: 05/07/2009   TIME: 19:36:29.74

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       65       2.0       607       1268     102.20      1        3
       7. SB        Rt4 aprch *     120       65       2.0      1906       1394     102.20      1        3
      10. EB        Rt7A aprch*     120       59       2.0      1345       1166     102.20      1        3
      14. WB        Rt7A aprch*     120       59       2.0       814        764     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)         *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0   *
      2. SW 164 W             *       151.0     2697.0       5.0   *
      3. SW 82 W              *       234.0     2693.0       5.0   *
      4. SW CNR               *       310.0     2683.0       5.0   *
      5. SW 82 S              *       316.0     2608.0       5.0   *
      6. SW 164 S             *       313.0     2527.0       5.0   *
      7. SW MID S             *       311.0     2362.0       5.0   *
      8. SE MID S             *       428.0     2361.0       5.0   *
      9. SE 164 S             *       431.0     2516.0       5.0   *
     10. SE 82 S              *       432.0     2598.0       5.0   *
     11. SE CNR               *       448.0     2662.0       5.0   *
     12. SE 82 E              *       506.0     2676.0       5.0   *
     13. SE 164 E             *       589.0     2673.0       5.0   *
     14. SE MID E             *       744.0     2669.0       5.0   *
     15. NE MID E             *       744.0     2746.0       5.0   *
     16. NE 164 E             *       588.0     2753.0       5.0   *
     17. NE 82 E              *       506.0     2757.0       5.0   *
     18. NE CNR               *       440.0     2763.0       5.0   *
     19. NE 82 N              *       433.0     2827.0       5.0   *
     20. NE 164 N             *       433.0     2911.0       5.0   *
     21. NE MID N             *       436.0     3044.0       5.0   *
     22. NW MID N             *       328.0     3045.0       5.0   *
     23. NW 164 N             *       323.0     2917.0       5.0   *
     24. NW 82 N              *       320.0     2833.0       5.0   *
     25. NW CNR               *       313.0     2765.0       5.0   *
     26. NW 82 W              *       247.0     2766.0       5.0   *
     27. NW 164 W             *       166.0     2767.0       5.0   *
     28. NW MID W             *       -36.0     2773.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 4 No Build 2014 PM - 4NBPM14.DAT                RUN: Site 4 No Build 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
   0.  *   1.5   1.5   1.6   2.2   1.7   1.2   1.2    .9   1.3   1.4   1.3   1.5    .5    .5    .0    .0    .2    .8    .8    .8
   5.  *   1.5   1.6   1.9   2.5   1.7   1.5   1.3    .9   1.1   1.1   1.3   1.5    .5    .5    .0    .0    .2    .4    .6    .6
  10.  *   1.5   1.7   2.0   2.6   2.0   1.5   1.2    .6   1.0   1.0   1.1   1.3    .5    .5    .0    .0    .0    .3    .4    .4
  15.  *   1.5   1.7   2.1   2.7   1.9   1.8   1.2    .3    .6    .5   1.0   1.3    .5    .5    .0    .0    .0    .1    .2    .2
  20.  *   1.6   1.8   2.4   2.8   1.7   1.8   1.2    .2    .4    .6   1.0   1.3    .5    .5    .0    .0    .0    .1    .1    .1
  25.  *   1.6   1.9   2.4   2.5   1.5   1.6   1.2    .2    .4    .5   1.1   1.2    .5    .5    .0    .0    .0    .0    .1    .1
  30.  *   1.7   1.9   2.6   2.3   1.7   1.6   1.1    .1    .3    .5   1.1   1.1    .5    .6    .0    .0    .0    .0    .0    .0
  35.  *   1.8   2.0   2.6   2.2   1.5   1.5   1.0    .1    .3    .5   1.1   1.2    .6    .6    .0    .0    .0    .0    .0    .0
```

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  40.  *   1.8   2.3   2.6   1.9   1.5   1.3    .9    .1    .3    .5   1.1   1.1    .6    .6    .0    .0    .0    .0    .0    .0
  45.  *   2.0   2.3   2.6   1.7   1.3   1.3    .7    .1    .2    .5   1.1   1.0    .7    .6    .0    .0    .0    .0    .0    .0
  50.  *   2.3   2.5   2.5   1.7   1.5   1.2    .7    .2    .1    .5   1.0    .9    .7    .6    .0    .0    .0    .0    .0    .0
  55.  *   2.2   2.5   2.5   1.6   1.5   1.0    .7    .2    .2    .4   1.0    .9    .7    .6    .0    .0    .0    .0    .0    .0
  60.  *   2.4   2.5   2.2   1.5   1.6   1.0    .6    .2    .2    .5    .9    .9    .7    .7    .0    .0    .0    .0    .0    .0
  65.  *   2.4   2.4   2.4   1.5   1.7    .8    .6    .1    .2    .4    .9    .9    .8    .8    .0    .0    .0    .0    .0    .0
  70.  *   2.5   2.5   2.3   1.6   1.7    .8    .6    .0    .2    .3    .8    .9    .8    .8    .1    .0    .0    .0    .0    .0
  75.  *   2.5   2.4   1.9   1.7   1.7    .7    .5    .0    .2    .3    .6    .8    .8    .8    .1    .2    .1    .1    .0    .0
  80.  *   2.5   2.2   1.9   1.7   1.6    .7    .5    .0    .2    .2    .6    .8    .7    .7    .3    .3    .3    .4    .0    .0
  85.  *   2.1   2.2   1.6   1.5   1.3    .6    .6    .0    .1    .2    .5    .8    .7    .7    .3    .4    .3    .4    .0    .0
  90.  *   1.7   1.9   1.5   1.5   1.2    .5    .6    .0    .0    .2    .4    .6    .6    .6    .4    .4    .5    .6    .2    .0
  95.  *   1.5   1.3   1.5   1.3   1.0    .5    .5    .0    .0    .1    .3    .4    .4    .4    .6    .6    .7    .9    .2    .0
 100.  *   1.1   1.1   1.2   1.2    .8    .5    .5    .0    .0    .0    .1    .3    .3    .3    .6    .7    .9   1.1    .2    .1
 105.  *    .7    .8    .8   1.0    .7    .5    .5    .0    .0    .0    .1    .2    .1    .1    .7    .7   1.0   1.3    .2    .2
 110.  *    .4    .5    .8   1.1    .7    .5    .5    .0    .0    .0    .0    .1    .1    .1    .7    .7   1.1   1.4    .4    .2
 115.  *    .3    .4    .7   1.1    .6    .5    .5    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.2   1.4    .5    .2
 120.  *    .2    .4    .5   1.1    .5    .5    .5    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.2   1.5    .5    .2
 125.  *    .1    .3    .5   1.1    .5    .5    .5    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.3   1.4    .4    .2
 130.  *    .1    .2    .4   1.0    .6    .6    .6    .0    .0    .0    .0    .0    .0    .0    .7    .6   1.3   1.4    .5    .2
 135.  *    .1    .1    .4    .9    .6    .6    .6    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.4   1.3    .5    .3
 140.  *    .1    .2    .4   1.0    .6    .6    .6    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.5   1.2    .6    .3
 145.  *    .1    .2    .3    .9    .6    .6    .6    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.5   1.1    .6    .3
 150.  *    .1    .2    .3    .8    .7    .7    .8    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.5   1.1    .6    .4
 155.  *    .1    .2    .3    .7    .7    .8    .8    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.5   1.0    .6    .4
 160.  *    .0    .1    .2    .7    .8    .8    .8    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.6    .9    .5    .5
 165.  *    .0    .1    .3    .8    .9    .8    .7    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.6    .8    .6    .5
 170.  *    .0    .1    .2    .7    .8    .7    .7    .1    .0    .2    .0    .0    .0    .0    .5    .5   1.6   1.0    .8    .7
 175.  *    .0    .1    .2    .7    .8    .7    .6    .2    .3    .3    .1    .0    .0    .0    .5    .5   1.6    .9    .7    .8
 180.  *    .0    .0    .1    .5    .6    .6    .6    .3    .3    .4    .3    .1    .0    .0    .5    .5   1.7   1.1   1.0   1.2
 185.  *    .0    .0    .1    .3    .4    .5    .4    .4    .4    .5    .4    .1    .0    .0    .5    .5   1.7   1.1   1.0   1.3
 190.  *    .0    .0    .0    .2    .3    .2    .2    .4    .6    .6    .5    .2    .1    .0    .5    .6   1.7   1.3   1.1   1.3
 195.  *    .0    .0    .0    .1    .2    .2    .2    .6    .6    .6    .7    .3    .1    .0    .5    .6   2.0   1.4   1.2   1.6
 200.  *    .0    .0    .0    .1    .1    .1    .1    .6    .6    .6    .7    .4    .2    .0    .5    .7   2.0   1.5   1.5   1.8
 205.  *    .0    .0    .0    .0    .1    .1    .1    .6    .6    .5    .8    .3    .1    .1    .6    .7   2.1   1.4   1.6   1.9
1
                                                                                                                    PAGE  4
      JOB: Site 4 No Build 2014 PM - 4NBPM14.DAT                RUN: Site 4 No Build 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .9    .3    .1    .1    .6    .7   2.1   1.4   1.4   2.0
 215.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5   1.0    .4    .1    .1    .6   1.0   2.1   1.4   1.5   2.2
 220.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5   1.2    .4    .2    .1    .6   1.1   2.1   1.2   1.6   2.2
 225.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5   1.3    .5    .2    .1    .6   1.2   2.1   1.2   1.9   2.3
 230.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5   1.4    .5    .2    .1    .7   1.3   1.9   1.4   2.1   2.4
 235.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5   1.3    .6    .3    .1    .8   1.6   1.9   1.5   2.1   2.3
 240.  *    .1    .0    .0    .0    .0    .0    .0    .5    .5    .5   1.4    .7    .3    .1    .9   1.6   2.0   1.5   2.3   2.3
 245.  *    .1    .1    .1    .0    .0    .0    .0    .5    .5    .5   1.4    .7    .3    .1   1.0   1.9   1.9   1.7   2.4   2.3
 250.  *    .2    .2    .2    .2    .0    .0    .0    .5    .5    .6   1.4    .7    .4    .2   1.1   1.9   1.9   1.9   2.4   2.2
 255.  *    .4    .5    .5    .2    .0    .0    .0    .4    .5    .6   1.4    .9    .7    .4   1.3   2.1   2.0   2.2   2.6   2.2
 260.  *    .8    .8    .7    .6    .1    .0    .0    .4    .5    .8   1.6   1.2    .8    .5   1.5   2.4   2.1   2.3   2.6   2.2
 265.  *   1.2   1.1   1.1    .8    .1    .0    .0    .5    .5    .9   1.7   1.3   1.1   1.0   1.5   2.0   2.0   2.6   2.5   2.2
 270.  *   1.5   1.5   1.4   1.2    .4    .1    .0    .5    .6   1.4   1.7   1.4   1.4   1.1   1.4   2.0   2.0   2.5   2.2   1.8
 275.  *   1.9   1.9   1.7   1.5    .5    .2    .0    .5    .7   1.5   1.7   1.7   1.7   1.3   1.2   1.8   1.8   2.4   2.2   1.8
 280.  *   2.1   2.1   2.0   1.7    .6    .4    .1    .6    .9   1.8   1.9   1.9   2.0   1.3   1.1   1.4   1.5   2.1   1.9   1.6
 285.  *   2.3   2.2   2.1   1.8    .8    .4    .1    .6    .9   2.1   1.9   1.8   1.9   1.7   1.0   1.2   1.4   1.9   1.8   1.5
 290.  *   2.3   2.2   2.1   1.8    .8    .4    .1    .6    .9   2.3   1.8   1.8   1.9   1.6    .4   1.0   1.3   1.8   1.8   1.3
 295.  *   2.1   2.1   2.0   1.8    .8    .4    .3    .9    .9   2.3   1.5   1.7   2.0   1.2    .4    .8   1.1   1.7   1.8   1.2
 300.  *   2.1   2.0   1.9   1.8    .8    .5    .4    .9   1.0   2.4   1.4   1.7   2.0   1.2    .3    .7   1.1   1.7   1.8   1.1
 305.  *   1.9   1.9   1.9   1.5    .7    .5    .4    .9   1.0   2.3   1.5   1.9   1.9   1.2    .4    .6   1.1   1.7   1.8   1.0
 310.  *   1.9   1.9   1.8   1.5    .7    .5    .4    .9   1.0   2.4   1.6   1.9   1.9   1.0    .4    .5   1.0   1.7   1.7   1.1
 315.  *   1.8   1.8   1.8   1.5    .7    .5    .3    .8   1.0   2.4   1.5   2.1   1.8   1.0    .2    .5   1.0   1.8   1.8   1.1
 320.  *   1.8   1.7   1.6   1.4    .7    .4    .3    .8   1.1   2.3   1.6   2.1   1.6    .8    .2    .4    .9   1.7   1.7   1.1
 325.  *   1.6   1.6   1.5   1.3    .7    .4    .3    .8   1.3   2.3   1.8   2.1   1.4    .8    .2    .4    .8   1.7   1.7   1.0
 330.  *   1.6   1.5   1.5   1.3    .7    .4    .3    .8   1.3   2.2   2.0   2.2   1.3    .8    .2    .4    .7   1.8   1.5   1.0
 335.  *   1.5   1.5   1.5   1.2    .7    .4    .3   1.1   1.5   2.2   2.0   2.0   1.1    .7    .2    .3    .6   1.6   1.6   1.1
 340.  *   1.5   1.5   1.5   1.4    .8    .4    .4   1.2   1.7   2.5   1.9   1.9    .8    .7    .2    .3    .6   1.5   1.4   1.1
 345.  *   1.5   1.5   1.5   1.4    .9    .7    .5   1.4   1.7   2.2   1.9   1.9    .8    .6    .0    .2    .5   1.4   1.3   1.1
 350.  *   1.5   1.5   1.5   1.6   1.3    .9    .7   1.0   1.6   1.9   1.8   1.9    .7    .5    .0    .2    .4   1.1   1.2   1.1
 355.  *   1.5   1.5   1.6   1.9   1.4   1.1    .9    .9   1.7   1.6   1.5   1.6    .7    .5    .0    .2    .3    .8   1.1    .9
 360.  *   1.5   1.5   1.6   2.2   1.7   1.2   1.2    .9   1.3   1.4   1.3   1.5    .5    .5    .0    .0    .2    .8    .8    .8
 ------*-------------------------------------------------------------------------------------------------------------------------
 MAX   *   2.5   2.5   2.6   2.8   2.0   1.8   1.3   1.4   1.7   2.5   2.0   2.2   2.0   1.7   1.5   2.4   2.1   2.6   2.6   2.4
 DEGR. *   70    50    30    20    10    15     5   345   340   340   330   330   280   285   260   260   205   265   255   230

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                                                                                                                    PAGE  5
      JOB: Site 4 No Build 2014 PM - 4NBPM14.DAT                RUN: Site 4 No Build 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .7    .9    .9   1.3   1.2    .2    .1    .0
   5.  *    .6   1.1   1.1   1.8   1.6    .4    .1    .0
  10.  *    .4   1.2   1.4   2.2   2.0    .5    .2    .0
  15.  *    .2   1.3   1.4   2.5   2.4    .6    .3    .0
  20.  *    .1   1.3   1.5   2.7   2.7    .8    .3    .1
  25.  *    .1   1.2   1.5   2.7   2.8    .8    .4    .1
  30.  *    .0   1.2   1.6   2.8   2.7   1.0    .5    .2
  35.  *    .0   1.1   1.5   2.8   2.7   1.1    .4    .2
  40.  *    .0   1.1   1.6   2.9   2.7   1.1    .6    .2
  45.  *    .0   1.0   1.6   2.8   2.6   1.2    .6    .2
  50.  *    .0   1.0   1.7   2.7   2.6   1.3    .6    .2
```

```
  55.  *    .0   1.0   1.8   2.7   2.3   1.3    .7    .4
  60.  *    .0   1.0   1.8   2.6   2.2   1.3    .8    .4
  65.  *    .0    .9   2.0   2.5   2.2   1.3    .8    .4
  70.  *    .0    .9   2.1   2.5   2.1   1.2    .9    .5
  75.  *    .0    .9   2.2   2.5   2.0   1.3    .8    .5
  80.  *    .0    .9   2.4   2.5   2.2   1.5   1.0    .8
  85.  *    .0   1.0   2.6   2.4   2.2   1.4   1.4   1.1
  90.  *    .0   1.0   2.6   2.6   2.3   1.5   1.5   1.4
  95.  *    .0    .9   2.6   2.7   2.3   1.6   1.7   1.5
 100.  *    .0   1.0   2.7   2.8   2.2   1.8   1.8   1.9
 105.  *    .0   1.0   2.7   2.8   2.4   1.7   1.8   1.8
 110.  *    .0   1.0   2.7   2.9   2.0   1.9   2.1   1.9
 115.  *    .2   1.2   2.8   2.9   1.9   1.9   1.8   1.9
 120.  *    .2   1.2   2.9   2.8   2.0   1.7   1.7   1.8
 125.  *    .2   1.1   3.0   2.8   2.0   1.9   1.7   1.7
 130.  *    .2   1.1   3.1   2.9   1.9   1.8   1.8   1.6
 135.  *    .1   1.3   3.1   2.9   1.8   1.8   1.9   1.6
 140.  *    .1   1.5   3.3   3.0   1.8   1.7   1.9   1.6
 145.  *    .1   1.6   3.3   3.1   1.8   1.8   1.5   1.4
 150.  *    .1   1.8   3.3   2.9   1.7   1.7   1.5   1.4
 155.  *    .2   2.0   3.4   2.8   1.8   1.8   1.5   1.4
 160.  *    .4   2.1   3.3   2.6   1.6   1.7   1.5   1.4
 165.  *    .4   2.1   3.2   2.3   1.8   1.5   1.4   1.3
 170.  *    .7   2.1   2.8   2.2   1.8   1.5   1.4   1.3
 175.  *   1.0   2.1   2.7   2.0   1.6   1.5   1.4   1.3
 180.  *   1.0   2.1   2.2   1.7   1.5   1.4   1.3   1.3
 185.  *   1.2   1.6   1.7   1.4   1.4   1.4   1.3   1.3
 190.  *   1.5   1.2   1.1   1.1   1.3   1.3   1.3   1.3
 195.  *   1.9    .9    .9   1.0   1.3   1.3   1.3   1.3
 200.  *   2.0    .6    .7    .8   1.3   1.3   1.3   1.3
 205.  *   2.0    .5    .6    .8   1.2   1.3   1.3   1.3
1
                                                                                                                       PAGE  6
      JOB: Site 4 No Build 2014 PM - 4NBPM14.DAT                RUN: Site 4 No Build 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.9    .4    .5    .8   1.3   1.3   1.3   1.3
 215.  *   1.8    .4    .5    .8   1.3   1.3   1.3   1.3
 220.  *   1.7    .3    .5    .8   1.3   1.3   1.4   1.4
 225.  *   1.5    .4    .5    .8   1.4   1.5   1.5   1.5
 230.  *   1.5    .4    .5    .8   1.5   1.5   1.5   1.5
 235.  *   1.3    .4    .6    .7   1.5   1.5   1.5   1.5
 240.  *   1.3    .4    .5    .7   1.5   1.6   1.6   1.6
 245.  *   1.2    .4    .4    .8   1.7   1.8   1.8   1.8
 250.  *   1.2    .4    .4    .8   1.8   1.8   1.8   1.8
 255.  *   1.1    .2    .4    .8   1.8   1.8   1.8   1.8
 260.  *    .9    .1    .4    .7   1.8   1.8   1.8   1.7
 265.  *    .9    .1    .4    .7   1.6   1.6   1.7   1.6
 270.  *    .8    .0    .1    .4   1.3   1.3   1.4   1.3
 275.  *    .8    .0    .1    .3   1.1   1.1   1.1   1.0
 280.  *    .8    .0    .0    .1    .8    .8    .8    .8
 285.  *    .8    .0    .0    .0    .5    .5    .5    .5
 290.  *    .8    .0    .0    .0    .2    .2    .2    .2
 295.  *    .8    .0    .0    .0    .1    .1    .1    .1
 300.  *    .8    .0    .0    .0    .0    .0    .0    .0
 305.  *    .8    .0    .0    .0    .0    .0    .0    .0
 310.  *    .8    .0    .1    .0    .0    .0    .0    .0
 315.  *    .9    .0    .1    .1    .0    .0    .0    .0
 320.  *   1.0    .0    .1    .1    .0    .0    .0    .0
 325.  *   1.0    .1    .1    .1    .0    .0    .0    .0
 330.  *   1.0    .1    .1    .1    .0    .0    .0    .0
 335.  *   1.1    .1    .1    .1    .1    .0    .0    .0
 340.  *   1.1    .2    .2    .2    .1    .0    .0    .0
 345.  *   1.0    .3    .3    .4    .3    .0    .0    .0
 350.  *   1.0    .4    .4    .7    .5    .0    .0    .0
 355.  *    .9    .7    .7   1.0    .9    .1    .0    .0
 360.  *    .7    .9    .9   1.3   1.2    .2    .1    .0
 ------*------------------------------------------------
 MAX   *   2.0   2.1   3.4   3.1   2.8   1.9   2.1   1.9
 DEGR. *  200   160   155   145    25   110   110   100

 THE HIGHEST CONCENTRATION IS    3.40 PPM AT  155 DEGREES FROM REC23.
 THE 2ND HIGHEST CONCENTRATION IS    3.10 PPM AT  145 DEGREES FROM REC24.
 THE 3RD HIGHEST CONCENTRATION IS    2.80 PPM AT   25 DEGREES FROM REC25.
```

```
Site 4 No Build 2030 PM - 4NBPM30.DAT   60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 No Build 2030 PM                  15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.     780 9.2   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.     780 9.2   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120         65       2.0  780   84.1 1294 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    1265 9.2   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    1710 9.2   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    1710 9.2   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120         65       2.0 1710   84.1 1411 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.    1485 9.2   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    1405 9.2   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
       120         63       2.0 1405   84.1 1748 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.     940 9.2   0  32   30.
```

```
  1
WB         Rt7A aprchAG  1388.  2708.   655.  2720.     960 9.2   0  44   30.
  1
WB         Rt7A aprchAG   655.  2720.   387.  2730.     960 9.2   0  56   30.
  2
WB         Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        63       2.0  960   84.1  809 1 3
  1
WB         Rt7A deparAG   386.  2733.  -609.  2763.    1165 9.2   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 4 No Build 2030 PM - 4NBPM30.DAT               RUN: Site 4 No Build 2030 PM
      DATE: 05/07/2009   TIME: 20:22:13.22


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*------------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG    780.   9.2    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG    780.   9.2    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     391.5    2589.7 *      69.   181. AG    489. 100.0    .0 48.0  .36   3.5
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1265.   9.2    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG   1710.   9.2    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG   1710.   9.2    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     358.6    2915.7 *     152.     1. AG    489. 100.0    .0 48.0  .71   7.7
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG   1485.   9.2    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1405.   9.2    .0 44.0
      10. EB        Rt7A aprch*    309.0    2719.0      25.1    2727.3 *     284.   272. AG    237. 100.0    .0 24.0  .91  14.4
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG    940.   9.2    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG    960.   9.2    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG    960.   9.2    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     602.4    2722.6 *     143.    92. AG    355. 100.0    .0 36.0  .90   7.3
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1165.   9.2    .0 44.0
1
                                                                                                               PAGE  2
      JOB: Site 4 No Build 2030 PM - 4NBPM30.DAT               RUN: Site 4 No Build 2030 PM
      DATE: 05/07/2009   TIME: 20:22:13.22

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       65       2.0       780       1294      84.10      1        3
       7. SB        Rt4 aprch *     120       65       2.0      1710       1411      84.10      1        3
      10. EB        Rt7A aprch*     120       63       2.0      1405       1748      84.10      1        3
      14. WB        Rt7A aprch*     120       63       2.0       960        809      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0   *
      2. SW 164 W             *       151.0     2697.0       5.0   *
      3. SW 82 W              *       234.0     2693.0       5.0   *
      4. SW CNR               *       310.0     2683.0       5.0   *
      5. SW 82 S              *       316.0     2608.0       5.0   *
      6. SW 164 S             *       313.0     2527.0       5.0   *
      7. SW MID S             *       311.0     2362.0       5.0   *
      8. SE MID S             *       428.0     2361.0       5.0   *
      9. SE 164 S             *       431.0     2516.0       5.0   *
     10. SE 82 S              *       432.0     2598.0       5.0   *
     11. SE CNR               *       448.0     2662.0       5.0   *
     12. SE 82 E              *       506.0     2676.0       5.0   *
     13. SE 164 E             *       589.0     2673.0       5.0   *
     14. SE MID E             *       744.0     2669.0       5.0   *
     15. NE MID E             *       744.0     2746.0       5.0   *
     16. NE 164 E             *       588.0     2753.0       5.0   *
     17. NE 82 E              *       506.0     2757.0       5.0   *
     18. NE CNR               *       440.0     2763.0       5.0   *
     19. NE 82 N              *       433.0     2827.0       5.0   *
     20. NE 164 N             *       433.0     2911.0       5.0   *
     21. NE MID N             *       436.0     3044.0       5.0   *
     22. NW MID N             *       328.0     3045.0       5.0   *
     23. NW 164 N             *       323.0     2917.0       5.0   *
     24. NW 82 N              *       320.0     2833.0       5.0   *
     25. NW CNR               *       313.0     2765.0       5.0   *
     26. NW 82 W              *       247.0     2766.0       5.0   *
     27. NW 164 W             *       166.0     2767.0       5.0   *
     28. NW MID W             *       -36.0     2773.0       5.0   *
1
                                                                                                               PAGE  3
      JOB: Site 4 No Build 2030 PM - 4NBPM30.DAT               RUN: Site 4 No Build 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .7   1.3   1.4   1.7   1.3   1.0   1.0    .9   1.3   1.1   1.1   1.4   1.1    .5    .0    .0    .2    .5    .7    .6
   5.  *    .7   1.4   1.5   1.9   1.5   1.4   1.0    .6   1.0   1.0    .9   1.3   1.0    .5    .0    .0    .1    .3    .4    .4
  10.  *    .7   1.4   1.7   1.9   1.5   1.5   1.1    .4    .8    .7    .8   1.2   1.0    .5    .0    .0    .0    .3    .3    .3
  15.  *    .7   1.5   1.7   2.0   1.5   1.5   1.1    .2    .6    .5    .9   1.2    .9    .5    .0    .0    .0    .1    .1    .2
  20.  *    .7   1.5   1.8   2.1   1.3   1.2   1.0    .1    .4    .5    .8   1.2    .8    .5    .0    .0    .0    .0    .1    .1
  25.  *    .8   1.6   2.0   1.8   1.4   1.4    .8    .1    .4    .5    .9   1.2    .7    .5    .0    .0    .0    .0    .1    .1
  30.  *    .9   1.7   2.1   1.8   1.5   1.6    .9    .1    .4    .5    .9   1.2    .7    .5    .0    .0    .0    .0    .0    .0
  35.  *    .9   1.7   2.0   1.6   1.3   1.4    .9    .0    .4    .5   1.0   1.2    .6    .5    .0    .0    .0    .0    .0    .0
```

```
   40.  *    .9   1.8   2.1   1.5   1.3   1.3    .8    .0    .3    .5   1.0   1.2    .6    .5    .0    .0    .0    .0    .0    .0
   45.  *   1.0   1.9   2.1   1.6   1.2   1.3    .8    .1    .2    .5   1.0   1.2    .6    .5    .0    .0    .0    .0    .0    .0
   50.  *   1.0   2.0   2.1   1.5   1.3   1.3    .6    .1    .2    .5   1.0   1.2    .6    .5    .0    .0    .0    .0    .0    .0
   55.  *   1.2   2.0   2.1   1.4   1.3   1.1    .6    .2    .2    .4   1.0   1.1    .5    .5    .0    .0    .0    .0    .0    .0
   60.  *   1.3   2.0   2.0   1.2   1.4    .9    .6    .0    .2    .5    .9   1.1    .5    .5    .0    .0    .0    .0    .0    .0
   65.  *   1.5   2.0   2.0   1.3   1.5   1.0    .5    .0    .2    .4   1.1   1.2    .7    .6    .0    .0    .0    .0    .0    .0
   70.  *   1.5   2.0   1.9   1.5   1.7    .9    .5    .0    .2    .3   1.0   1.1    .7    .6    .1    .0    .0    .0    .0    .0
   75.  *   1.6   2.2   1.8   1.5   1.6    .8    .5    .0    .2    .2    .8   1.0    .7    .6    .1    .1    .1    .2    .0    .0
   80.  *   1.6   1.9   1.7   1.3   1.5    .7    .5    .0    .1    .2    .7    .8    .6    .6    .2    .2    .3    .3    .0    .0
   85.  *   1.7   1.9   1.7   1.3   1.5    .5    .6    .0    .0    .2    .5    .7    .5    .5    .3    .4    .5    .5    .0    .0
   90.  *   1.4   1.5   1.4   1.3   1.4    .5    .6    .0    .0    .2    .4    .6    .5    .5    .4    .4    .6    .7    .1    .0
   95.  *   1.2   1.2   1.3   1.3   1.2    .5    .5    .0    .0    .0    .2    .3    .3    .3    .5    .5    .8    .9    .2    .0
  100.  *    .8   1.0   1.0   1.2   1.0    .5    .5    .0    .0    .0    .1    .3    .3    .3    .6    .6   1.1   1.2    .2    .1
  105.  *    .7    .8    .8   1.0    .9    .5    .5    .0    .0    .0    .1    .1    .1    .1    .6    .6   1.3   1.4    .3    .2
  110.  *    .4    .6    .7   1.0    .8    .5    .5    .0    .0    .0    .0    .1    .1    .1    .6    .7   1.4   1.4    .4    .2
  115.  *    .2    .4    .6   1.0    .7    .5    .5    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.5   1.4    .5    .2
  120.  *    .2    .3    .5   1.0    .7    .5    .5    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.5   1.4    .6    .2
  125.  *    .1    .3    .5   1.0    .6    .5    .5    .0    .0    .0    .0    .0    .0    .0    .6    .8   1.5   1.4    .5    .3
  130.  *    .1    .2    .5   1.0    .6    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .8   1.6   1.3    .6    .2
  135.  *    .1    .2    .4   1.0    .5    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .8   1.6   1.3    .6    .3
  140.  *    .1    .1    .4    .9    .7    .6    .6    .0    .0    .0    .0    .0    .0    .0    .5    .8   1.6   1.2    .6    .4
  145.  *    .1    .1    .3    .8    .6    .6    .7    .0    .0    .0    .0    .0    .0    .0    .5    .9   1.5   1.1    .6    .4
  150.  *    .1    .1    .3    .8    .6    .7    .7    .0    .0    .0    .0    .0    .0    .0    .5   1.0   1.5   1.0    .6    .4
  155.  *    .1    .1    .3    .8    .6    .7    .7    .0    .0    .0    .0    .0    .0    .0    .5   1.0   1.5    .9    .5    .4
  160.  *    .0    .1    .3    .7    .8    .8    .8    .0    .0    .0    .0    .0    .0    .0    .5   1.1   1.5    .7    .5    .5
  165.  *    .0    .1    .3    .8    .8    .8    .7    .0    .0    .0    .0    .0    .0    .0    .5   1.2   1.5    .7    .4    .5
  170.  *    .0    .1    .3    .7    .8    .7    .7    .1    .0    .1    .0    .0    .0    .0    .5   1.3   1.5    .9    .8    .7
  175.  *    .0    .1    .1    .6    .7    .6    .6    .2    .3    .3    .1    .0    .0    .0    .5   1.4   1.5    .9    .7    .8
  180.  *    .0    .0    .1    .5    .6    .5    .5    .3    .3    .3    .3    .1    .0    .0    .5   1.4   1.6   1.0    .9    .8
  185.  *    .0    .0    .1    .3    .4    .4    .4    .4    .4    .5    .4    .1    .0    .0    .5   1.5   1.6   1.3    .9   1.2
  190.  *    .0    .0    .0    .2    .2    .2    .2    .4    .5    .5    .5    .2    .1    .0    .5   1.6   1.6   1.2    .9   1.2
  195.  *    .0    .0    .0    .1    .2    .1    .1    .6    .6    .6    .7    .3    .1    .0    .5   1.6   1.9   1.4   1.1   1.3
  200.  *    .0    .0    .0    .1    .1    .1    .1    .6    .6    .7    .8    .4    .2    .0    .5   1.6   1.8   1.3   1.2   1.6
  205.  *    .0    .0    .0    .0    .1    .0    .0    .6    .6    .6    .9    .3    .2    .1    .6   1.6   1.9   1.2   1.2   1.6
1
                                                                                                                PAGE  4
      JOB: Site 4 No Build 2030 PM - 4NBPM30.DAT                RUN: Site 4 No Build 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
  210.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6   1.0    .4    .1    .1    .6   1.7   1.9   1.2   1.4   1.7
  215.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6   1.0    .4    .1    .1    .6   1.9   2.0    .9   1.3   1.8
  220.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6   1.1    .5    .2    .1    .6   1.9   2.0   1.1   1.3   1.8
  225.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6   1.2    .5    .2    .1    .6   1.9   2.0   1.2   1.6   1.8
  230.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .7   1.3    .6    .3    .1    .6   2.0   1.8   1.2   1.8   2.0
  235.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .6   1.3    .6    .3    .1    .7   2.1   1.6   1.2   1.9   1.9
  240.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7   1.3    .7    .3    .1    .9   2.1   1.5   1.2   1.8   1.8
  245.  *    .1    .1    .0    .0    .0    .0    .0    .4    .4    .7   1.3    .7    .4    .1    .9   2.2   1.7   1.5   1.9   1.7
  250.  *    .1    .1    .1    .0    .0    .0    .0    .4    .4    .8   1.2    .7    .4    .2   1.0   2.3   1.8   1.7   2.0   1.7
  255.  *    .2    .2    .2    .2    .0    .0    .0    .4    .4   1.0   1.2    .7    .4    .3   1.4   2.0   1.8   1.7   2.0   1.6
  260.  *    .3    .4    .4    .3    .0    .0    .0    .3    .4   1.1   1.3    .9    .8    .5   1.4   2.1   1.7   1.7   1.9   1.5
  265.  *    .5    .7    .6    .5    .0    .0    .0    .4    .4   1.2   1.3   1.0    .8    .9   1.3   1.9   1.5   1.8   1.7   1.4
  270.  *    .7    .9    .9    .8    .1    .0    .0    .4    .4   1.4   1.4   1.1   1.1   1.0   1.3   1.8   1.4   1.9   1.7   1.2
  275.  *    .8   1.2   1.2   1.0    .2    .0    .0    .4    .4   1.7   1.4   1.2   1.2   1.1   1.1   1.2   1.4   1.9   1.6   1.1
  280.  *    .9   1.3   1.4   1.3    .3    .1    .0    .4    .6   1.8   1.4   1.4   1.5   1.2   1.0   1.2   1.2   1.6   1.4    .9
  285.  *    .9   1.4   1.5   1.3    .4    .2    .0    .4    .6   1.9   1.4   1.5   1.4   1.5    .7    .9   1.2   1.5   1.4    .8
  290.  *   1.0   1.6   1.6   1.4    .4    .2    .0    .3    .7   2.1   1.4   1.5   1.7   1.5    .4    .7   1.0   1.4   1.4    .8
  295.  *    .9   1.6   1.6   1.4    .5    .3    .1    .5    .7   2.1   1.4   1.3   1.8   1.1    .3    .6    .9   1.3   1.4    .7
  300.  *    .9   1.6   1.5   1.4    .6    .3    .2    .6    .7   2.1   1.0   1.5   1.5   1.0    .3    .5    .9   1.4   1.4    .7
  305.  *    .8   1.5   1.5   1.3    .5    .3    .2    .6    .8   2.1   1.3   1.5   1.7   1.0    .3    .4    .8   1.4   1.4    .7
  310.  *    .8   1.5   1.5   1.3    .6    .3    .2    .7    .8   2.1   1.3   1.5   1.7   1.0    .2    .4    .8   1.4   1.4    .7
  315.  *    .8   1.5   1.5   1.3    .6    .4    .2    .8    .9   2.1   1.2   1.7   1.7    .7    .2    .3    .7   1.4   1.3    .8
  320.  *    .8   1.5   1.4   1.3    .6    .4    .3    .8   1.0   2.0   1.4   1.8   1.7    .7    .2    .4    .7   1.4   1.2    .8
  325.  *    .7   1.4   1.3   1.1    .6    .4    .3    .8   1.2   2.1   1.3   1.7   1.6    .7    .2    .3    .7   1.3   1.2    .7
  330.  *    .7   1.3   1.3   1.1    .5    .4    .3    .8   1.3   2.0   1.5   1.9   1.6    .7    .2    .2    .5   1.3   1.1    .9
  335.  *    .7   1.3   1.3   1.1    .5    .4    .3   1.1   1.6   1.9   1.7   1.8   1.4    .7    .2    .2    .5   1.2   1.1    .9
  340.  *    .7   1.3   1.3    .9    .5    .4    .4   1.1   1.5   2.1   1.5   1.7   1.4    .7    .2    .2    .4   1.0   1.0    .8
  345.  *    .7   1.3   1.3   1.1    .7    .5    .4   1.0   1.5   1.7   1.3   1.7   1.4    .5    .0    .2    .3    .9   1.0    .9
  350.  *    .7   1.3   1.3   1.3   1.0    .6    .5    .9   1.3   1.5   1.4   1.5   1.4    .5    .0    .2    .3    .8    .8    .9
  355.  *    .7   1.3   1.3   1.5   1.1    .9    .9    .8   1.6   1.4   1.2   1.4   1.3    .5    .0    .1    .2    .8    .8    .7
  360.  *    .7   1.3   1.4   1.7   1.3   1.0   1.0    .9   1.3   1.1   1.1   1.4   1.1    .5    .0    .0    .2    .5    .7    .6
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.7   2.2   2.1   2.1   1.7   1.6   1.1   1.1   1.6   2.1   1.7   1.9   1.8   1.5   1.4   2.3   2.0   1.9   2.0   2.0
 DEGR. *   85    75    30    20    70    30    10   335   335   290   335   330   295   285   255   250   215   270   250   230

1
                                                                                                                PAGE  5
      JOB: Site 4 No Build 2030 PM - 4NBPM30.DAT                RUN: Site 4 No Build 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
    0.  *    .6    .6    .7   1.0   1.0    .1    .0    .0
    5.  *    .4    .8    .9   1.2   1.3    .2    .1    .0
   10.  *    .3    .9    .9   1.5   1.6    .3    .1    .0
   15.  *    .1    .9    .9   1.7   1.7    .5    .2    .0
   20.  *    .1   1.0   1.0   1.9   1.9    .4    .2    .0
   25.  *    .1   1.0   1.0   2.1   2.0    .7    .2    .1
   30.  *    .0    .9    .9   2.2   2.0    .8    .3    .1
   35.  *    .0    .9    .8   2.1   2.1    .8    .4    .2
   40.  *    .0    .8    .8   2.1   2.1    .8    .4    .2
   45.  *    .0    .7    .7   2.1   2.0    .8    .4    .2
   50.  *    .0    .7    .8   2.1   2.0    .9    .4    .2
```

```
  55.  *    .0    .7    .8   2.1   1.9    .9    .6    .2
  60.  *    .0    .7    .8   2.1   1.8    .9    .6    .3
  65.  *    .0    .7    .7   1.9   1.7    .9    .7    .3
  70.  *    .0    .6    .8   1.9   1.6    .9    .8    .4
  75.  *    .0    .6    .9   1.9   1.7   1.0    .8    .4
  80.  *    .0    .6   1.1   1.9   1.7   1.0    .7    .8
  85.  *    .0    .6   1.2   2.0   2.0   1.1   1.1    .8
  90.  *    .0    .7   1.3   2.0   1.8   1.4   1.2   1.1
  95.  *    .0    .7   1.5   2.3   2.0   1.4   1.4   1.3
 100.  *    .0    .7   1.6   2.4   2.0   1.4   1.4   1.6
 105.  *    .0    .7   1.8   2.4   2.0   1.5   1.7   1.6
 110.  *    .0    .7   1.9   2.4   1.7   1.5   1.6   1.5
 115.  *    .0    .7   2.1   2.3   1.6   1.5   1.6   1.5
 120.  *    .1    .8   2.2   2.3   1.7   1.5   1.6   1.3
 125.  *    .2    .8   2.4   2.4   1.6   1.6   1.6   1.2
 130.  *    .2    .9   2.5   2.4   1.5   1.5   1.6   1.1
 135.  *    .1    .9   2.5   2.3   1.3   1.5   1.6   1.1
 140.  *    .1   1.0   2.6   2.6   1.6   1.6   1.5    .9
 145.  *    .1   1.0   2.7   2.5   1.4   1.5   1.4    .9
 150.  *    .1   1.1   2.8   2.5   1.5   1.4   1.3    .7
 155.  *    .1   1.2   3.0   2.3   1.5   1.4   1.3    .7
 160.  *    .3   1.6   2.5   2.1   1.6   1.4   1.2    .7
 165.  *    .3   1.7   2.7   1.9   1.5   1.2   1.2    .6
 170.  *    .3   1.5   2.4   1.7   1.5   1.2   1.2    .6
 175.  *    .7   1.4   2.1   1.5   1.4   1.2   1.2    .6
 180.  *    .9   1.4   1.8   1.4   1.4   1.1   1.1    .6
 185.  *   1.0   1.1   1.4   1.1   1.1   1.2   1.1    .6
 190.  *   1.1    .9    .9   1.0   1.1   1.1   1.1    .6
 195.  *   1.4    .8    .8    .8   1.0   1.1   1.1    .6
 200.  *   1.6    .5    .5    .7   1.0   1.0   1.1    .6
 205.  *   1.6    .4    .6    .7   1.0   1.1   1.1    .6
1                                                                                                                 PAGE  6
      JOB: Site 4 No Build 2030 PM - 4NBPM30.DAT                 RUN: Site 4 No Build 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.5    .4    .5    .6   1.0   1.1   1.1    .6
 215.  *   1.3    .3    .5    .6   1.0   1.1   1.1    .6
 220.  *   1.2    .3    .5    .7   1.1   1.2   1.2    .7
 225.  *   1.2    .3    .4    .7   1.2   1.2   1.3    .8
 230.  *   1.1    .2    .3    .7   1.2   1.3   1.3    .8
 235.  *   1.1    .2    .3    .7   1.3   1.3   1.3    .8
 240.  *    .9    .2    .3    .6   1.3   1.3   1.3    .8
 245.  *    .8    .2    .3    .6   1.3   1.4   1.3    .9
 250.  *    .8    .2    .2    .6   1.4   1.4   1.3    .9
 255.  *    .7    .0    .2    .5   1.4   1.3   1.2    .9
 260.  *    .6    .0    .2    .5   1.3   1.3   1.1    .9
 265.  *    .6    .0    .2    .2   1.1   1.1   1.1    .8
 270.  *    .7    .0    .0    .2    .9    .9    .8    .7
 275.  *    .7    .0    .0    .2    .7    .6    .6    .5
 280.  *    .6    .0    .0    .0    .4    .4    .4    .3
 285.  *    .6    .0    .0    .0    .2    .3    .3    .3
 290.  *    .6    .0    .0    .0    .1    .1    .1    .1
 295.  *    .6    .0    .0    .0    .1    .1    .1    .1
 300.  *    .6    .0    .0    .0    .0    .0    .0    .0
 305.  *    .7    .0    .0    .0    .0    .0    .0    .0
 310.  *    .7    .0    .0    .0    .0    .0    .0    .0
 315.  *    .7    .0    .0    .0    .0    .0    .0    .0
 320.  *    .7    .0    .0    .0    .0    .0    .0    .0
 325.  *    .7    .0    .0    .0    .0    .0    .0    .0
 330.  *    .8    .1    .1    .1    .0    .0    .0    .0
 335.  *    .8    .1    .1    .1    .0    .0    .0    .0
 340.  *    .8    .1    .1    .1    .1    .0    .0    .0
 345.  *    .8    .2    .2    .2    .2    .0    .0    .0
 350.  *    .8    .3    .4    .4    .3    .0    .0    .0
 355.  *    .7    .5    .5    .8    .6    .1    .0    .0
 360.  *    .6    .6    .7   1.0   1.0    .1    .0    .0
 ------*------------------------------------------------
 MAX   *   1.6   1.7   3.0   2.6   2.1   1.6   1.7   1.6
 DEGR. *  200   165   155   140    35   125   105   100

 THE HIGHEST CONCENTRATION IS    3.00 PPM AT  155 DEGREES FROM REC23.
 THE 2ND HIGHEST CONCENTRATION IS    2.60 PPM AT  140 DEGREES FROM REC24.
 THE 3RD HIGHEST CONCENTRATION IS    2.30 PPM AT  250 DEGREES FROM REC16.
```

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Site 4 Opt 1/2 2014 AM - 4B1AM14.DAT    60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Opt 1/2 2014 AM                   15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.    167711.4   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.    167711.4   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        62       2.0 1677  102.2 1327 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    193411.4   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    125211.4   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    125211.4   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        62       2.0 1252  102.2 1196 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.     56211.4   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    121611.4   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
       120        62       2.0 1216  102.2 1086 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.     91411.4   0  32   30.
```

```
  1
WB        Rt7A aprchAG  1388.  2708.   655.  2720.    100111.4   0  44   30.
  1
WB        Rt7A aprchAG   655.  2720.   387.  2730.    100111.4   0  56   30.
  2
WB        Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        62       2.0 1001  102.2 1109 1 3
  1
WB        Rt7A deparAG   386.  2733.  -609.  2763.    173611.4   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 4 Opt 1/2 2014 AM - 4B1AM14.DAT                 RUN: Site 4 Opt 1/2 2014 AM
      DATE: 05/08/2009   TIME: 06:30:57.90


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. NB         Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG   1677.  11.4    .0 56.0
       2. NB         Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG   1677.  11.4    .0 68.0
       3. NB         Rt4 aprch *    393.0    2659.0     389.8    2517.0 *     142.   181. AG    567. 100.0    .0 48.0  .70   7.2
       4. NB         Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1934.  11.4    .0 56.0
       5. SB         Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG   1252.  11.4    .0 56.0
       6. SB         Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG   1252.  11.4    .0 68.0
       7. SB         Rt4 aprch *    356.0    2764.0     357.8    2870.1 *     106.     1. AG    567. 100.0    .0 48.0  .58   5.4
       8. SB         Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG    562.  11.4    .0 56.0
       9. EB         Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1216.  11.4    .0 44.0
      10. EB         Rt7A aprch*    309.0    2719.0   -1211.7    2763.4 *    1521.   272. AG    283. 100.0    .0 24.0 1.25  77.3
      11. EB         Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG    914.  11.4    .0 32.0
      12. WB         Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   1001.  11.4    .0 44.0
      13. WB         Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   1001.  11.4    .0 56.0
      14. WB         Rt7A aprch*    459.0    2727.0     571.8    2723.5 *     113.    92. AG    425. 100.0    .0 36.0  .67   5.7
      15. WB         Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1736.  11.4    .0 44.0
1
                                                                                                                PAGE  2
      JOB: Site 4 Opt 1/2 2014 AM - 4B1AM14.DAT                 RUN: Site 4 Opt 1/2 2014 AM
      DATE: 05/08/2009   TIME: 06:30:57.90

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB         Rt4 aprch *     120       62       2.0      1677       1327     102.20      1        3
       7. SB         Rt4 aprch *     120       62       2.0      1252       1196     102.20      1        3
      10. EB         Rt7A aprch*     120       62       2.0      1216       1086     102.20      1        3
      14. WB         Rt7A aprch*     120       62       2.0      1001       1109     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0   *
      2. SW 164 W             *       151.0     2697.0       5.0   *
      3. SW 82 W              *       234.0     2693.0       5.0   *
      4. SW CNR               *       310.0     2683.0       5.0   *
      5. SW 82 S              *       316.0     2608.0       5.0   *
      6. SW 164 S             *       313.0     2527.0       5.0   *
      7. SW MID S             *       311.0     2362.0       5.0   *
      8. SE MID S             *       428.0     2361.0       5.0   *
      9. SE 164 S             *       431.0     2516.0       5.0   *
     10. SE 82 S              *       432.0     2598.0       5.0   *
     11. SE CNR               *       448.0     2662.0       5.0   *
     12. SE 82 E              *       506.0     2676.0       5.0   *
     13. SE 164 E             *       589.0     2673.0       5.0   *
     14. SE MID E             *       744.0     2669.0       5.0   *
     15. NE MID E             *       744.0     2746.0       5.0   *
     16. NE 164 E             *       588.0     2753.0       5.0   *
     17. NE 82 E              *       506.0     2757.0       5.0   *
     18. NE CNR               *       440.0     2763.0       5.0   *
     19. NE 82 N              *       433.0     2827.0       5.0   *
     20. NE 164 N             *       433.0     2911.0       5.0   *
     21. NE MID N             *       436.0     3044.0       5.0   *
     22. NW MID N             *       328.0     3045.0       5.0   *
     23. NW 164 N             *       323.0     2917.0       5.0   *
     24. NW 82 N              *       320.0     2833.0       5.0   *
     25. NW CNR               *       313.0     2765.0       5.0   *
     26. NW 82 W              *       247.0     2766.0       5.0   *
     27. NW 164 W             *       166.0     2767.0       5.0   *
     28. NW MID W             *       -36.0     2773.0       5.0   *
1
                                                                                                                PAGE  3
      JOB: Site 4 Opt 1/2 2014 AM - 4B1AM14.DAT                 RUN: Site 4 Opt 1/2 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *     (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.8   1.6   1.8   1.9   1.5   1.1   1.2   1.5   1.8   1.4   1.3   1.8    .8    .6    .0    .1    .3    .8    .9   1.0
   5.  *   1.8   1.8   1.8   2.2   1.5   1.3   1.4   1.2   1.5   1.4   1.1   1.6    .7    .6    .0    .0    .1    .5    .7    .7
  10.  *   1.7   1.9   2.0   2.5   1.7   1.3   1.3    .8   1.0    .9   1.0   1.6    .6    .6    .0    .0    .1    .3    .5    .6
  15.  *   1.7   1.9   2.1   2.4   1.7   1.5   1.4    .7    .7    .8   1.0   1.5    .6    .6    .0    .0    .0    .2    .3    .3
  20.  *   1.8   2.0   2.2   2.6   1.5   1.5   1.4    .5    .7    .7   1.0   1.5    .6    .6    .0    .0    .0    .1    .2    .2
  25.  *   1.9   2.1   2.4   2.3   1.5   1.8   1.3    .3    .5    .6   1.0   1.5    .6    .6    .0    .0    .0    .0    .1    .1
  30.  *   1.9   2.1   2.4   2.1   1.5   1.7   1.2    .2    .4    .6   1.0   1.5    .6    .6    .0    .0    .0    .0    .1    .1
  35.  *   2.0   2.3   2.5   2.1   1.4   1.7   1.2    .1    .4    .6   1.1   1.4    .6    .6    .0    .0    .0    .0    .0    .1
```

```
  40.  *   2.0   2.2   2.6   2.0   1.5   1.9   1.0    .1    .3    .5   1.1   1.4    .6    .6    .0    .0    .0    .0    .0    .0
  45.  *   2.1   2.3   2.8   2.0   1.3   1.9    .8    .2    .3    .5   1.2   1.4    .7    .7    .0    .0    .0    .0    .0    .0
  50.  *   2.1   2.5   2.6   1.8   1.4   1.9    .8    .2    .2    .4   1.2   1.3    .7    .7    .0    .0    .0    .0    .0    .0
  55.  *   2.3   2.6   2.5   1.7   1.6   1.8    .8    .2    .2    .5   1.1   1.2    .8    .7    .0    .0    .0    .0    .0    .0
  60.  *   2.5   2.7   2.4   1.5   1.7   2.0    .8    .2    .2    .5   1.0   1.2    .8    .7    .0    .0    .0    .0    .0    .0
  65.  *   2.5   2.7   2.4   1.6   1.8   1.9    .7    .2    .2    .5   1.1   1.1    .7    .7    .1    .0    .0    .0    .0    .0
  70.  *   2.5   2.5   2.3   1.5   2.0   1.7    .6    .0    .2    .4    .9   1.0    .8    .7    .1    .0    .1    .0    .0    .0
  75.  *   2.6   2.6   2.1   1.5   2.0   1.7    .6    .0    .2    .2    .8   1.0    .9    .8    .1    .2    .2    .2    .0    .0
  80.  *   2.7   2.5   2.0   1.7   1.9   1.6    .6    .0    .2    .2    .7   1.0    .9    .8    .2    .3    .4    .3    .0    .0
  85.  *   2.4   2.3   1.9   1.7   1.8   1.5    .6    .0    .0    .2    .6    .8    .7    .7    .4    .4    .5    .6    .0    .0
  90.  *   2.2   1.9   1.8   1.6   1.8   1.2    .6    .0    .0    .2    .4    .7    .6    .6    .5    .6    .7    .7    .1    .0
  95.  *   1.6   1.5   1.4   1.3   1.7   1.1    .5    .0    .0    .1    .3    .5    .5    .4    .7    .7   1.0   1.1    .2    .0
 100.  *   1.2   1.1   1.3   1.3   1.6   1.0    .6    .0    .0    .0    .2    .3    .3    .3    .7    .7   1.1   1.2    .2    .1
 105.  *    .7   1.0    .9   1.1   1.6    .9    .6    .0    .0    .0    .1    .2    .2    .1    .8    .8   1.4   1.5    .4    .2
 110.  *    .5    .7    .9   1.1   1.6    .8    .5    .0    .0    .0    .0    .1    .1    .1    .8    .9   1.5   1.6    .4    .2
 115.  *    .4    .7    .7   1.2   1.6    .8    .5    .0    .0    .0    .0    .0    .0    .0    .8    .7   1.5   1.7    .5    .2
 120.  *    .3    .6    .8   1.3   1.5    .7    .5    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.7   1.6    .5    .2
 125.  *    .2    .5    .8   1.4   1.5    .7    .6    .0    .0    .0    .0    .0    .0    .0    .7    .6   1.7   1.6    .6    .2
 130.  *    .1    .5    .7   1.4   1.4    .6    .6    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.7   1.5    .7    .4
 135.  *    .1    .3    .7   1.4   1.3    .6    .6    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.8   1.5    .7    .3
 140.  *    .1    .4    .6   1.4   1.2    .7    .6    .0    .0    .0    .0    .0    .0    .0    .6    .6   1.8   1.4    .8    .4
 145.  *    .1    .3    .6   1.4   1.1    .6    .6    .0    .0    .0    .0    .0    .0    .0    .6    .6   1.8   1.3    .8    .4
 150.  *    .1    .3    .5   1.3   1.1    .6    .6    .0    .0    .0    .0    .0    .0    .0    .6    .5   1.8   1.1    .7    .5
 155.  *    .1    .2    .4   1.2   1.1    .7    .6    .0    .0    .1    .0    .0    .0    .0    .6    .5   1.7   1.0    .7    .6
 160.  *    .1    .2    .3   1.1    .9    .7    .7    .1    .1    .1    .0    .0    .0    .0    .5    .5   1.7    .9    .8    .6
 165.  *    .0    .2    .3    .9    .9    .8    .7    .1    .2    .2    .0    .0    .0    .0    .5    .5   1.6   1.0    .9    .7
 170.  *    .0    .1    .2    .8    .8    .7    .7    .2    .2    .4    .2    .0    .0    .0    .6    .5   1.6   1.2   1.1    .9
 175.  *    .0    .1    .2    .7    .6    .6    .5    .3    .4    .6    .3    .1    .0    .0    .6    .6   1.9   1.2   1.3   1.1
 180.  *    .0    .0    .1    .5    .5    .4    .4    .5    .7    .9    .7    .1    .0    .0    .6    .7   1.9   1.5   1.5   1.5
 185.  *    .0    .0    .0    .3    .4    .3    .2    .6    .8   1.1    .9    .2    .1    .0    .6    .8   2.1   1.6   1.7   1.8
 190.  *    .0    .0    .0    .2    .2    .2    .2    .7    .9   1.4   1.2    .4    .1    .0    .6    .9   2.2   1.9   1.7   2.0
 195.  *    .0    .0    .0    .0    .1    .1    .1    .8    .9   1.6   1.4    .5    .1    .0    .6    .9   2.2   1.9   1.7   2.1
 200.  *    .0    .0    .0    .0    .0    .0    .0    .8    .9   1.8   1.5    .5    .1    .1    .6   1.2   2.3   2.0   1.9   2.1
 205.  *    .0    .0    .0    .0    .0    .0    .0    .8    .9   2.0   1.7    .6    .3    .1    .6   1.4   2.5   1.8   1.8   2.2
1
                                                                                                                      PAGE  4
      JOB: Site 4 Opt 1/2 2014 AM - 4B1AM14.DAT                 RUN: Site 4 Opt 1/2 2014 AM

 WIND   * CONCENTRATION
 ANGLE  *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .8    .8   2.1   1.8    .8    .3    .1    .7   1.5   2.5   1.7   1.8   2.4
 215.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   2.1   1.8    .8    .4    .1    .7   1.9   2.6   1.8   1.9   2.2
 220.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   2.1   1.8    .9    .4    .1    .8   2.0   2.6   1.5   1.8   2.3
 225.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   2.2   1.8   1.0    .5    .2    .9   2.1   2.4   1.6   2.0   2.2
 230.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   2.2   1.8   1.1    .5    .2    .8   2.2   2.3   1.7   2.2   2.2
 235.  *    .0    .0    .0    .0    .0    .0    .0    .6    .8   2.2   1.8   1.1    .6    .2    .9   2.3   2.4   1.7   2.4   2.1
 240.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   2.1   1.7   1.0    .7    .2   1.1   2.3   2.3   1.8   2.4   2.0
 245.  *    .1    .1    .1    .0    .0    .0    .0    .7    .7   2.1   1.7   1.0    .7    .2   1.1   2.6   2.1   1.9   2.5   1.9
 250.  *    .2    .2    .2    .1    .0    .0    .0    .6    .8   2.0   1.5   1.0    .7    .3   1.5   2.5   2.2   2.2   2.8   1.8
 255.  *    .5    .5    .4    .3    .0    .0    .0    .6    .9   2.0   1.5   1.2    .9    .5   1.5   2.6   2.2   2.5   2.7   1.7
 260.  *    .8    .9    .8    .6    .1    .0    .0    .6   1.0   2.1   1.7   1.3    .9    .8   1.5   2.6   2.3   2.7   2.7   1.5
 265.  *   1.2   1.3   1.2    .8    .1    .0    .0    .6   1.2   2.2   1.9   1.5   1.3   1.1   1.7   2.5   2.3   2.6   2.7   1.5
 270.  *   1.6   1.7   1.6   1.2    .4    .1    .0    .6   1.4   2.6   1.9   1.7   1.5   1.3   1.5   2.4   2.1   2.7   2.4   1.2
 275.  *   1.9   2.0   2.0   1.5    .5    .2    .0    .7   1.6   2.7   2.1   1.8   1.8   1.6   1.4   2.0   2.0   2.5   2.2   1.1
 280.  *   2.3   2.3   2.2   1.8    .7    .4    .1    .7   1.9   2.8   2.0   2.1   2.1   1.8    .9   1.6   1.6   2.2   2.0   1.0
 285.  *   2.4   2.4   2.3   1.9    .8    .4    .1    .8   2.1   2.8   1.9   1.8   2.1   1.5    .8   1.2   1.4   2.0   1.7    .9
 290.  *   2.4   2.5   2.3   2.0    .9    .6    .2    .9   2.4   2.9   1.9   1.9   2.2   1.5    .5   1.0   1.3   1.9   1.6    .9
 295.  *   2.3   2.2   2.2   1.8    .9    .6    .4   1.0   2.5   2.8   2.0   1.9   2.2   1.3    .3    .6   1.2   1.8   1.5    .9
 300.  *   2.2   2.2   2.1   1.8    .9    .6    .4   1.0   2.5   2.8   1.9   1.9   2.1   1.1    .3    .6    .9   1.7   1.4   1.0
 305.  *   2.2   2.1   2.1   1.8    .9    .6    .4   1.0   2.6   2.9   1.7   1.9   2.1   1.1    .2    .4    .9   1.7   1.4   1.0
 310.  *   2.1   2.0   2.0   1.7    .9    .5    .4   1.0   2.7   2.8   1.7   2.1   2.0   1.0    .1    .4    .8   1.7   1.3   1.0
 315.  *   2.0   2.0   1.8   1.6    .8    .5    .4   1.0   2.8   2.8   1.6   2.2   2.0    .8    .2    .3    .7   1.6   1.2   1.1
 320.  *   1.9   1.8   1.8   1.6    .8    .5    .4   1.1   2.8   2.7   1.8   2.0   1.8    .9    .2    .4    .6   1.6   1.3   1.1
 325.  *   1.8   1.8   1.8   1.4    .7    .5    .3   1.1   2.8   2.6   1.8   2.1   1.8    .8    .2    .4    .7   1.5   1.2   1.1
 330.  *   1.8   1.7   1.6   1.4    .7    .5    .3   1.2   2.9   2.8   1.7   2.1   1.6    .8    .2    .3    .6   1.4   1.3   1.3
 335.  *   1.7   1.7   1.6   1.4    .7    .5    .3   1.5   2.9   2.6   1.8   2.1   1.4    .8    .2    .3    .6   1.4   1.2   1.2
 340.  *   1.7   1.7   1.6   1.3    .7    .5    .3   1.8   2.8   2.4   1.7   2.1   1.4    .8    .1    .3    .6   1.3   1.2   1.3
 345.  *   1.7   1.7   1.6   1.5    .8    .6    .3   1.8   2.8   2.4   1.8   2.0   1.3    .7    .1    .3    .5   1.2   1.4   1.4
 350.  *   1.7   1.7   1.6   1.6   1.0    .8    .6   1.8   2.6   2.2   1.6   1.9   1.2    .6    .0    .3    .4   1.1   1.3   1.2
 355.  *   1.8   1.7   1.6   1.8   1.3   1.0    .9   1.7   2.3   1.9   1.3   1.9    .9    .6    .0    .1    .4    .9   1.2   1.1
 360.  *   1.8   1.6   1.8   1.9   1.5   1.1   1.2   1.5   1.8   1.4   1.3   1.8    .8    .6    .0    .1    .3    .8    .9   1.0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   2.7   2.7   2.8   2.6   2.0   2.0   1.4   1.8   2.9   2.9   2.1   2.2   2.2   1.8   1.7   2.6   2.6   2.7   2.8   2.4
 DEGR. *   80    60    45    20    70    60     5   340   330   290   275   315   290   280   265   255   215   260   250   210

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                                                                                                                      PAGE  5
      JOB: Site 4 Opt 1/2 2014 AM - 4B1AM14.DAT                 RUN: Site 4 Opt 1/2 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND   * CONCENTRATION
 ANGLE  *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *   1.0    .7    .8    .8    .8    .2    .0    .0
   5.  *    .7    .9    .9   1.0   1.3    .2    .2    .0
  10.  *    .5   1.0   1.1   1.3   1.5    .4    .2    .0
  15.  *    .3   1.1   1.2   1.5   1.8    .4    .2    .0
  20.  *    .2   1.1   1.1   1.5   2.1    .5    .3    .0
  25.  *    .1   1.1   1.2   1.6   2.3    .7    .3    .2
  30.  *    .1   1.1   1.1   1.6   2.3    .7    .4    .2
  35.  *    .1   1.0   1.1   1.7   2.3    .7    .4    .2
  40.  *    .0   1.0   1.0   1.9   2.4    .8    .4    .2
  45.  *    .0   1.0    .9   1.9   2.3    .9    .4    .2
  50.  *    .0    .9    .9   2.0   2.3   1.0    .4    .2
```

```
  55.  *    .0    .8    .8   2.0   2.2   1.1    .5    .1
  60.  *    .0    .8    .8   2.0   2.2   1.1    .5    .3
  65.  *    .0    .8    .8   2.1   2.1   1.2    .7    .4
  70.  *    .0    .8    .8   2.2   2.0   1.3    .7    .4
  75.  *    .0    .8    .8   2.3   2.1   1.1    .9    .5
  80.  *    .0    .8    .8   2.3   2.2   1.5    .9    .8
  85.  *    .0    .8    .8   2.3   2.3   1.5   1.6   1.2
  90.  *    .0    .9    .8   2.5   2.3   1.7   1.6   1.6
  95.  *    .0    .9    .8   2.6   2.5   2.0   1.9   2.0
 100.  *    .0    .8    .9   2.7   2.4   2.0   2.0   2.2
 105.  *    .0    .9   1.0   2.8   2.5   2.0   2.2   2.2
 110.  *    .0    .9   1.1   2.8   2.3   1.9   2.2   2.1
 115.  *    .1   1.0   1.2   2.8   2.0   2.0   2.2   2.2
 120.  *    .2   1.1   1.4   2.8   2.2   2.2   2.3   2.1
 125.  *    .2   1.1   1.4   2.9   2.1   2.1   2.4   2.1
 130.  *    .2    .9   1.7   3.0   2.0   2.0   2.4   2.0
 135.  *    .2   1.1   1.8   3.0   2.2   2.2   2.3   1.9
 140.  *    .2   1.3   1.9   2.9   2.1   2.3   2.2   1.8
 145.  *    .1   1.4   2.2   3.1   2.1   2.1   2.2   1.8
 150.  *    .3   1.5   2.3   3.0   2.1   2.0   1.9   1.6
 155.  *    .4   1.7   2.5   2.9   2.2   2.1   1.9   1.6
 160.  *    .4   1.6   2.5   2.7   2.2   2.0   1.8   1.6
 165.  *    .5   1.5   2.5   2.5   2.2   1.8   1.6   1.4
 170.  *    .8   1.7   2.4   2.2   2.1   1.8   1.6   1.5
 175.  *   1.0   1.6   2.3   2.0   2.0   1.6   1.6   1.5
 180.  *   1.4   1.5   2.0   1.8   1.8   1.6   1.4   1.4
 185.  *   1.6   1.4   1.5   1.4   1.6   1.5   1.4   1.4
 190.  *   1.8   1.0   1.2   1.3   1.4   1.4   1.5   1.5
 195.  *   1.9    .6    .9    .8   1.4   1.4   1.5   1.5
 200.  *   2.0    .5    .7    .8   1.3   1.4   1.4   1.4
 205.  *   1.9    .4    .6    .9   1.4   1.4   1.5   1.5
1
                                                                                                                               PAGE  6
      JOB: Site 4 Opt 1/2 2014 AM - 4B1AM14.DAT                RUN: Site 4 Opt 1/2 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.7    .4    .6    .8   1.4   1.4   1.5   1.5
 215.  *   1.6    .4    .6    .8   1.4   1.5   1.6   1.6
 220.  *   1.5    .4    .5    .8   1.4   1.7   1.7   1.7
 225.  *   1.6    .4    .5    .8   1.7   1.7   1.7   1.7
 230.  *   1.4    .4    .5    .8   1.7   1.7   1.7   1.7
 235.  *   1.4    .4    .5    .8   1.7   1.8   1.9   1.9
 240.  *   1.3    .4    .5    .9   1.9   1.9   1.9   1.9
 245.  *   1.2    .4    .6    .9   1.9   1.9   2.0   2.0
 250.  *   1.3    .4    .6    .9   2.0   2.0   2.0   2.0
 255.  *   1.2    .2    .5    .9   2.0   2.0   2.3   2.2
 260.  *   1.0    .1    .4    .9   2.0   2.0   2.1   2.0
 265.  *   1.1    .1    .4    .6   2.0   2.0   2.0   1.9
 270.  *   1.0    .0    .2    .5   1.6   1.7   1.7   1.7
 275.  *   1.0    .0    .1    .4   1.2   1.2   1.2   1.2
 280.  *    .9    .0    .0    .2    .9    .9   1.0    .8
 285.  *    .8    .0    .0    .0    .6    .6    .6    .6
 290.  *    .9    .0    .0    .0    .3    .3    .3    .3
 295.  *    .9    .0    .0    .0    .1    .1    .1    .1
 300.  *   1.0    .0    .0    .0    .1    .1    .1    .1
 305.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 310.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 315.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 320.  *   1.1    .0    .0    .0    .0    .0    .0    .0
 325.  *   1.1    .0    .0    .0    .0    .0    .0    .0
 330.  *   1.2    .0    .0    .0    .0    .0    .0    .0
 335.  *   1.2    .1    .1    .1    .0    .0    .0    .0
 340.  *   1.2    .1    .1    .1    .1    .0    .0    .0
 345.  *   1.3    .2    .2    .2    .1    .0    .0    .0
 350.  *   1.3    .4    .3    .4    .4    .0    .0    .0
 355.  *   1.1    .5    .5    .4    .5    .1    .0    .0
 360.  *   1.0    .7    .8    .8    .8    .2    .0    .0
 ------*------------------------------------------------
 MAX   *   2.0   1.7   2.5   3.1   2.5   2.3   2.4   2.2
 DEGR. *  200   155   160   145    95   140   125   100

 THE HIGHEST CONCENTRATION IS    3.10 PPM AT  145 DEGREES FROM REC24.
 THE 2ND HIGHEST CONCENTRATION IS    2.90 PPM AT  290 DEGREES FROM REC10.
 THE 3RD HIGHEST CONCENTRATION IS    2.90 PPM AT  330 DEGREES FROM REC9 .
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```
Site 4 Opt 1/2 2030 AM - 4B1AM30.DAT    60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Opt 1/2 2030 AM                   15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.    1695 9.2   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.    1695 9.2   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        65       2.0 1695   84.1 1391 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    1875 9.2   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    1205 9.2   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    1205 9.2   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        65       2.0 1205   84.1 1252 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.     635 9.2   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    1100 9.2   0  56   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  36   2
       120        63       2.0 1100   84.1 1181 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.     870 9.2   0  32   30.
```

```
  1
WB         Rt7A aprchAG  1388.  2708.   655.  2720.     765 9.2   0  44   30.
  1
WB         Rt7A aprchAG   655.  2720.   387.  2730.     765 9.2   0  56   30.
  2
WB         Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        63       2.0  765   84.1 1009 1 3
  1
WB         Rt7A deparAG   386.  2733.  -609.  2763.    1385 9.2   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 4 Opt 1/2 2030 AM - 4B1AM30.DAT                 RUN: Site 4 Opt 1/2 2030 AM
      DATE: 05/08/2009   TIME: 08:06:47.18


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG  1695.   9.2    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG  1695.   9.2    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     389.6    2508.7 *     150.   181. AG   489. 100.0    .0 48.0  .72   7.6
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG  1875.   9.2    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG  1205.   9.2    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG  1205.   9.2    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     357.8    2871.0 *     107.     1. AG   489. 100.0    .0 48.0  .57   5.4
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG   635.   9.2    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG  1100.   9.2    .0 56.0
      10. EB        Rt7A aprch*    309.0    2719.0    -283.0    2736.3 *     592.   272. AG   237. 100.0    .0 36.0 1.06  30.1
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG   870.   9.2    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   765.   9.2    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   765.   9.2    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     546.8    2724.3 *      88.    92. AG   355. 100.0    .0 36.0  .57   4.5
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG  1385.   9.2    .0 44.0
1
                                                                                                                 PAGE  2
      JOB: Site 4 Opt 1/2 2030 AM - 4B1AM30.DAT                 RUN: Site 4 Opt 1/2 2030 AM
      DATE: 05/08/2009   TIME: 08:06:47.18

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       65        2.0      1695        1391      84.10      1        3
       7. SB        Rt4 aprch *     120       65        2.0      1205        1252      84.10      1        3
      10. EB        Rt7A aprch*     120       63        2.0      1100        1181      84.10      1        3
      14. WB        Rt7A aprch*     120       63        2.0       765        1009      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z       *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0    *
      2. SW 164 W             *       151.0     2697.0       5.0    *
      3. SW 82 W              *       234.0     2693.0       5.0    *
      4. SW CNR               *       310.0     2683.0       5.0    *
      5. SW 82 S              *       316.0     2608.0       5.0    *
      6. SW 164 S             *       313.0     2527.0       5.0    *
      7. SW MID S             *       311.0     2362.0       5.0    *
      8. SE MID S             *       428.0     2361.0       5.0    *
      9. SE 164 S             *       431.0     2516.0       5.0    *
     10. SE 82 S              *       432.0     2598.0       5.0    *
     11. SE CNR               *       448.0     2662.0       5.0    *
     12. SE 82 E              *       506.0     2676.0       5.0    *
     13. SE 164 E             *       589.0     2673.0       5.0    *
     14. SE MID E             *       744.0     2669.0       5.0    *
     15. NE MID E             *       744.0     2746.0       5.0    *
     16. NE 164 E             *       588.0     2753.0       5.0    *
     17. NE 82 E              *       506.0     2757.0       5.0    *
     18. NE CNR               *       440.0     2763.0       5.0    *
     19. NE 82 N              *       433.0     2827.0       5.0    *
     20. NE 164 N             *       433.0     2911.0       5.0    *
     21. NE MID N             *       436.0     3044.0       5.0    *
     22. NW MID N             *       328.0     3045.0       5.0    *
     23. NW 164 N             *       323.0     2917.0       5.0    *
     24. NW 82 N              *       320.0     2833.0       5.0    *
     25. NW CNR               *       313.0     2765.0       5.0    *
     26. NW 82 W              *       247.0     2766.0       5.0    *
     27. NW 164 W             *       166.0     2767.0       5.0    *
     28. NW MID W             *       -36.0     2773.0       5.0    *
1
                                                                                                                 PAGE  3
      JOB: Site 4 Opt 1/2 2030 AM - 4B1AM30.DAT                 RUN: Site 4 Opt 1/2 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.3   1.3   1.5   1.7   1.0   1.0    .9   1.1   1.5   1.3   1.2   1.2    .5    .4    .0    .1    .1    .5    .7    .7
   5.  *   1.3   1.3   1.5   1.7   1.3   1.2    .9    .9   1.1   1.2    .8   1.2    .4    .4    .0    .0    .1    .4    .6    .6
  10.  *   1.3   1.5   1.6   2.0   1.3   1.3   1.1    .6    .9    .7    .8   1.1    .4    .4    .0    .0    .0    .2    .3    .5
  15.  *   1.3   1.5   1.8   2.0   1.3   1.2   1.1    .4    .6    .6    .8   1.1    .4    .4    .0    .0    .0    .1    .2    .2
  20.  *   1.3   1.5   1.8   2.0   1.3   1.2   1.2    .3    .5    .6    .7   1.1    .4    .4    .0    .0    .0    .1    .1    .1
  25.  *   1.4   1.5   1.9   2.0   1.1   1.3   1.1    .1    .3    .5    .8   1.0    .4    .4    .0    .0    .0    .0    .1    .1
  30.  *   1.5   1.7   1.9   1.7   1.2   1.4    .9    .0    .3    .5    .8   1.0    .4    .4    .0    .0    .0    .0    .0    .1
  35.  *   1.6   1.7   2.0   1.6   1.4   1.5    .9    .0    .3    .5    .8   1.0    .4    .5    .0    .0    .0    .0    .0    .0
```

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   40.  *   1.7   1.9   2.1   1.5   1.1   1.5    .7    .0    .2    .4    .8    .9    .4    .5    .0    .0    .0    .0    .0    .0
   45.  *   1.7   2.0   2.2   1.3   1.2   1.6    .6    .0    .1    .4    .9    .9    .5    .5    .0    .0    .0    .0    .0    .0
   50.  *   1.8   2.0   2.2   1.5   1.3   1.6    .6    .0    .1    .3    .9    .8    .5    .5    .0    .0    .0    .0    .0    .0
   55.  *   1.8   2.1   2.0   1.4   1.3   1.5    .5    .0    .1    .3    .8    .7    .5    .5    .0    .0    .0    .0    .0    .0
   60.  *   2.1   2.1   2.0   1.2   1.4   1.5    .5    .0    .2    .3    .6    .7    .5    .5    .0    .0    .0    .0    .0    .0
   65.  *   2.2   2.1   1.9   1.1   1.4   1.4    .5    .0    .2    .2    .6    .7    .5    .5    .0    .0    .0    .0    .0    .0
   70.  *   2.2   2.1   2.0   1.2   1.5   1.4    .5    .0    .2    .2    .6    .6    .6    .5    .1    .0    .0    .0    .0    .0
   75.  *   2.3   2.2   1.8   1.2   1.5   1.4    .5    .0    .2    .2    .5    .6    .7    .6    .1    .0    .1    .0    .0    .0
   80.  *   2.1   2.0   1.7   1.2   1.6   1.4    .5    .0    .1    .2    .5    .6    .5    .5    .1    .2    .2    .2    .0    .0
   85.  *   2.0   1.9   1.3   1.1   1.5   1.2    .5    .0    .0    .2    .4    .5    .5    .5    .3    .3    .3    .4    .0    .0
   90.  *   1.8   1.6   1.3   1.2   1.4   1.2    .5    .0    .0    .1    .3    .5    .4    .4    .3    .4    .3    .5    .0    .0
   95.  *   1.5   1.2   1.1   1.2   1.3   1.1    .5    .0    .0    .0    .2    .3    .3    .3    .4    .4    .5    .7    .2    .0
  100.  *   1.0    .9   1.0    .9   1.3   1.0    .5    .0    .0    .0    .1    .3    .3    .3    .5    .5    .7    .9    .2    .0
  105.  *    .8    .8    .9    .9   1.3    .9    .5    .0    .0    .0    .1    .1    .1    .1    .5    .6    .8   1.0    .2    .1
  110.  *    .6    .6    .7   1.1   1.3    .8    .5    .0    .0    .0    .0    .1    .1    .1    .5    .6    .9   1.2    .3    .2
  115.  *    .4    .7    .8   1.0   1.3    .7    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.0   1.2    .4    .2
  120.  *    .4    .6    .8   1.1   1.3    .6    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.0   1.3    .3    .2
  125.  *    .2    .5    .7   1.2   1.3    .6    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1   1.3    .4    .1
  130.  *    .1    .4    .7   1.2   1.2    .6    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.2   1.1    .4    .1
  135.  *    .1    .3    .6   1.2   1.2    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.2   1.1    .5    .2
  140.  *    .1    .3    .6   1.2   1.1    .5    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.2   1.0    .5    .3
  145.  *    .1    .3    .5   1.2   1.0    .6    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.3    .9    .5    .3
  150.  *    .1    .3    .4   1.1   1.0    .5    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.3    .8    .5    .4
  155.  *    .1    .2    .4   1.1    .9    .6    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.2    .7    .5    .5
  160.  *    .0    .2    .3   1.0    .8    .6    .5    .0    .0    .1    .0    .0    .0    .0    .4    .4   1.2    .6    .5    .5
  165.  *    .0    .1    .3    .8    .8    .5    .5    .1    .2    .1    .0    .0    .0    .0    .4    .4   1.2    .8    .7    .7
  170.  *    .0    .1    .2    .7    .8    .5    .5    .2    .2    .4    .2    .0    .0    .0    .4    .4   1.3    .8    .8    .7
  175.  *    .0    .0    .2    .5    .5    .5    .4    .2    .4    .4    .3    .0    .0    .0    .4    .4   1.3    .9    .9   1.0
  180.  *    .0    .0    .1    .5    .4    .4    .4    .3    .5    .8    .5    .1    .0    .0    .4    .4   1.4   1.3   1.2   1.3
  185.  *    .0    .0    .0    .2    .3    .2    .2    .5    .6   1.0    .7    .1    .1    .0    .4    .5   1.6   1.3   1.5   1.4
  190.  *    .0    .0    .0    .2    .2    .2    .2    .6    .8   1.3    .9    .3    .1    .0    .4    .5   1.7   1.5   1.5   1.4
  195.  *    .0    .0    .0    .0    .1    .1    .1    .7    .7   1.5   1.2    .4    .1    .0    .4    .5   1.8   1.6   1.5   1.7
  200.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.6   1.3    .4    .1    .1    .5    .6   1.9   1.6   1.5   1.7
  205.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.8   1.5    .6    .2    .1    .5    .9   2.0   1.4   1.5   1.9
1
                                                                                                                    PAGE  4
      JOB: Site 4 Opt 1/2 2030 AM - 4B1AM30.DAT                RUN: Site 4 Opt 1/2 2030 AM

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
  ------*------------------------------------------------------------------------------------------------------------------------
  210.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.8   1.5    .7    .3    .1    .5    .9   1.9   1.4   1.3   1.9
  215.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.8   1.5    .7    .4    .1    .5   1.0   1.9   1.2   1.4   1.7
  220.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.9   1.6    .8    .3    .1    .5   1.0   1.9   1.3   1.6   1.8
  225.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.9   1.6    .8    .4    .1    .6   1.3   2.0   1.2   1.6   1.8
  230.  *    .0    .0    .0    .0    .0    .0    .0    .5    .7   1.9   1.6    .9    .4    .1    .6   1.5   1.7   1.4   1.7   1.8
  235.  *    .1    .1    .0    .0    .0    .0    .0    .5    .8   1.9   1.5    .9    .5    .2    .6   1.5   1.6   1.4   1.9   1.6
  240.  *    .1    .1    .1    .0    .0    .0    .0    .5    .7   1.8   1.5    .9    .5    .2    .8   1.5   1.9   1.2   2.0   1.5
  245.  *    .2    .2    .1    .0    .0    .0    .0    .5    .8   1.8   1.4    .8    .6    .2    .9   1.5   1.5   1.4   2.1   1.4
  250.  *    .2    .2    .2    .2    .0    .0    .0    .6    .9   1.7   1.4    .8    .5    .3    .9   1.6   1.5   1.6   2.2   1.4
  255.  *    .4    .5    .5    .2    .0    .0    .0    .5   1.0   1.7   1.4    .9    .5    .4   1.1   1.6   1.7   1.7   2.2   1.2
  260.  *    .7    .7    .6    .4    .0    .0    .0    .5   1.1   1.7   1.5   1.0    .8    .5   1.0   1.9   1.7   2.0   2.1   1.1
  265.  *   1.0   1.1    .9    .6    .0    .0    .0    .5   1.3   1.8   1.5   1.1    .7    .8   1.2   1.7   1.8   2.1   2.0   1.1
  270.  *   1.2   1.2   1.2   1.0    .3    .0    .0    .5   1.4   2.2   1.7   1.2   1.1    .9    .9   1.5   1.6   2.0   1.8    .7
  275.  *   1.5   1.6   1.6   1.3    .3    .0    .0    .5   1.5   2.2   1.5   1.2   1.2   1.1    .9   1.4   1.3   1.9   1.8    .7
  280.  *   1.6   1.8   1.8   1.4    .4    .3    .0    .6   1.8   2.2   1.6   1.4   1.4   1.1    .9   1.0   1.2   1.7   1.5    .7
  285.  *   1.8   1.9   1.9   1.6    .6    .3    .0    .5   1.9   2.3   1.7   1.4   1.6   1.0    .7   1.0   1.1   1.5   1.4    .7
  290.  *   1.9   1.9   1.9   1.6    .7    .3    .0    .5   2.1   2.4   1.4   1.5   1.7   1.1    .3    .7    .8   1.4   1.3    .7
  295.  *   1.9   1.9   1.9   1.6    .7    .4    .1    .8   2.1   2.4   1.5   1.4   1.7    .9    .3    .5    .7   1.3   1.2    .7
  300.  *   1.9   1.9   1.8   1.5    .7    .4    .3    .8   2.2   2.4   1.3   1.6   1.5    .9    .1    .5    .7   1.4   1.2    .7
  305.  *   1.7   1.7   1.7   1.4    .7    .4    .3    .8   2.2   2.3   1.2   1.5   1.5    .8    .1    .4    .6   1.4   1.1    .7
  310.  *   1.7   1.7   1.6   1.4    .7    .4    .3    .8   2.3   2.3   1.4   1.5   1.5    .6    .1    .4    .6   1.4   1.0    .8
  315.  *   1.7   1.6   1.5   1.3    .7    .4    .3    .8   2.4   2.3   1.4   1.5   1.3    .5    .2    .3    .6   1.3   1.0    .8
  320.  *   1.6   1.5   1.5   1.2    .7    .4    .3   1.0   2.4   2.2   1.4   1.7   1.3    .6    .2    .3    .5   1.2    .9    .9
  325.  *   1.5   1.4   1.3   1.2    .6    .4    .3   1.0   2.4   2.3   1.5   1.6   1.2    .7    .2    .3    .5   1.1    .9    .9
  330.  *   1.4   1.3   1.3   1.2    .6    .4    .3   1.1   2.6   2.1   1.5   1.6   1.0    .7    .2    .3    .5   1.1   1.0    .9
  335.  *   1.3   1.3   1.3   1.1    .6    .4    .3   1.2   2.5   2.1   1.4   1.7    .9    .6    .1    .3    .5   1.1   1.0   1.0
  340.  *   1.3   1.3   1.3   1.1    .5    .4    .3   1.5   2.4   1.8   1.4   1.7    .8    .5    .1    .3    .5   1.1   1.0   1.0
  345.  *   1.3   1.3   1.3   1.2    .5    .4    .3   1.6   2.3   2.0   1.3   1.6    .8    .5    .1    .3    .4    .9   1.0   1.1
  350.  *   1.3   1.3   1.3   1.3    .7    .6    .5   1.3   2.0   1.7   1.4   1.4    .6    .4    .0    .2    .3    .8   1.0   1.0
  355.  *   1.3   1.3   1.3   1.4    .9    .7    .8   1.4   1.8   1.6   1.1   1.4    .5    .4    .0    .1    .3    .7    .9    .9
  360.  *   1.3   1.3   1.5   1.7   1.0   1.0    .9   1.1   1.5   1.3   1.2   1.2    .5    .4    .0    .1    .1    .5    .7    .7
  ------*------------------------------------------------------------------------------------------------------------------------
  MAX   *   2.3   2.2   2.2   2.0   1.6   1.6   1.2   1.6   2.6   2.4   1.7   1.7   1.7   1.1   1.2   1.9   2.0   2.1   2.2   1.9
  DEGR. *   75    75    45    15    80    45    20   345   330   290   270   320   290   290   265   260   205   265   250   205

1
                                                                                                                    PAGE  5
      JOB: Site 4 Opt 1/2 2030 AM - 4B1AM30.DAT                RUN: Site 4 Opt 1/2 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
  ------*------------------------------------------------
    0.  *    .7    .6    .6    .6    .7    .2    .0    .0
    5.  *    .6    .7    .7    .9    .9    .2    .0    .0
   10.  *    .3    .8    .8   1.0   1.2    .3    .2    .0
   15.  *    .2    .9    .9   1.2   1.5    .4    .2    .0
   20.  *    .1    .9    .9   1.3   1.8    .4    .2    .0
   25.  *    .1    .9    .9   1.4   1.8    .5    .3    .1
   30.  *    .1    .8    .9   1.4   1.9    .5    .3    .2
   35.  *    .0    .8    .9   1.5   1.9    .6    .4    .2
   40.  *    .0    .8    .8   1.6   2.0    .7    .3    .2
   45.  *    .0    .8    .7   1.6   1.9    .7    .4    .2
   50.  *    .0    .7    .7   1.6   1.9    .8    .4    .1
```

```
   55.  *    .0    .6    .6   1.6   1.8    .9    .4    .1
   60.  *    .0    .6    .6   1.7   1.8    .9    .4    .1
   65.  *    .0    .6    .6   1.8   1.7   1.0    .5    .3
   70.  *    .0    .6    .6   1.8   1.6   1.0    .6    .4
   75.  *    .0    .6    .6   1.9   1.5   1.0    .6    .5
   80.  *    .0    .6    .6   1.9   1.7   1.1    .7    .7
   85.  *    .0    .6    .6   1.9   1.7   1.3   1.1    .9
   90.  *    .0    .6    .6   1.9   1.8   1.3   1.2   1.2
   95.  *    .0    .7    .6   2.0   1.8   1.3   1.5   1.5
  100.  *    .0    .7    .6   2.2   1.8   1.3   1.8   1.8
  105.  *    .0    .6    .7   2.3   1.8   1.4   1.9   1.7
  110.  *    .0    .7    .9   2.2   1.7   1.5   1.6   1.7
  115.  *    .0    .7    .8   2.3   1.5   1.6   1.7   1.7
  120.  *    .0    .6   1.0   2.3   1.5   1.5   1.6   1.6
  125.  *    .0    .6   1.2   2.3   1.6   1.6   1.8   1.6
  130.  *    .0    .7   1.3   2.3   1.5   1.8   1.8   1.6
  135.  *    .0    .7   1.5   2.5   1.6   1.7   1.8   1.4
  140.  *    .0    .9   1.6   2.5   1.6   1.9   1.7   1.4
  145.  *    .0   1.0   1.9   2.5   1.6   1.8   1.5   1.4
  150.  *    .0   1.1   2.0   2.4   1.6   1.8   1.6   1.4
  155.  *    .2   1.2   1.9   2.2   1.6   1.8   1.6   1.3
  160.  *    .2   1.2   1.9   2.0   1.8   1.7   1.4   1.2
  165.  *    .2   1.2   2.2   2.1   1.8   1.5   1.4   1.2
  170.  *    .5   1.2   2.1   1.8   1.6   1.6   1.3   1.2
  175.  *    .7   1.4   1.9   1.7   1.7   1.4   1.3   1.2
  180.  *   1.0   1.3   1.6   1.3   1.3   1.4   1.2   1.2
  185.  *   1.3   1.2   1.3   1.1   1.4   1.2   1.2   1.2
  190.  *   1.3    .8   1.1   1.0   1.1   1.2   1.2   1.2
  195.  *   1.6    .6    .6    .6   1.1   1.2   1.2   1.2
  200.  *   1.6    .5    .6    .6   1.1   1.2   1.2   1.2
  205.  *   1.5    .4    .5    .6   1.1   1.2   1.2   1.2
1
                                                                                                                         PAGE  6
      JOB: Site 4 Opt 1/2 2030 AM - 4B1AM30.DAT                RUN: Site 4 Opt 1/2 2030 AM

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
  ------*------------------------------------------------
  210.  *   1.4    .3    .4    .6   1.2   1.2   1.2   1.2
  215.  *   1.3    .3    .4    .6   1.2   1.2   1.3   1.3
  220.  *   1.2    .3    .4    .6   1.2   1.3   1.3   1.3
  225.  *   1.2    .3    .4    .7   1.3   1.3   1.4   1.4
  230.  *   1.1    .3    .4    .7   1.4   1.4   1.4   1.4
  235.  *   1.0    .3    .4    .7   1.4   1.4   1.4   1.4
  240.  *   1.0    .3    .4    .7   1.4   1.4   1.4   1.4
  245.  *   1.0    .3    .4    .7   1.4   1.5   1.7   1.5
  250.  *   1.1    .3    .4    .7   1.6   1.7   1.7   1.6
  255.  *    .8    .0    .3    .7   1.6   1.6   1.6   1.5
  260.  *    .7    .0    .3    .5   1.5   1.5   1.6   1.4
  265.  *    .7    .0    .1    .5   1.3   1.4   1.4   1.3
  270.  *    .7    .0    .0    .3   1.2   1.2   1.2   1.0
  275.  *    .7    .0    .0    .3    .9    .9    .9    .8
  280.  *    .7    .0    .0    .0    .6    .6    .6    .5
  285.  *    .7    .0    .0    .0    .4    .4    .4    .4
  290.  *    .7    .0    .0    .0    .2    .2    .1    .1
  295.  *    .7    .0    .0    .0    .1    .1    .1    .1
  300.  *    .7    .0    .0    .0    .0    .0    .0    .0
  305.  *    .7    .0    .0    .0    .0    .0    .0    .0
  310.  *    .8    .0    .0    .0    .0    .0    .0    .0
  315.  *    .8    .0    .0    .0    .0    .0    .0    .0
  320.  *    .8    .0    .0    .0    .0    .0    .0    .0
  325.  *    .8    .0    .0    .0    .0    .0    .0    .0
  330.  *    .9    .0    .0    .0    .0    .0    .0    .0
  335.  *    .9    .1    .0    .0    .0    .0    .0    .0
  340.  *    .9    .1    .1    .1    .0    .0    .0    .0
  345.  *   1.0    .1    .2    .1    .1    .0    .0    .0
  350.  *   1.0    .3    .3    .3    .4    .0    .0    .0
  355.  *    .9    .4    .5    .4    .4    .0    .0    .0
  360.  *    .7    .6    .6    .6    .7    .2    .0    .0
  ------*------------------------------------------------
  MAX   *   1.6   1.4   2.2   2.5   2.0   1.9   1.9   1.8
  DEGR. *  195   175   165   135    40   140   105   100

  THE HIGHEST CONCENTRATION IS    2.60 PPM AT  330 DEGREES FROM REC9 .
  THE 2ND HIGHEST CONCENTRATION IS    2.50 PPM AT  135 DEGREES FROM REC24.
  THE 3RD HIGHEST CONCENTRATION IS    2.40 PPM AT  290 DEGREES FROM REC10.
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Site 4 Opt 1/2 2014 PM - 4B1AP14.DAT    60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Opt 1/2 2014 PM                   15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.     86711.4   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.     86711.4   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        62       2.0  867  102.2 1263 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    148211.4   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    200011.4   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    200011.4   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        62       2.0 2000  102.2 1357 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.    165111.4   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    171011.4   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
       120        62       2.0 1710  102.2  967 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.    116411.4   0  32   30.
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  1
WB         Rt7A aprchAG  1388.  2708.   655.  2720.    138011.4   0  44   30.
  1
WB         Rt7A aprchAG   655.  2720.   387.  2730.    138011.4   0  56   30.
  2
WB         Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        62       2.0 1380  102.2  607 1 3
  1
WB         Rt7A deparAG   386.  2733.  -609.  2763.    166011.4   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 4 Opt 1/2 2014 PM - 4B1AP14.DAT                RUN: Site 4 Opt 1/2 2014 PM
      DATE: 05/08/2009   TIME: 06:55:19.64


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*--------------------------------------*----------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG    867.  11.4    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG    867.  11.4    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     391.4    2585.8 *      73.   181. AG    567. 100.0    .0 48.0  .38   3.7
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1482.  11.4    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG   2000.  11.4    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG   2000.  11.4    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     359.0    2941.9 *     178.     1. AG    567. 100.0    .0 48.0  .82   9.0
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG   1651.  11.4    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1710.  11.4    .0 44.0
      10. EB        Rt7A aprch*    309.0    2719.0   -4312.7    2853.9 *    4624.   272. AG    283. 100.0    .0 24.0 1.97 234.9
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG   1164.  11.4    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   1380.  11.4    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   1380.  11.4    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0    2590.5    2661.6 *    2133.    92. AG    425. 100.0    .0 36.0 1.68 108.3
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1660.  11.4    .0 44.0
1
                                                                                                                PAGE  2
      JOB: Site 4 Opt 1/2 2014 PM - 4B1AP14.DAT                RUN: Site 4 Opt 1/2 2014 PM
      DATE: 05/08/2009   TIME: 06:55:19.64

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE      RATE
                              *     (SEC)   (SEC)     (SEC)     (VPH)      (VPH)    (gm/hr)
      ------------------------*------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       62       2.0       867       1263     102.20      1        3
       7. SB        Rt4 aprch *     120       62       2.0      2000       1357     102.20      1        3
      10. EB        Rt7A aprch*     120       62       2.0      1710        967     102.20      1        3
      14. WB        Rt7A aprch*     120       62       2.0      1380        607     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0    *
      2. SW 164 W             *       151.0     2697.0       5.0    *
      3. SW 82 W              *       234.0     2693.0       5.0    *
      4. SW CNR               *       310.0     2683.0       5.0    *
      5. SW 82 S              *       316.0     2608.0       5.0    *
      6. SW 164 S             *       313.0     2527.0       5.0    *
      7. SW MID S             *       311.0     2362.0       5.0    *
      8. SE MID S             *       428.0     2361.0       5.0    *
      9. SE 164 S             *       431.0     2516.0       5.0    *
     10. SE 82 S              *       432.0     2598.0       5.0    *
     11. SE CNR               *       448.0     2662.0       5.0    *
     12. SE 82 E              *       506.0     2676.0       5.0    *
     13. SE 164 E             *       589.0     2673.0       5.0    *
     14. SE MID E             *       744.0     2669.0       5.0    *
     15. NE MID E             *       744.0     2746.0       5.0    *
     16. NE 164 E             *       588.0     2753.0       5.0    *
     17. NE 82 E              *       506.0     2757.0       5.0    *
     18. NE CNR               *       440.0     2763.0       5.0    *
     19. NE 82 N              *       433.0     2827.0       5.0    *
     20. NE 164 N             *       433.0     2911.0       5.0    *
     21. NE MID N             *       436.0     3044.0       5.0    *
     22. NW MID N             *       328.0     3045.0       5.0    *
     23. NW 164 N             *       323.0     2917.0       5.0    *
     24. NW 82 N              *       320.0     2833.0       5.0    *
     25. NW CNR               *       313.0     2765.0       5.0    *
     26. NW 82 W              *       247.0     2766.0       5.0    *
     27. NW 164 W             *       166.0     2767.0       5.0    *
     28. NW MID W             *       -36.0     2773.0       5.0    *
1
                                                                                                                PAGE  3
      JOB: Site 4 Opt 1/2 2014 PM - 4B1AP14.DAT                RUN: Site 4 Opt 1/2 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
   0.  *   1.9   1.8   2.0   2.5   1.7   1.5   1.4   1.4   1.4   1.6   1.4   1.9   1.8   1.7    .0    .0    .2    .8    .9    .9
   5.  *   1.9   1.9   2.3   2.7   2.2   1.6   1.6   1.1   1.2   1.4   1.5   1.9   1.7   1.7    .0    .0    .2    .4    .7    .7
  10.  *   1.9   2.1   2.2   3.0   2.2   1.7   1.8    .7   1.1   1.2   1.3   1.7   1.7   1.7    .0    .0    .0    .3    .4    .4
  15.  *   1.9   2.2   2.5   3.0   2.2   1.9   1.7    .7    .7    .9   1.2   1.7   1.7   1.7    .0    .0    .0    .1    .2    .3
  20.  *   2.0   2.3   2.7   3.1   2.1   2.2   1.7    .4    .5    .8   1.1   1.7   1.7   1.7    .0    .0    .0    .1    .1    .1
  25.  *   2.1   2.3   2.8   2.9   2.0   2.1   1.6    .4    .5    .8   1.2   1.7   1.7   1.7    .0    .0    .0    .0    .1    .1
  30.  *   2.1   2.4   2.9   2.5   1.8   1.9   1.4    .4    .5    .8   1.2   1.7   1.7   1.7    .0    .0    .0    .0    .0    .1
  35.  *   2.1   2.6   2.9   2.5   1.7   1.9   1.4    .4    .5    .9   1.3   1.7   1.7   1.7    .0    .0    .0    .0    .0    .0
```

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 40.  *   2.2   2.8   2.9   2.3   1.7   1.7   1.3    .4    .5    .9   1.3   1.7   1.7   1.7    .0    .0    .0    .0    .0    .0
 45.  *   2.3   2.6   3.1   2.2   1.8   1.8   1.2    .4    .7    .9   1.4   1.9   1.8   1.9    .0    .0    .0    .0    .0    .0
 50.  *   2.5   2.8   2.9   2.1   2.0   1.8   1.3    .5    .7    .9   1.4   1.9   2.0   1.9    .0    .0    .0    .0    .0    .0
 55.  *   2.6   2.9   2.8   2.2   2.0   1.9   1.3    .5    .6   1.0   1.6   2.0   2.0   1.9    .0    .0    .0    .0    .0    .0
 60.  *   2.7   2.9   3.0   2.0   2.1   1.7   1.2    .5    .6   1.0   1.7   2.1   2.1   2.0    .0    .0    .1    .0    .0    .0
 65.  *   2.9   2.9   2.9   2.2   2.4   1.6   1.2    .5    .6   1.0   1.7   2.2   2.1   2.0    .2    .2    .2    .1    .0    .0
 70.  *   3.0   3.1   2.7   2.2   2.5   1.5   1.2    .5    .6   1.1   1.8   2.3   2.3   2.2    .3    .4    .3    .2    .0    .0
 75.  *   3.1   3.0   2.8   2.5   2.5   1.4    .9    .2    .6   1.0   1.8   2.3   2.3   2.2    .6    .5    .5    .5    .1    .0
 80.  *   3.2   3.0   2.8   2.6   2.6   1.3    .9    .2    .6   1.0   1.8   2.3   2.3   2.2   1.1   1.0   1.0    .8    .1    .0
 85.  *   3.1   3.0   2.6   2.5   2.3   1.2    .8    .1    .5    .7   1.6   2.1   2.0   1.9   1.5   1.6   1.4   1.2    .4    .1
 90.  *   3.0   2.6   2.4   2.5   2.2    .9    .8    .1    .2    .6   1.4   1.8   1.8   1.7   2.2   2.1   1.9   1.8    .6    .2
 95.  *   2.2   2.2   2.0   2.1   1.9    .8    .7    .0    .1    .5    .9   1.4   1.3   1.3   2.6   2.5   2.4   2.2    .8    .4
100.  *   1.6   1.6   1.7   1.8   1.5    .8    .6    .0    .1    .1    .6    .9    .9    .9   2.9   2.8   2.8   2.5   1.0    .6
105.  *    .9   1.2   1.1   1.7   1.3    .7    .7    .0    .0    .1    .3    .6    .6    .6   3.1   2.9   2.8   2.6   1.2    .6
110.  *    .6    .9    .9   1.4   1.1    .7    .7    .0    .0    .0    .1    .2    .2    .2   3.0   2.9   2.9   2.5   1.2    .7
115.  *    .3    .6    .8   1.4   1.0    .7    .7    .0    .0    .0    .0    .2    .2    .2   2.8   2.7   2.6   2.4   1.2    .7
120.  *    .2    .5    .7   1.3    .9    .7    .7    .0    .0    .0    .0    .0    .0    .0   2.7   2.5   2.6   2.2   1.2    .7
125.  *    .2    .5    .7   1.4    .9    .8    .8    .0    .0    .0    .0    .0    .0    .0   2.5   2.5   2.4   2.0   1.2    .7
130.  *    .1    .4    .6   1.3    .9    .8    .8    .0    .0    .0    .0    .0    .0    .0   2.4   2.4   2.3   1.9   1.0    .7
135.  *    .1    .3    .5   1.3    .9    .8    .8    .0    .0    .0    .0    .0    .0    .0   2.4   2.3   2.3   1.7   1.0    .7
140.  *    .1    .3    .5   1.3    .8    .8    .8    .0    .0    .0    .0    .0    .0    .0   2.2   2.2   2.1   1.6   1.0    .6
145.  *    .1    .2    .5   1.2    .9    .9    .9    .0    .0    .0    .0    .0    .0    .0   2.1   2.1   2.1   1.4    .9    .6
150.  *    .1    .3    .4   1.1    .9   1.0    .9    .0    .0    .0    .0    .0    .0    .0   2.1   2.1   2.0   1.3    .8    .6
155.  *    .1    .3    .5   1.1   1.1    .9    .9    .0    .0    .0    .0    .0    .0    .0   2.1   2.0   1.9   1.2    .7    .7
160.  *    .1    .3    .5   1.1   1.1   1.0   1.0    .0    .0    .0    .0    .0    .0    .0   2.0   2.0   1.9   1.0    .6    .7
165.  *    .0    .3    .4   1.0   1.0   1.0   1.0    .1    .0    .1    .0    .0    .0    .0   2.0   2.0   1.9    .9    .8    .5
170.  *    .0    .1    .3    .9   1.0   1.0   1.0    .2    .3    .3    .0    .0    .0    .0   2.0   2.0   1.9   1.1    .9    .9
175.  *    .0    .1    .3    .8   1.0    .8    .8    .3    .3    .3    .3    .0    .0    .0   2.1   2.0   1.9   1.3   1.0   1.0
180.  *    .0    .0    .1    .7    .7    .7    .7    .4    .4    .5    .4    .1    .0    .0   2.1   1.9   2.0   1.5   1.2   1.3
185.  *    .0    .0    .1    .5    .6    .5    .5    .5    .7    .7    .6    .2    .0    .0   2.1   2.1   2.1   1.6   1.5   1.6
190.  *    .0    .0    .0    .2    .3    .3    .3    .6    .7    .7    .7    .3    .2    .0   2.0   2.2   2.4   1.9   1.6   1.9
195.  *    .0    .0    .0    .1    .2    .2    .2    .8    .8    .8    .8    .4    .2    .0   2.0   2.2   2.3   1.9   1.9   2.0
200.  *    .0    .0    .0    .1    .1    .1    .1    .8    .8    .9   1.1    .4    .2    .1   2.1   2.2   2.3   1.8   1.8   2.0
205.  *    .0    .0    .0    .0    .1    .1    .1    .8    .8    .8   1.2    .4    .3    .1   2.1   2.4   2.3   1.7   1.8   2.3
1
                                                                                                                   PAGE  4
      JOB: Site 4 Opt 1/2 2014 PM - 4B1AP14.DAT                RUN: Site 4 Opt 1/2 2014 PM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8    .8   1.3    .4    .3    .2   2.2   2.3   2.5   1.8   1.7   2.2
215.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7    .8   1.3    .4    .3    .2   2.2   2.5   2.5   1.8   2.0   2.4
220.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7    .9   1.5    .6    .3    .1   2.3   2.5   2.5   1.8   1.8   2.5
225.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7    .9   1.6    .7    .3    .1   2.3   2.6   2.4   1.6   2.0   2.7
230.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.0   1.6    .8    .4    .1   2.6   2.8   2.3   1.8   2.3   2.7
235.  *    .1    .0    .0    .0    .0    .0    .0    .6    .6    .9   1.7    .7    .4    .1   2.8   2.8   2.4   1.8   2.4   2.6
240.  *    .1    .1    .0    .0    .0    .0    .0    .6    .6   1.0   1.6    .8    .5    .2   2.8   2.7   2.5   2.1   2.5   2.6
245.  *    .2    .1    .1    .0    .0    .0    .0    .5    .6   1.1   1.5    .8    .5    .3   3.0   3.0   2.5   2.2   2.6   2.7
250.  *    .3    .2    .2    .2    .0    .0    .0    .5    .6   1.3   1.5    .9    .5    .4   3.2   2.7   2.3   2.4   2.8   2.6
255.  *    .5    .5    .5    .4    .0    .0    .0    .5    .6   1.4   1.6   1.1    .8    .6   3.3   3.1   2.4   2.8   2.8   2.6
260.  *    .9    .9    .8    .6    .1    .0    .0    .6    .6   1.7   1.7   1.3    .9   1.0   3.2   3.0   2.7   2.7   2.9   2.4
265.  *   1.4   1.4   1.3   1.0    .3    .1    .0    .6    .7   2.0   1.7   1.4   1.5   1.2   3.4   2.9   2.7   3.0   2.8   2.4
270.  *   1.9   2.0   1.9   1.5    .5    .2    .1    .7    .8   2.3   2.0   1.8   1.7   1.6   2.8   2.6   2.4   2.8   2.6   2.2
275.  *   2.3   2.4   2.3   1.8    .7    .4    .1    .6   1.0   2.6   2.1   2.1   2.2   2.2   2.3   2.1   2.1   2.6   2.3   1.9
280.  *   2.5   2.5   2.5   2.1    .8    .5    .2    .8   1.1   2.7   2.3   2.3   2.5   2.6   1.8   1.8   1.9   2.4   2.2   1.8
285.  *   2.8   2.7   2.6   2.2    .9    .5    .2    .8   1.1   2.9   2.2   2.2   2.3   2.5   1.3   1.4   1.6   2.0   2.0   1.6
290.  *   2.7   2.7   2.6   2.2   1.0    .6    .4   1.0   1.3   3.0   1.9   2.2   2.4   2.7    .9   1.2   1.4   1.9   1.9   1.5
295.  *   2.6   2.5   2.5   2.0   1.0    .7    .4    .9   1.3   3.0   2.1   2.2   2.5   2.5    .5    .9   1.2   1.7   1.9   1.4
300.  *   2.5   2.4   2.3   2.0   1.0    .7    .4    .9   1.4   2.9   1.9   2.1   2.6   2.3    .4    .8   1.2   1.7   1.9   1.3
305.  *   2.4   2.3   2.3   2.0   1.0    .7    .4    .9   1.3   2.9   1.8   2.2   2.4   2.4    .4    .8   1.1   1.8   1.9   1.2
310.  *   2.3   2.2   2.1   1.8   1.0    .6    .4   1.0   1.4   2.9   1.9   2.3   2.5   2.3    .4    .6   1.0   1.8   1.9   1.2
315.  *   2.1   2.1   2.0   1.8    .8    .6    .4   1.1   1.5   2.7   2.1   2.5   2.5   2.3    .2    .6   1.1   1.8   1.9   1.2
320.  *   2.1   2.0   2.0   1.7    .8    .6    .4   1.0   1.6   2.6   1.9   2.5   2.4   2.0    .2    .5   1.1   1.8   1.9   1.2
325.  *   2.0   2.0   1.9   1.6    .8    .6    .3   1.0   1.8   2.7   2.0   2.6   2.3   1.9    .2    .5    .9   1.7   1.8   1.1
330.  *   1.9   1.9   1.8   1.6    .8    .6    .3   1.1   1.7   2.8   2.1   2.5   2.2   1.9    .2    .5    .8   1.8   1.6   1.2
335.  *   1.9   1.9   1.8   1.5    .8    .6    .3   1.3   2.0   2.6   2.3   2.5   2.2   1.9    .2    .4    .7   1.7   1.7   1.2
340.  *   1.9   1.9   1.8   1.6   1.0    .7    .4   1.4   2.0   2.5   2.0   2.4   2.0   1.9    .2    .4    .7   1.6   1.5   1.3
345.  *   1.9   1.9   1.8   1.7    .9    .9    .4   1.7   2.3   2.5   2.3   2.3   2.0   1.8    .1    .2    .6   1.4   1.6   1.3
350.  *   1.9   1.9   1.8   1.9   1.4   1.1    .9   1.4   2.1   2.1   1.9   2.3   1.9   1.6    .0    .2    .4   1.2   1.3   1.3
355.  *   1.9   1.9   1.9   2.1   1.6   1.3   1.1   1.5   2.0   2.0   1.7   2.0   1.9   1.6    .0    .2    .3    .9   1.2   1.0
360.  *   1.9   1.8   2.0   2.5   1.7   1.5   1.4   1.4   1.4   1.6   1.4   1.9   1.8   1.7    .0    .0    .2    .8    .9    .9
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   3.2   3.1   3.1   3.1   2.6   2.2   1.8   1.7   2.3   3.0   2.3   2.6   2.6   2.7   3.4   3.1   2.9   3.0   2.9   2.7
DEGR. *   80    70    45    20    80    20    10   345   345   290   280   325   300   290   265   255   110   265   260   225

1
                                                                                                                   PAGE  5
      JOB: Site 4 Opt 1/2 2014 PM - 4B1AP14.DAT                RUN: Site 4 Opt 1/2 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
------*------------------------------------------------
  0.  *    .8   1.0   1.0   1.4   1.3    .2    .1    .0
  5.  *    .7   1.1   1.3   1.9   1.7    .4    .1    .0
 10.  *    .4   1.3   1.5   2.2   2.2    .5    .2    .0
 15.  *    .2   1.4   1.6   2.6   2.4    .6    .3    .0
 20.  *    .1   1.4   1.8   2.7   2.7    .8    .3    .1
 25.  *    .1   1.4   1.7   2.8   2.8    .9    .4    .2
 30.  *    .1   1.3   1.8   2.9   2.7   1.0    .6    .2
 35.  *    .0   1.3   1.8   2.8   2.7   1.1    .5    .2
 40.  *    .0   1.2   1.9   2.8   2.6   1.1    .7    .2
 45.  *    .0   1.1   1.7   2.8   2.6   1.3    .7    .2
 50.  *    .0   1.0   1.8   2.7   2.5   1.3    .7    .2
```

```
  55.  *    .0   1.0   1.9   2.6   2.4   1.2    .7    .4
  60.  *    .0   1.0   2.0   2.6   2.3   1.2    .7    .5
  65.  *    .0   1.0   2.0   2.4   2.2   1.2    .9    .4
  70.  *    .0    .9   2.1   2.4   2.2   1.4   1.0    .5
  75.  *    .0    .9   2.3   2.5   2.3   1.5   1.0    .8
  80.  *    .0    .9   2.5   2.5   2.7   1.9   1.5   1.1
  85.  *    .0   1.0   2.6   2.9   2.9   2.0   1.8   1.6
  90.  *    .1   1.1   2.8   3.2   3.1   2.4   2.2   2.2
  95.  *    .1   1.1   3.0   3.4   3.3   2.5   2.4   2.5
 100.  *    .2   1.2   3.2   3.4   3.2   2.4   2.6   2.8
 105.  *    .3   1.4   3.0   3.5   3.1   2.7   2.8   2.5
 110.  *    .4   1.5   3.2   3.5   2.9   2.7   2.6   2.5
 115.  *    .5   1.5   3.3   3.5   2.8   2.4   2.6   2.4
 120.  *    .5   1.5   3.3   3.3   2.3   2.2   2.5   2.3
 125.  *    .5   1.5   3.4   3.3   2.4   2.4   2.3   2.2
 130.  *    .5   1.5   3.3   3.2   2.3   2.4   2.3   2.0
 135.  *    .5   1.8   3.3   3.3   2.2   2.3   2.2   1.9
 140.  *    .5   1.8   3.3   3.2   2.4   2.2   2.2   1.9
 145.  *    .6   1.8   3.3   3.1   2.2   2.2   2.1   1.8
 150.  *    .5   1.9   3.5   3.1   2.3   2.2   2.0   1.8
 155.  *    .5   2.1   3.6   2.9   2.3   2.1   2.0   1.8
 160.  *    .5   2.3   3.5   2.9   2.1   2.2   2.0   1.8
 165.  *    .5   2.6   3.4   2.7   2.4   2.1   1.9   1.6
 170.  *    .8   2.6   3.0   2.5   2.3   2.0   1.8   1.7
 175.  *   1.0   2.3   2.7   2.3   2.3   1.9   1.8   1.7
 180.  *   1.4   2.1   2.3   2.0   2.2   1.8   1.7   1.6
 185.  *   1.6   1.8   2.0   1.6   1.8   1.7   1.6   1.6
 190.  *   1.9   1.2   1.4   1.2   1.7   1.7   1.7   1.7
 195.  *   2.3    .9   1.1   1.0   1.7   1.6   1.7   1.7
 200.  *   2.2    .6   1.0    .9   1.6   1.6   1.6   1.6
 205.  *   2.2    .5    .8   1.0   1.6   1.6   1.7   1.7
1
                                                                                                                PAGE  6
      JOB: Site 4 Opt 1/2 2014 PM - 4B1AP14.DAT                RUN: Site 4 Opt 1/2 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   2.1    .4    .7   1.0   1.6   1.6   1.7   1.7
 215.  *   1.9    .5    .7   1.0   1.6   1.7   1.7   1.7
 220.  *   1.8    .4    .7   1.0   1.6   1.7   1.7   1.7
 225.  *   1.8    .4    .7   1.0   1.7   1.8   1.8   1.8
 230.  *   1.6    .4    .7   1.0   1.8   1.8   1.8   1.8
 235.  *   1.4    .4    .7    .9   1.8   1.9   2.0   2.0
 240.  *   1.5    .4    .7   1.0   2.0   2.1   2.1   2.1
 245.  *   1.4    .4    .7   1.0   2.1   2.1   2.1   2.1
 250.  *   1.3    .4    .7   1.0   2.1   2.1   2.2   2.2
 255.  *   1.4    .4    .7   1.0   2.3   2.3   2.3   2.3
 260.  *   1.3    .2    .5    .9   2.3   2.3   2.3   2.3
 265.  *   1.2    .2    .5    .8   2.1   2.1   2.2   2.1
 270.  *   1.0    .1    .4    .6   1.8   1.8   1.9   1.8
 275.  *   1.0    .1    .1    .4   1.4   1.4   1.4   1.4
 280.  *   1.0    .0    .1    .2    .9   1.0   1.0   1.0
 285.  *    .9    .0    .0    .1    .6    .6    .6    .6
 290.  *    .9    .0    .0    .0    .4    .4    .4    .4
 295.  *    .9    .0    .0    .0    .1    .1    .1    .1
 300.  *    .9    .0    .0    .0    .0    .1    .1    .1
 305.  *    .9    .0    .1    .0    .0    .0    .0    .0
 310.  *    .9    .0    .1    .1    .0    .0    .0    .0
 315.  *   1.1    .0    .1    .1    .0    .0    .0    .0
 320.  *   1.1    .0    .1    .1    .0    .0    .0    .0
 325.  *   1.1    .1    .1    .1    .0    .0    .0    .0
 330.  *   1.2    .1    .1    .1    .0    .0    .0    .0
 335.  *   1.2    .1    .1    .1    .1    .0    .0    .0
 340.  *   1.2    .2    .2    .2    .1    .0    .0    .0
 345.  *   1.3    .3    .3    .4    .3    .0    .0    .0
 350.  *   1.2    .5    .5    .8    .6    .0    .0    .0
 355.  *   1.0    .7    .7   1.0    .9    .1    .0    .0
 360.  *    .8   1.0   1.0   1.4   1.3    .2    .1    .0
 ------*------------------------------------------------
 MAX   *   2.3   2.6   3.6   3.5   3.3   2.7   2.8   2.8
 DEGR. *  195   170   155   105    95   105   105   100

 THE HIGHEST CONCENTRATION IS    3.60 PPM AT  155 DEGREES FROM REC23.
 THE 2ND HIGHEST CONCENTRATION IS    3.50 PPM AT  105 DEGREES FROM REC24.
 THE 3RD HIGHEST CONCENTRATION IS    3.40 PPM AT  265 DEGREES FROM REC15.
```

```
Site 4 Opt 1/2 2030 PM - 4B1PM30.DAT    60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Opt 1/2 2030 PM                   15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.     780 9.2   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.     780 9.2   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        65       2.0  780   84.1 1289 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    1275 9.2   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    2020 9.2   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    2020 9.2   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        65       2.0 2020   84.1 1422 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.    1670 9.2   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    1530 9.2   0  56   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  36   2
       120        63       2.0 1530   84.1 1160 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.    1185 9.2   0  32   30.
```

```
  1
WB         Rt7A aprchAG  1388.  2708.   655.  2720.    1185 9.2   0  44   30.
  1
WB         Rt7A aprchAG   655.  2720.   387.  2730.    1185 9.2   0  56   30.
  2
WB         Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        63       2.0 1185   84.1  763 1 3
  1
WB         Rt7A deparAG   386.  2733.  -609.  2763.    1385 9.2   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 4 Opt 1/2 2030 PM - 4B1PM30.DAT                 RUN: Site 4 Opt 1/2 2030 PM
      DATE: 05/08/2009   TIME: 08:14:49.31


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH   EF       H   W    V/C QUEUE
                              *   X1         Y1       X2         Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.    1. AG     780.   9.2    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.    1. AG     780.   9.2    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     391.5    2589.7 *      69.  181. AG     489. 100.0    .0 48.0  .36   3.5
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.    1. AG    1275.   9.2    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.  180. AG    2020.   9.2    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.  181. AG    2020.   9.2    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     359.3    2956.5 *     193.    1. AG     489. 100.0    .0 48.0  .84   9.8
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.  181. AG    1670.   9.2    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.   92. AG    1530.   9.2    .0 56.0
      10. EB        Rt7A aprch*    309.0    2719.0   -2608.2    2804.2 *    2918.  272. AG     237. 100.0    .0 36.0 1.49 148.3
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.   92. AG    1185.   9.2    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.  271. AG    1185.   9.2    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.  272. AG    1185.   9.2    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0    1280.6    2701.8 *     822.   92. AG     355. 100.0    .0 36.0 1.18  41.8
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.  272. AG    1385.   9.2    .0 44.0
1
                                                                                                                 PAGE  2
      JOB: Site 4 Opt 1/2 2030 PM - 4B1PM30.DAT                 RUN: Site 4 Opt 1/2 2030 PM
      DATE: 05/08/2009   TIME: 08:14:49.31

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*---------------------------------------------------------------------------------
       3. NB        Rt4 aprch *    120        65       2.0       780       1289      84.10      1        3
       7. SB        Rt4 aprch *    120        65       2.0      2020       1422      84.10      1        3
      10. EB        Rt7A aprch*    120        63       2.0      1530       1160      84.10      1        3
      14. WB        Rt7A aprch*    120        63       2.0      1185        763      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0        5.0   *
      2. SW 164 W             *       151.0     2697.0        5.0   *
      3. SW 82 W              *       234.0     2693.0        5.0   *
      4. SW CNR               *       310.0     2683.0        5.0   *
      5. SW 82 S              *       316.0     2608.0        5.0   *
      6. SW 164 S             *       313.0     2527.0        5.0   *
      7. SW MID S             *       311.0     2362.0        5.0   *
      8. SE MID S             *       428.0     2361.0        5.0   *
      9. SE 164 S             *       431.0     2516.0        5.0   *
     10. SE 82 S              *       432.0     2598.0        5.0   *
     11. SE CNR               *       448.0     2662.0        5.0   *
     12. SE 82 E              *       506.0     2676.0        5.0   *
     13. SE 164 E             *       589.0     2673.0        5.0   *
     14. SE MID E             *       744.0     2669.0        5.0   *
     15. NE MID E             *       744.0     2746.0        5.0   *
     16. NE 164 E             *       588.0     2753.0        5.0   *
     17. NE 82 E              *       506.0     2757.0        5.0   *
     18. NE CNR               *       440.0     2763.0        5.0   *
     19. NE 82 N              *       433.0     2827.0        5.0   *
     20. NE 164 N             *       433.0     2911.0        5.0   *
     21. NE MID N             *       436.0     3044.0        5.0   *
     22. NW MID N             *       328.0     3045.0        5.0   *
     23. NW 164 N             *       323.0     2917.0        5.0   *
     24. NW 82 N              *       320.0     2833.0        5.0   *
     25. NW CNR               *       313.0     2765.0        5.0   *
     26. NW 82 W              *       247.0     2766.0        5.0   *
     27. NW 164 W             *       166.0     2767.0        5.0   *
     28. NW MID W             *       -36.0     2773.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 4 Opt 1/2 2030 PM - 4B1PM30.DAT                 RUN: Site 4 Opt 1/2 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *   1.5   1.5   1.6   2.0   1.4   1.2   1.2    .9   1.3   1.1   1.1   1.5   1.3   1.2    .0    .0    .2    .7    .7    .6
   5.  *   1.5   1.6   1.9   2.3   1.7   1.5   1.3   1.0   1.0   1.0   1.0   1.4   1.3   1.2    .0    .0    .1    .3    .4    .4
  10.  *   1.5   1.6   1.8   2.4   1.8   1.5   1.1    .7    .8    .8    .8   1.4   1.3   1.3    .0    .0    .0    .3    .3    .3
  15.  *   1.4   1.6   1.9   2.4   1.7   1.8   1.2    .4    .6    .5   1.0   1.4   1.3   1.3    .0    .0    .0    .1    .1    .2
  20.  *   1.5   1.6   2.1   2.5   1.6   1.4   1.2    .4    .4    .5    .9   1.4   1.2   1.3    .0    .0    .0    .0    .1    .1
  25.  *   1.5   1.8   2.2   2.3   1.5   1.5   1.2    .3    .5    .5    .9   1.4   1.2   1.3    .0    .0    .0    .0    .1    .1
  30.  *   1.7   1.8   2.3   2.0   1.7   1.6   1.2    .3    .5    .6   1.0   1.4   1.3   1.4    .0    .0    .0    .0    .0    .0
  35.  *   1.8   2.0   2.4   1.9   1.5   1.4   1.1    .3    .5    .6   1.1   1.4   1.3   1.4    .0    .0    .0    .0    .0    .0
```

```
   40.  *   1.8   2.2   2.4   1.8   1.5   1.4   1.0    .3    .5    .6   1.1   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0
   45.  *   1.9   2.2   2.4   1.7   1.4   1.4   1.0    .4    .5    .6   1.2   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0
   50.  *   2.3   2.3   2.3   1.7   1.4   1.5    .9    .4    .5    .6   1.2   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0
   55.  *   2.2   2.5   2.2   1.5   1.5   1.4   1.0    .4    .5    .7   1.2   1.6   1.6   1.6    .0    .0    .0    .0    .0    .0
   60.  *   2.3   2.5   2.2   1.6   1.7   1.3    .9    .4    .5    .9   1.2   1.7   1.7   1.6    .0    .0    .0    .0    .0    .0
   65.  *   2.5   2.6   2.2   1.7   1.8   1.2    .9    .3    .5    .9   1.4   1.8   1.6   1.7    .1    .1    .1    .0    .0    .0
   70.  *   2.6   2.3   2.4   1.8   2.0   1.1    .6    .1    .5    .7   1.4   1.7   1.7   1.7    .3    .1    .2    .1    .0    .0
   75.  *   2.7   2.5   2.1   2.1   2.0   1.1    .6    .1    .4    .7   1.4   1.9   1.8   1.7    .4    .4    .4    .3    .0    .0
   80.  *   2.6   2.5   2.3   1.9   2.0    .9    .6    .0    .4    .6   1.2   1.8   1.8   1.6    .8    .7    .7    .6    .1    .0
   85.  *   2.4   2.4   2.1   2.0   1.7    .7    .6    .0    .1    .5   1.1   1.6   1.4   1.3   1.1   1.1   1.0    .9    .1    .0
   90.  *   2.0   2.1   2.0   1.7   1.7    .6    .6    .0    .1    .4    .9   1.3   1.2   1.2   1.4   1.4   1.4   1.2    .3    .1
   95.  *   1.8   1.7   1.8   1.7   1.3    .5    .5    .0    .0    .2    .6    .9    .8    .8   1.9   1.8   1.8   1.6    .5    .1
  100.  *   1.3   1.2   1.4   1.6   1.1    .5    .5    .0    .0    .1    .4    .6    .6    .6   2.1   2.0   2.0   1.7    .6    .3
  105.  *   1.0   1.1   1.1   1.2    .9    .5    .5    .0    .0    .0    .2    .3    .4    .2   2.3   2.2   2.3   1.9    .8    .4
  110.  *    .6    .8    .9   1.1    .8    .5    .5    .0    .0    .0    .0    .2    .2    .2   2.3   2.4   2.2   2.0    .9    .5
  115.  *    .4    .5    .7   1.0    .7    .5    .5    .0    .0    .0    .0    .0    .0    .0   2.3   2.2   2.2   1.8    .9    .5
  120.  *    .3    .4    .6   1.0    .7    .5    .5    .0    .0    .0    .0    .0    .0    .0   2.2   2.1   2.1   1.6    .9    .6
  125.  *    .2    .4    .6   1.0    .7    .6    .6    .0    .0    .0    .0    .0    .0    .0   2.0   1.9   1.8   1.6    .8    .6
  130.  *    .2    .3    .6   1.0    .7    .6    .6    .0    .0    .0    .0    .0    .0    .0   1.9   1.8   1.8   1.5    .8    .6
  135.  *    .2    .4    .5   1.0    .6    .6    .6    .0    .0    .0    .0    .0    .0    .0   1.8   1.8   1.7   1.4    .8    .5
  140.  *    .2    .3    .4   1.0    .7    .6    .6    .0    .0    .0    .0    .0    .0    .0   1.8   1.6   1.7   1.3    .8    .5
  145.  *    .2    .2    .3    .9    .7    .6    .7    .0    .0    .0    .0    .0    .0    .0   1.7   1.6   1.6   1.1    .7    .5
  150.  *    .1    .2    .3    .8    .7    .8    .8    .0    .0    .0    .0    .0    .0    .0   1.6   1.5   1.5   1.0    .7    .5
  155.  *    .1    .2    .3    .8    .7    .8    .8    .0    .0    .0    .0    .0    .0    .0   1.6   1.5   1.5    .9    .6    .5
  160.  *    .1    .1    .3    .8    .8    .8    .8    .0    .0    .0    .0    .0    .0    .0   1.5   1.5   1.5    .8    .6    .5
  165.  *    .0    .1    .3    .9    .9    .9    .7    .0    .0    .0    .0    .0    .0    .0   1.5   1.5   1.5    .8    .5    .5
  170.  *    .0    .1    .3    .8    .9    .7    .7    .1    .0    .2    .0    .0    .0    .0   1.5   1.5   1.5   1.0    .9    .7
  175.  *    .0    .1    .2    .7    .8    .7    .7    .2    .3    .3    .1    .0    .0    .0   1.5   1.5   1.5    .9    .8    .8
  180.  *    .0    .0    .1    .5    .6    .6    .6    .3    .3    .4    .3    .1    .0    .0   1.6   1.6   1.6   1.1   1.0    .9
  185.  *    .0    .0    .1    .3    .4    .5    .5    .4    .4    .5    .4    .1    .0    .0   1.6   1.6   1.6   1.3    .9   1.2
  190.  *    .0    .0    .0    .2    .3    .2    .2    .4    .6    .6    .5    .2    .1    .0   1.5   1.6   1.6   1.3   1.0   1.3
  195.  *    .0    .0    .0    .1    .2    .2    .2    .6    .6    .6    .8    .4    .1    .0   1.5   1.6   1.9   1.4   1.2   1.6
  200.  *    .0    .0    .0    .1    .1    .1    .1    .6    .6    .7    .8    .4    .2    .0   1.6   1.6   1.8   1.5   1.4   1.6
  205.  *    .0    .0    .0    .0    .1    .1    .1    .6    .6    .6    .9    .3    .2    .1   1.6   1.6   1.9   1.4   1.3   1.7
1
                                                                                                                        PAGE  4
      JOB: Site 4 Opt 1/2 2030 PM - 4B1PM30.DAT                RUN: Site 4 Opt 1/2 2030 PM

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
  ------*-------------------------------------------------------------------------------------------------------------------------
  210.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6   1.0    .4    .1    .1   1.7   1.7   1.9   1.4   1.4   1.7
  215.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6   1.1    .4    .1    .1   1.8   1.8   2.0   1.3   1.5   1.9
  220.  *    .1    .0    .0    .0    .0    .0    .0    .5    .5    .6   1.2    .5    .2    .1   1.8   2.0   2.1   1.4   1.5   1.9
  225.  *    .1    .1    .0    .0    .0    .0    .0    .5    .5    .6   1.3    .5    .2    .1   1.9   2.0   2.1   1.3   1.7   2.0
  230.  *    .1    .1    .1    .0    .0    .0    .0    .5    .5    .7   1.4    .6    .3    .1   1.9   2.1   1.9   1.4   1.9   2.1
  235.  *    .1    .1    .1    .0    .0    .0    .0    .5    .5    .7   1.3    .6    .3    .1   2.1   2.2   1.9   1.4   1.9   2.0
  240.  *    .1    .1    .1    .0    .0    .0    .0    .5    .5    .8   1.3    .7    .3    .1   2.2   2.2   1.8   1.3   2.0   2.2
  245.  *    .2    .2    .2    .0    .0    .0    .0    .5    .5    .8   1.3    .7    .4    .1   2.4   2.3   2.0   1.6   2.1   2.1
  250.  *    .4    .3    .3    .2    .0    .0    .0    .5    .5    .9   1.2    .7    .4    .2   2.4   2.3   2.0   1.8   2.2   2.1
  255.  *    .6    .6    .5    .3    .0    .0    .0    .5    .5   1.1   1.4    .9    .7    .4   2.6   2.2   2.0   2.1   2.3   2.1
  260.  *   1.0    .9    .8    .6    .1    .0    .0    .4    .5   1.3   1.5   1.1    .9    .6   2.6   2.5   2.0   2.2   2.3   2.0
  265.  *   1.4   1.3   1.3    .9    .1    .1    .0    .5    .6   1.4   1.6   1.3    .9   1.1   2.4   2.2   2.0   2.3   2.2   2.1
  270.  *   1.7   1.7   1.6   1.2    .4    .1    .0    .5    .6   1.8   1.7   1.4   1.3   1.3   2.0   2.0   1.8   2.3   2.0   1.8
  275.  *   2.1   2.0   2.0   1.6    .5    .3    .1    .6    .8   2.0   1.7   1.5   1.7   1.4   1.8   1.7   1.6   2.1   1.9   1.7
  280.  *   2.2   2.3   2.2   1.8    .7    .4    .1    .6    .9   2.2   1.7   1.7   1.8   1.8   1.5   1.3   1.5   1.9   1.7   1.6
  285.  *   2.4   2.4   2.2   1.8    .8    .5    .1    .6    .9   2.4   1.8   1.7   1.8   2.1   1.2   1.1   1.2   1.6   1.7   1.4
  290.  *   2.3   2.2   2.2   1.9    .8    .5    .2    .7   1.0   2.5   1.7   1.8   2.0   2.3    .6    .9   1.1   1.5   1.6   1.4
  295.  *   2.2   2.1   2.1   1.8    .8    .5    .4    .9    .9   2.4   1.7   1.6   2.0   2.0    .5    .7    .9   1.3   1.5   1.3
  300.  *   2.1   2.0   1.9   1.6    .8    .5    .4    .9    .9   2.4   1.3   1.7   1.9   2.0    .4    .6    .9   1.4   1.5   1.2
  305.  *   1.9   1.9   1.9   1.5    .7    .5    .4    .9   1.0   2.3   1.5   1.7   2.0   1.9    .3    .6    .9   1.4   1.6   1.2
  310.  *   1.9   1.9   1.8   1.5    .7    .5    .3    .8   1.0   2.4   1.5   1.8   2.1   1.9    .3    .4    .9   1.4   1.6   1.1
  315.  *   1.8   1.7   1.6   1.5    .7    .4    .3    .8   1.1   2.3   1.3   1.9   2.0   1.9    .2    .5    .8   1.5   1.6   1.0
  320.  *   1.7   1.6   1.6   1.4    .7    .4    .3    .8   1.2   2.1   1.5   2.0   1.9   1.6    .2    .4    .8   1.6   1.5   1.0
  325.  *   1.6   1.6   1.5   1.3    .7    .4    .3    .8   1.4   2.2   1.7   1.9   1.8   1.6    .2    .4    .8   1.5   1.5   1.0
  330.  *   1.6   1.5   1.5   1.3    .7    .4    .3    .8   1.3   2.1   1.6   2.1   1.7   1.5    .2    .2    .7   1.5   1.3   1.0
  335.  *   1.4   1.4   1.4   1.2    .7    .4    .3   1.1   1.6   1.9   1.7   2.1   1.7   1.5    .2    .2    .5   1.4   1.3   1.0
  340.  *   1.4   1.4   1.4   1.2    .7    .4    .4   1.2   1.6   2.2   1.7   1.9   1.5   1.5    .2    .2    .6   1.3   1.3    .9
  345.  *   1.4   1.4   1.4   1.4    .8    .7    .4   1.3   1.7   2.1   1.4   1.8   1.5   1.3    .0    .2    .5   1.1   1.1    .9
  350.  *   1.4   1.4   1.4   1.5   1.0    .7    .7   1.0   1.7   1.6   1.4   1.8   1.5   1.3    .0    .2    .4   1.0   1.0    .9
  355.  *   1.5   1.5   1.6   1.7   1.3   1.0   1.0    .9   1.7   1.5   1.2   1.5   1.5   1.2    .0    .2    .2    .8    .9    .8
  360.  *   1.5   1.5   1.6   2.0   1.4   1.2   1.2    .9   1.3   1.1   1.1   1.5   1.3   1.2    .0    .0    .2    .7    .7    .6
  ------*-------------------------------------------------------------------------------------------------------------------------
  MAX   *   2.7   2.6   2.4   2.5   2.0   1.8   1.3   1.3   1.7   2.5   1.8   2.1   2.1   2.3   2.6   2.5   2.3   2.3   2.3   2.2
  DEGR. *   75    65    70    20    70    15     5   345   345   290   285   335   310   290   255   260   105   265   255   240

1
                                                                                                                        PAGE  5
      JOB: Site 4 Opt 1/2 2030 PM - 4B1PM30.DAT                RUN: Site 4 Opt 1/2 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
  ------*-----------------------------------------------
    0.  *    .6    .7    .8   1.1   1.1    .1    .0    .0
    5.  *    .4   1.0   1.2   1.6   1.6    .2    .1    .0
   10.  *    .3   1.0   1.4   1.9   1.8    .5    .1    .0
   15.  *    .1   1.1   1.4   2.1   2.1    .5    .2    .0
   20.  *    .1   1.1   1.7   2.4   2.2    .7    .3    .1
   25.  *    .1   1.1   1.7   2.4   2.3    .8    .2    .1
   30.  *    .0   1.0   1.8   2.5   2.2    .9    .4    .1
   35.  *    .0   1.0   1.7   2.4   2.2   1.1    .4    .2
   40.  *    .0    .9   1.8   2.3   2.2   1.1    .5    .2
   45.  *    .0    .8   1.8   2.3   2.2   1.0    .5    .2
   50.  *    .0    .8   1.8   2.2   2.1   1.1    .6    .2
```

```
  55.  *    .0    .8   1.9   2.2   1.9   1.1    .7    .4
  60.  *    .0    .8   1.9   2.1   1.9   1.0    .7    .3
  65.  *    .0    .7   1.9   2.0   1.8   1.0    .7    .4
  70.  *    .0    .7   2.0   2.0   1.8   1.1    .8    .5
  75.  *    .0    .7   2.0   2.0   2.0   1.1    .9    .8
  80.  *    .0    .7   2.0   2.1   2.2   1.4   1.1    .9
  85.  *    .0    .7   2.2   2.2   2.3   1.7   1.5   1.4
  90.  *    .0    .8   2.3   2.5   2.3   1.7   1.7   1.4
  95.  *    .0    .8   2.3   2.6   2.5   1.9   1.8   1.7
 100.  *    .0    .9   2.4   2.7   2.5   1.9   2.1   2.0
 105.  *    .1    .9   2.5   2.8   2.4   2.0   2.1   2.1
 110.  *    .1   1.0   2.5   2.8   2.0   2.0   2.0   2.0
 115.  *    .3   1.2   2.6   2.7   1.9   1.8   1.9   1.9
 120.  *    .4   1.2   2.7   2.7   2.0   1.8   1.8   1.7
 125.  *    .4   1.2   2.7   2.6   1.9   1.9   1.8   1.7
 130.  *    .4   1.2   2.8   2.5   1.9   1.8   1.8   1.6
 135.  *    .4   1.3   2.7   2.5   1.7   1.7   1.9   1.6
 140.  *    .3   1.4   2.8   2.7   1.7   1.8   1.8   1.5
 145.  *    .3   1.6   2.9   2.7   1.8   1.8   1.6   1.5
 150.  *    .3   1.7   2.9   2.6   1.6   1.8   1.5   1.5
 155.  *    .4   1.7   3.1   2.6   1.7   1.8   1.5   1.4
 160.  *    .5   2.1   2.9   2.1   1.7   1.7   1.5   1.4
 165.  *    .5   2.1   2.8   2.1   1.8   1.5   1.4   1.3
 170.  *    .6   1.9   2.5   2.0   1.7   1.4   1.4   1.3
 175.  *    .9   2.0   2.4   1.8   1.8   1.5   1.4   1.3
 180.  *   1.0   1.9   1.9   1.5   1.7   1.4   1.4   1.3
 185.  *   1.2   1.4   1.5   1.3   1.4   1.4   1.3   1.3
 190.  *   1.3   1.2   1.0   1.1   1.3   1.3   1.3   1.3
 195.  *   1.7    .9    .8    .8   1.2   1.3   1.3   1.3
 200.  *   1.8    .6    .6    .8   1.3   1.3   1.3   1.3
 205.  *   1.9    .5    .6    .8   1.2   1.3   1.3   1.3
1
                                                                                                                             PAGE  6
      JOB: Site 4 Opt 1/2 2030 PM - 4B1PM30.DAT                RUN: Site 4 Opt 1/2 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.8    .4    .5    .8   1.3   1.3   1.3   1.3
 215.  *   1.6    .3    .5    .8   1.3   1.3   1.4   1.4
 220.  *   1.6    .3    .5    .7   1.3   1.4   1.4   1.4
 225.  *   1.5    .4    .5    .7   1.4   1.4   1.5   1.5
 230.  *   1.5    .4    .5    .7   1.5   1.5   1.5   1.5
 235.  *   1.3    .4    .4    .7   1.5   1.5   1.5   1.5
 240.  *   1.2    .4    .4    .7   1.5   1.6   1.7   1.7
 245.  *   1.2    .4    .4    .8   1.7   1.7   1.8   1.8
 250.  *   1.1    .4    .5    .8   1.8   1.8   1.8   1.8
 255.  *   1.0    .3    .5    .8   1.8   1.8   1.9   1.9
 260.  *    .9    .2    .4    .8   1.8   1.8   1.9   1.8
 265.  *    .8    .1    .4    .7   1.6   1.7   1.7   1.7
 270.  *    .8    .1    .2    .5   1.4   1.5   1.5   1.4
 275.  *    .8    .0    .1    .4   1.2   1.2   1.2   1.1
 280.  *    .6    .0    .0    .1    .8    .8    .8    .8
 285.  *    .6    .0    .0    .1    .5    .5    .5    .5
 290.  *    .6    .0    .0    .0    .3    .3    .3    .3
 295.  *    .6    .0    .0    .0    .1    .1    .1    .1
 300.  *    .6    .0    .0    .0    .0    .0    .0    .0
 305.  *    .8    .0    .0    .0    .0    .0    .0    .0
 310.  *    .8    .0    .0    .0    .0    .0    .0    .0
 315.  *    .8    .0    .1    .0    .0    .0    .0    .0
 320.  *    .8    .0    .1    .1    .0    .0    .0    .0
 325.  *    .8    .0    .1    .1    .0    .0    .0    .0
 330.  *    .9    .1    .1    .1    .0    .0    .0    .0
 335.  *    .9    .1    .1    .1    .0    .0    .0    .0
 340.  *    .9    .1    .2    .2    .1    .0    .0    .0
 345.  *    .9    .2    .2    .4    .3    .0    .0    .0
 350.  *    .8    .3    .4    .5    .5    .0    .0    .0
 355.  *    .8    .6    .7    .9    .7    .1    .0    .0
 360.  *    .6    .7    .8   1.1   1.1    .1    .0    .0
 ------*------------------------------------------------
 MAX   *   1.9   2.1   3.1   2.8   2.5   2.0   2.1   2.1
 DEGR. *  205   160   155   105    95   110   100   105

 THE HIGHEST CONCENTRATION IS    3.10 PPM AT  155 DEGREES FROM REC23.
 THE 2ND HIGHEST CONCENTRATION IS    2.80 PPM AT  105 DEGREES FROM REC24.
 THE 3RD HIGHEST CONCENTRATION IS    2.70 PPM AT   75 DEGREES FROM REC1 .
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Site 4 Opt 3 2014 AM - 4B3AM14.DAT      60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Opt 3 2014 AM                     15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.    170711.4   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.    170711.4   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        62       2.0 1707  102.2 1319 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    193611.4   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    131411.4   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    131411.4   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        62       2.0 1314  102.2 1197 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.     61011.4   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    122311.4   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
       120        62       2.0 1223  102.2 1085 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.     94411.4   0  32   30.
```

```
  1
WB         Rt7A aprchAG  1388.  2708.   655.  2720.    100811.4   0  44   30.
  1
WB         Rt7A aprchAG   655.  2720.   387.  2730.    100811.4   0  56   30.
  2
WB         Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        62       2.0 1008  102.2 1060 1 3
  1
WB         Rt7A deparAG   386.  2733.  -609.  2763.    176211.4   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 4 Opt 3 2014 AM - 4B3AM14.DAT                   RUN: Site 4 Opt 3 2014 AM
      DATE: 05/08/2009   TIME: 08:35:15.96


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG   1707.  11.4    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG   1707.  11.4    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     389.8    2514.6 *     144.   181. AG    567. 100.0    .0 48.0  .72    7.3
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1936.  11.4    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG   1314.  11.4    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG   1314.  11.4    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     357.9    2875.2 *     111.     1. AG    567. 100.0    .0 48.0  .61    5.6
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG    610.  11.4    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1223.  11.4    .0 44.0
      10. EB        Rt7A aprch*    309.0    2719.0   -1242.9    2764.3 *    1553.   272. AG    283. 100.0    .0 24.0 1.25   78.9
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG    944.  11.4    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   1008.  11.4    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   1008.  11.4    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     572.9    2723.5 *     114.    92. AG    425. 100.0    .0 36.0  .71    5.8
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1762.  11.4    .0 44.0
1
                                                                                                                 PAGE  2
      JOB: Site 4 Opt 3 2014 AM - 4B3AM14.DAT                   RUN: Site 4 Opt 3 2014 AM
      DATE: 05/08/2009   TIME: 08:35:15.96

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *    120        62       2.0      1707       1319     102.20      1        3
       7. SB        Rt4 aprch *    120        62       2.0      1314       1197     102.20      1        3
      10. EB        Rt7A aprch*    120        62       2.0      1223       1085     102.20      1        3
      14. WB        Rt7A aprch*    120        62       2.0      1008       1060     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)         *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0        5.0   *
      2. SW 164 W             *       151.0     2697.0        5.0   *
      3. SW 82 W              *       234.0     2693.0        5.0   *
      4. SW CNR               *       310.0     2683.0        5.0   *
      5. SW 82 S              *       316.0     2608.0        5.0   *
      6. SW 164 S             *       313.0     2527.0        5.0   *
      7. SW MID S             *       311.0     2362.0        5.0   *
      8. SE MID S             *       428.0     2361.0        5.0   *
      9. SE 164 S             *       431.0     2516.0        5.0   *
     10. SE 82 S              *       432.0     2598.0        5.0   *
     11. SE CNR               *       448.0     2662.0        5.0   *
     12. SE 82 E              *       506.0     2676.0        5.0   *
     13. SE 164 E             *       589.0     2673.0        5.0   *
     14. SE MID E             *       744.0     2669.0        5.0   *
     15. NE MID E             *       744.0     2746.0        5.0   *
     16. NE 164 E             *       588.0     2753.0        5.0   *
     17. NE 82 E              *       506.0     2757.0        5.0   *
     18. NE CNR               *       440.0     2763.0        5.0   *
     19. NE 82 N              *       433.0     2827.0        5.0   *
     20. NE 164 N             *       433.0     2911.0        5.0   *
     21. NE MID N             *       436.0     3044.0        5.0   *
     22. NW MID N             *       328.0     3045.0        5.0   *
     23. NW 164 N             *       323.0     2917.0        5.0   *
     24. NW 82 N              *       320.0     2833.0        5.0   *
     25. NW CNR               *       313.0     2765.0        5.0   *
     26. NW 82 W              *       247.0     2766.0        5.0   *
     27. NW 164 W             *       166.0     2767.0        5.0   *
     28. NW MID W             *       -36.0     2773.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 4 Opt 3 2014 AM - 4B3AM14.DAT                   RUN: Site 4 Opt 3 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.8   1.7   1.8   2.1   1.5   1.1   1.3   1.5   1.8   1.5   1.3   1.8    .8    .6    .0    .1    .3    .8   1.0   1.0
   5.  *   1.8   1.9   1.8   2.2   1.6   1.4   1.4   1.2   1.5   1.4   1.1   1.6    .7    .6    .0    .0    .1    .5    .7    .7
  10.  *   1.7   1.9   2.0   2.5   1.7   1.4   1.4    .9   1.1    .9   1.0   1.6    .6    .6    .0    .0    .1    .4    .5    .6
  15.  *   1.7   1.9   2.1   2.5   1.7   1.5   1.5    .7    .7    .8   1.0   1.5    .6    .6    .0    .0    .0    .2    .3    .3
  20.  *   1.8   2.0   2.3   2.6   1.5   1.5   1.4    .5    .7    .7   1.0   1.5    .6    .6    .0    .0    .0    .1    .2    .2
  25.  *   1.9   2.1   2.4   2.4   1.5   1.8   1.5    .3    .5    .7   1.0   1.5    .6    .6    .0    .0    .0    .0    .1    .1
  30.  *   1.9   2.1   2.5   2.1   1.5   1.8   1.4    .2    .4    .6   1.0   1.5    .6    .6    .0    .0    .0    .0    .1    .1
  35.  *   2.0   2.3   2.5   2.1   1.4   1.7   1.2    .1    .4    .6   1.2   1.4    .6    .6    .0    .0    .0    .0    .0    .1
```

```
 40.  *   2.0   2.2   2.6   2.0   1.5   1.9   1.0    .1    .3    .5   1.2   1.5    .6    .7    .0    .0    .0    .0    .0    .0
 45.  *   2.2   2.3   2.8   2.0   1.3   1.9    .9    .2    .3    .5   1.2   1.4    .7    .7    .0    .0    .0    .0    .0    .0
 50.  *   2.1   2.5   2.7   1.8   1.5   1.9    .8    .2    .2    .4   1.3   1.3    .7    .7    .0    .0    .0    .0    .0    .0
 55.  *   2.4   2.6   2.5   1.7   1.6   1.8    .8    .2    .2    .6   1.1   1.2    .8    .7    .0    .0    .0    .0    .0    .0
 60.  *   2.5   2.7   2.4   1.5   1.7   2.0    .8    .2    .2    .5   1.0   1.2    .8    .7    .0    .0    .0    .0    .0    .0
 65.  *   2.5   2.7   2.5   1.7   1.8   1.9    .7    .2    .2    .5   1.1   1.1    .7    .7    .1    .0    .0    .0    .0    .0
 70.  *   2.5   2.5   2.3   1.5   2.0   1.7    .6    .0    .2    .4   1.0   1.0    .9    .8    .1    .0    .1    .0    .0    .0
 75.  *   2.6   2.6   2.1   1.7   2.0   1.7    .6    .0    .2    .3    .8   1.1    .9    .8    .1    .2    .2    .2    .0    .0
 80.  *   2.7   2.5   2.0   1.7   2.0   1.6    .6    .0    .2    .2    .7   1.0    .9    .8    .2    .3    .4    .3    .0    .0
 85.  *   2.4   2.3   1.9   1.7   1.8   1.6    .6    .0    .0    .2    .6    .8    .7    .7    .4    .4    .5    .6    .0    .0
 90.  *   2.2   1.9   1.8   1.6   1.8   1.3    .6    .0    .0    .2    .5    .7    .6    .6    .5    .6    .7    .7    .1    .0
 95.  *   1.6   1.5   1.4   1.3   1.7   1.2    .5    .0    .0    .1    .3    .5    .5    .4    .7    .7   1.0   1.1    .2    .0
100.  *   1.2   1.2   1.3   1.3   1.6   1.1    .6    .0    .0    .0    .2    .3    .3    .3    .7    .7   1.2   1.3    .2    .1
105.  *    .7   1.0    .9   1.2   1.6   1.0    .6    .0    .0    .0    .1    .2    .2    .1    .8    .8   1.4   1.5    .4    .2
110.  *    .5    .8    .9   1.2   1.6    .9    .5    .0    .0    .0    .0    .1    .1    .1    .9    .9   1.5   1.6    .4    .2
115.  *    .4    .7    .7   1.2   1.6    .8    .5    .0    .0    .0    .0    .0    .0    .0    .8    .8   1.7   1.7    .5    .2
120.  *    .3    .6    .8   1.3   1.5    .7    .6    .0    .0    .0    .0    .0    .0    .0    .8    .8   1.7   1.6    .5    .2
125.  *    .2    .6    .8   1.4   1.5    .7    .6    .0    .0    .0    .0    .0    .0    .0    .7    .6   1.7   1.6    .6    .2
130.  *    .2    .5    .8   1.4   1.4    .6    .6    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.7   1.5    .7    .4
135.  *    .1    .3    .7   1.5   1.3    .6    .6    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.8   1.5    .7    .3
140.  *    .1    .4    .6   1.4   1.2    .7    .6    .0    .0    .0    .0    .0    .0    .0    .6    .6   1.8   1.4    .8    .4
145.  *    .1    .3    .6   1.4   1.1    .6    .6    .0    .0    .0    .0    .0    .0    .0    .6    .6   1.8   1.3    .8    .4
150.  *    .1    .3    .6   1.3   1.2    .7    .7    .0    .0    .0    .0    .0    .0    .0    .6    .5   1.8   1.1    .7    .5
155.  *    .1    .2    .4   1.3   1.1    .8    .7    .0    .0    .1    .0    .0    .0    .0    .6    .5   1.7   1.0    .7    .6
160.  *    .1    .2    .3   1.2    .9    .7    .7    .1    .1    .1    .0    .0    .0    .0    .5    .5   1.7    .9    .8    .6
165.  *    .0    .2    .3   1.0    .9    .8    .7    .1    .2    .2    .0    .0    .0    .0    .5    .5   1.6   1.0    .9    .7
170.  *    .0    .1    .2    .9    .8    .7    .7    .2    .2    .4    .2    .0    .0    .0    .6    .5   1.6   1.2   1.1    .9
175.  *    .0    .1    .2    .7    .6    .7    .6    .3    .4    .6    .3    .1    .0    .0    .6    .6   1.9   1.2   1.4   1.2
180.  *    .0    .0    .1    .5    .5    .4    .4    .5    .7    .9    .7    .1    .0    .0    .6    .7   1.9   1.5   1.5   1.5
185.  *    .0    .0    .0    .3    .4    .3    .3    .7    .8   1.1    .9    .2    .1    .0    .6    .9   2.1   1.6   1.7   1.8
190.  *    .0    .0    .0    .2    .2    .2    .2    .8    .9   1.4   1.2    .4    .1    .0    .6    .9   2.2   1.9   1.7   2.0
195.  *    .0    .0    .0    .1    .1    .1    .1    .8    .9   1.7   1.4    .5    .1    .0    .6    .9   2.2   1.9   1.7   2.1
200.  *    .0    .0    .0    .0    .0    .0    .0    .8    .9   1.9   1.5    .5    .2    .1    .6   1.3   2.3   2.0   1.9   2.1
205.  *    .0    .0    .0    .0    .0    .0    .0    .8    .9   2.0   1.8    .6    .3    .1    .6   1.5   2.5   1.9   1.8   2.2
1
                                                                                                                        PAGE  4
      JOB: Site 4 Opt 3 2014 AM - 4B3AM14.DAT                  RUN: Site 4 Opt 3 2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .8    .8   2.1   1.8    .8    .3    .1    .7   1.7   2.5   1.7   1.8   2.4
 215.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   2.2   1.9    .8    .4    .1    .7   2.0   2.6   1.8   1.9   2.3
 220.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   2.2   1.8    .9    .5    .1    .8   2.1   2.6   1.6   1.9   2.3
 225.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   2.2   1.9   1.0    .5    .2    .9   2.2   2.4   1.6   2.0   2.3
 230.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   2.2   1.8   1.1    .6    .2    .8   2.3   2.3   1.7   2.2   2.2
 235.  *    .0    .0    .0    .0    .0    .0    .0    .6    .8   2.2   1.8   1.1    .6    .2    .9   2.3   2.4   1.8   2.4   2.1
 240.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   2.2   1.7   1.0    .7    .2   1.1   2.5   2.3   1.9   2.4   2.1
 245.  *    .1    .1    .1    .0    .0    .0    .0    .7    .8   2.1   1.7   1.0    .7    .2   1.1   2.7   2.1   1.9   2.6   2.0
 250.  *    .2    .2    .2    .1    .0    .0    .0    .6    .9   2.0   1.6   1.0    .7    .3   1.5   2.5   2.2   2.2   2.8   1.9
 255.  *    .5    .5    .4    .3    .0    .0    .0    .6   1.0   2.0   1.6   1.2   1.0    .5   1.5   2.6   2.2   2.5   2.8   1.8
 260.  *    .8    .9    .8    .6    .1    .0    .0    .6   1.1   2.1   1.8   1.3   1.0    .8   1.5   2.6   2.3   2.7   2.8   1.6
 265.  *   1.2   1.3   1.2    .8    .1    .0    .0    .6   1.3   2.3   1.9   1.5   1.3   1.1   1.8   2.5   2.3   2.6   2.7   1.5
 270.  *   1.6   1.7   1.6   1.2    .4    .1    .0    .6   1.6   2.6   1.9   1.7   1.5   1.3   1.5   2.5   2.1   2.8   2.6   1.3
 275.  *   2.0   2.0   2.0   1.5    .5    .2    .0    .7   1.9   2.7   2.1   1.8   1.8   1.6   1.4   2.0   2.0   2.6   2.2   1.1
 280.  *   2.4   2.3   2.2   1.8    .7    .4    .1    .7   2.0   2.8   2.1   2.1   2.1   1.8   1.0   1.6   1.6   2.2   2.0   1.0
 285.  *   2.4   2.4   2.3   1.9    .8    .4    .1    .8   2.1   2.8   2.0   1.8   2.1   1.6    .8   1.2   1.5   2.0   1.7    .9
 290.  *   2.5   2.5   2.3   2.1    .9    .6    .2    .9   2.4   2.9   1.9   1.9   2.2   1.6    .5   1.0   1.3   1.9   1.7    .9
 295.  *   2.3   2.2   2.2   1.9    .9    .6    .4   1.0   2.5   2.8   2.0   1.9   2.2   1.3    .3    .6   1.2   1.8   1.6    .9
 300.  *   2.2   2.2   2.1   1.8    .9    .6    .4   1.1   2.5   2.8   1.9   1.9   2.1   1.1    .3    .6    .9   1.8   1.5   1.0
 305.  *   2.2   2.1   2.1   1.8    .9    .6    .4   1.0   2.7   2.9   1.7   2.0   2.1   1.1    .2    .4    .9   1.7   1.5   1.0
 310.  *   2.1   2.0   2.0   1.7    .9    .5    .4   1.0   2.7   2.8   1.9   2.1   2.0   1.1    .2    .4    .8   1.7   1.4   1.0
 315.  *   2.0   2.0   1.8   1.6    .8    .5    .4   1.1   2.8   2.8   1.6   2.2   2.0    .9    .2    .4    .7   1.6   1.3   1.1
 320.  *   2.0   1.8   1.8   1.6    .8    .5    .4   1.1   2.8   2.7   1.9   2.1   1.9    .9    .2    .4    .7   1.6   1.3   1.2
 325.  *   1.8   1.8   1.8   1.5    .7    .5    .3   1.1   2.8   2.6   1.9   2.1   1.8    .8    .2    .4    .7   1.5   1.2   1.1
 330.  *   1.8   1.8   1.6   1.4    .7    .5    .3   1.3   3.1   2.9   1.8   2.2   1.6    .8    .2    .3    .7   1.4   1.3   1.3
 335.  *   1.7   1.7   1.6   1.4    .7    .5    .3   1.5   3.0   2.7   1.8   2.2   1.5    .8    .2    .3    .6   1.5   1.2   1.3
 340.  *   1.7   1.7   1.6   1.3    .7    .5    .3   1.8   2.8   2.5   1.7   2.1   1.4    .8    .2    .3    .6   1.3   1.2   1.3
 345.  *   1.7   1.7   1.6   1.5    .8    .6    .3   1.8   2.8   2.4   1.8   2.0   1.3    .7    .1    .3    .5   1.2   1.4   1.4
 350.  *   1.7   1.7   1.6   1.6   1.0    .8    .6   1.9   2.6   2.3   1.7   1.9   1.2    .6    .0    .3    .4   1.2   1.3   1.4
 355.  *   1.8   1.7   1.6   1.8   1.4   1.1    .9   1.7   2.3   2.0   1.3   1.9    .9    .6    .0    .1    .4    .9   1.2   1.1
 360.  *   1.8   1.7   1.8   2.1   1.5   1.1   1.3   1.5   1.8   1.5   1.3   1.8    .8    .6    .0    .1    .3    .8   1.0   1.0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   2.7   2.7   2.8   2.6   2.0   2.0   1.5   1.9   3.1   2.9   2.1   2.2   2.2   1.8   1.8   2.7   2.6   2.8   2.8   2.4
 DEGR. *   80    60    45    20    70    60    15   350   330   290   280   330   290   280   265   245   215   270   250   210

1
                                                                                                                        PAGE  5
      JOB: Site 4 Opt 3 2014 AM - 4B3AM14.DAT                  RUN: Site 4 Opt 3 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *   1.0    .7    .8    .8    .9    .2    .0    .0
   5.  *    .7    .9    .9   1.1   1.3    .2    .2    .0
  10.  *    .5   1.1   1.1   1.4   1.6    .4    .2    .0
  15.  *    .3   1.2   1.2   1.6   1.8    .4    .2    .0
  20.  *    .2   1.2   1.2   1.6   2.1    .5    .3    .0
  25.  *    .1   1.1   1.2   1.7   2.3    .7    .3    .2
  30.  *    .1   1.1   1.1   1.9   2.3    .8    .4    .2
  35.  *    .1   1.1   1.1   1.9   2.3    .7    .4    .2
  40.  *    .0   1.0   1.0   2.0   2.4    .8    .4    .2
  45.  *    .0   1.0    .9   2.0   2.4    .9    .4    .2
  50.  *    .0    .9    .9   2.1   2.3   1.0    .4    .2
```

```
  55.  *    .0    .9    .9   2.2   2.2   1.1    .5    .1
  60.  *    .0    .9    .8   2.1   2.2   1.1    .7    .3
  65.  *    .0    .8    .8   2.2   2.1   1.2    .7    .4
  70.  *    .0    .8    .8   2.2   2.0   1.3    .8    .4
  75.  *    .0    .8    .8   2.3   2.2   1.1    .9    .5
  80.  *    .0    .8    .8   2.3   2.2   1.5   1.0    .8
  85.  *    .0    .8    .9   2.3   2.3   1.5   1.6   1.2
  90.  *    .0    .9    .9   2.7   2.3   1.8   1.6   1.6
  95.  *    .0    .9    .9   2.7   2.5   2.0   1.9   2.1
 100.  *    .0    .8   1.0   2.7   2.4   2.0   2.0   2.2
 105.  *    .0    .9   1.0   2.8   2.5   2.1   2.2   2.2
 110.  *    .0    .9   1.1   2.8   2.3   1.9   2.3   2.1
 115.  *    .1   1.0   1.3   2.8   2.2   2.0   2.3   2.2
 120.  *    .2   1.1   1.5   2.8   2.2   2.2   2.3   2.2
 125.  *    .2   1.1   1.6   2.9   2.1   2.1   2.4   2.1
 130.  *    .2   1.0   1.8   3.2   2.0   2.0   2.4   2.0
 135.  *    .2   1.1   1.9   3.0   2.2   2.2   2.3   1.9
 140.  *    .2   1.3   2.1   2.9   2.1   2.3   2.2   1.8
 145.  *    .1   1.5   2.3   3.1   2.1   2.2   2.2   1.8
 150.  *    .4   1.5   2.5   3.1   2.1   2.0   1.9   1.7
 155.  *    .4   1.7   2.7   3.0   2.2   2.1   1.9   1.6
 160.  *    .4   1.7   2.8   2.7   2.3   2.0   1.8   1.6
 165.  *    .5   1.6   2.6   2.6   2.2   1.8   1.6   1.4
 170.  *    .8   1.8   2.5   2.2   2.1   1.8   1.7   1.5
 175.  *   1.1   1.7   2.4   2.1   2.0   1.6   1.6   1.5
 180.  *   1.4   1.6   2.0   1.8   1.8   1.6   1.4   1.4
 185.  *   1.6   1.5   1.6   1.4   1.6   1.5   1.4   1.4
 190.  *   1.8   1.0   1.2   1.4   1.4   1.4   1.5   1.5
 195.  *   1.9    .6    .9    .9   1.4   1.4   1.5   1.5
 200.  *   2.0    .5    .7    .8   1.3   1.4   1.4   1.4
 205.  *   1.9    .4    .6    .9   1.4   1.4   1.5   1.5
1
                                                                                                                              PAGE  6
      JOB: Site 4 Opt 3 2014 AM - 4B3AM14.DAT                   RUN: Site 4 Opt 3 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.8    .4    .6    .8   1.4   1.4   1.5   1.5
 215.  *   1.6    .4    .6    .8   1.4   1.5   1.7   1.7
 220.  *   1.5    .4    .5    .8   1.5   1.7   1.7   1.7
 225.  *   1.6    .4    .5    .8   1.7   1.7   1.7   1.7
 230.  *   1.4    .4    .5    .8   1.7   1.7   1.8   1.8
 235.  *   1.4    .4    .5    .8   1.8   1.8   1.9   1.9
 240.  *   1.4    .4    .5    .9   1.9   1.9   1.9   1.9
 245.  *   1.3    .4    .6    .9   1.9   2.0   2.0   2.0
 250.  *   1.3    .4    .6    .9   2.0   2.0   2.0   2.0
 255.  *   1.2    .2    .5    .9   2.0   2.1   2.3   2.2
 260.  *   1.1    .1    .4    .9   2.0   2.1   2.1   2.1
 265.  *   1.1    .1    .4    .6   2.0   2.0   2.0   2.0
 270.  *   1.0    .0    .2    .5   1.6   1.7   1.7   1.7
 275.  *   1.0    .0    .1    .4   1.2   1.2   1.3   1.2
 280.  *    .9    .0    .0    .2    .9    .9   1.0    .9
 285.  *    .9    .0    .0    .0    .6    .6    .6    .6
 290.  *    .9    .0    .0    .0    .3    .3    .3    .3
 295.  *    .9    .0    .0    .0    .1    .1    .1    .1
 300.  *   1.0    .0    .0    .0    .1    .1    .1    .1
 305.  *   1.0    .0    .0    .0    .0    .0    .1    .1
 310.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 315.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 320.  *   1.1    .0    .0    .0    .0    .0    .0    .0
 325.  *   1.1    .0    .0    .0    .0    .0    .0    .0
 330.  *   1.2    .0    .1    .1    .0    .0    .0    .0
 335.  *   1.2    .1    .1    .1    .0    .0    .0    .0
 340.  *   1.2    .1    .1    .1    .1    .0    .0    .0
 345.  *   1.3    .2    .2    .2    .1    .0    .0    .0
 350.  *   1.3    .4    .4    .4    .4    .0    .0    .0
 355.  *   1.1    .5    .5    .5    .6    .1    .0    .0
 360.  *   1.0    .7    .8    .8    .9    .2    .0    .0
 ------*------------------------------------------------
 MAX   *   2.0   1.8   2.8   3.2   2.5   2.3   2.4   2.2
 DEGR. *  200   170   160   130    95   140   125   100

 THE HIGHEST CONCENTRATION IS    3.20 PPM AT  130 DEGREES FROM REC24.
 THE 2ND HIGHEST CONCENTRATION IS    3.10 PPM AT  330 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    2.90 PPM AT  290 DEGREES FROM REC10.
```

```
Site 4 Opt 3 2030 AM - 4B3AM30.DAT      60.0321.0.0000.000280.30480000    1
1
SW MID W                   -47.     2704.       5.0
SW 164 W                   151.     2697.       5.0
SW 82 W                    234.     2693.       5.0
SW CNR                     310.     2683.       5.0
SW 82 S                    316.     2608.       5.0
SW 164 S                   313.     2527.       5.0
SW MID S                   311.     2362.       5.0
SE MID S                   428.     2361.       5.0
SE 164 S                   431.     2516.       5.0
SE 82 S                    432.     2598.       5.0
SE CNR                     448.     2662.       5.0
SE 82 E                    506.     2676.       5.0
SE 164 E                   589.     2673.       5.0
SE MID E                   744.     2669.       5.0
NE MID E                   744.     2746.       5.0
NE 164 E                   588.     2753.       5.0
NE 82 E                    506.     2757.       5.0
NE CNR                     440.     2763.       5.0
NE 82 N                    433.     2827.       5.0
NE 164 N                   433.     2911.       5.0
NE MID N                   436.     3044.       5.0
NW MID N                   328.     3045.       5.0
NW 164 N                   323.     2917.       5.0
NW 82 N                    320.     2833.       5.0
NW CNR                     313.     2765.       5.0
NW 82 W                    247.     2766.       5.0
NW 164 W                   166.     2767.       5.0
NW MID W                   -36.     2773.       5.0
Site 4 Opt 3 2030 AM                     15  1   0
  1
NB         Rt4 aprch AG   373.  1724.   386.  2364.    1735 9.2   0  56   30.
  1
NB         Rt4 aprch AG   386.  2364.   395.  2721.    1735 9.2   0  68   30.
  2
NB         Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        63       2.0 1735   84.1 1390 1 3
  1
NB         Rt4 departAG   395.  2719.   416.  3717.    1895 9.2   0  56   30.
  1
SB         Rt4 aprch AG   364.  3714.   361.  3032.    1260 9.2   0  56   30.
  1
SB         Rt4 aprch AG   361.  3032.   355.  2722.    1260 9.2   0  68   30.
  2
SB         Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        63       2.0 1260   84.1 1252 1 3
  1
SB         Rt4 departAG   354.  2716.   337.  1722.     650 9.2   0  56   30.
  1
EB         Rt7A aprchAG  -612.  2747.   375.  2717.    1075 9.2   0  56   30.
  2
EB         Rt7A aprchAG   309.  2719.    35.  2727.      0.  36   2
       120        65       2.0 1075   84.1 1185 1 3
  1
EB         Rt7A deparAG   376.  2705.  1385.  2675.     915 9.2   0  32   30.
```

```
  1
WB         Rt7A aprchAG  1388.  2708.   655.  2720.     760 9.2   0  44   30.
  1
WB         Rt7A aprchAG   655.  2720.   387.  2730.     760 9.2   0  56   30.
  2
WB         Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        65       2.0  760   84.1 1002 1 3
  1
WB         Rt7A deparAG   386.  2733.  -609.  2763.    1370 9.2   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 4 Opt 3 2030 AM - 4B3AM30.DAT                   RUN: Site 4 Opt 3 2030 AM
      DATE: 05/08/2009   TIME: 09:29:39.64


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG   1735.   9.2    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG   1735.   9.2    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     389.7    2509.9 *     149.   181. AG    474. 100.0    .0 48.0  .71   7.6
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1895.   9.2    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG   1260.   9.2    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG   1260.   9.2    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     357.8    2872.5 *     109.     1. AG    474. 100.0    .0 48.0  .57   5.5
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG    650.   9.2    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1075.   9.2    .0 56.0
      10. EB        Rt7A aprch*    309.0    2719.0    -332.9    2737.7 *     642.   272. AG    244. 100.0    .0 36.0 1.07  32.6
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG    915.   9.2    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG    760.   9.2    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG    760.   9.2    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     548.9    2724.2 *      90.    92. AG    367. 100.0    .0 36.0  .60   4.6
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1370.   9.2    .0 44.0
1
                                                                                                                 PAGE  2
      JOB: Site 4 Opt 3 2030 AM - 4B3AM30.DAT                   RUN: Site 4 Opt 3 2030 AM
      DATE: 05/08/2009   TIME: 09:29:39.64

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       63       2.0      1735       1390      84.10      1        3
       7. SB        Rt4 aprch *     120       63       2.0      1260       1252      84.10      1        3
      10. EB        Rt7A aprch*     120       65       2.0      1075       1185      84.10      1        3
      14. WB        Rt7A aprch*     120       65       2.0       760       1002      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0        5.0   *
      2. SW 164 W             *       151.0     2697.0        5.0   *
      3. SW 82 W              *       234.0     2693.0        5.0   *
      4. SW CNR               *       310.0     2683.0        5.0   *
      5. SW 82 S              *       316.0     2608.0        5.0   *
      6. SW 164 S             *       313.0     2527.0        5.0   *
      7. SW MID S             *       311.0     2362.0        5.0   *
      8. SE MID S             *       428.0     2361.0        5.0   *
      9. SE 164 S             *       431.0     2516.0        5.0   *
     10. SE 82 S              *       432.0     2598.0        5.0   *
     11. SE CNR               *       448.0     2662.0        5.0   *
     12. SE 82 E              *       506.0     2676.0        5.0   *
     13. SE 164 E             *       589.0     2673.0        5.0   *
     14. SE MID E             *       744.0     2669.0        5.0   *
     15. NE MID E             *       744.0     2746.0        5.0   *
     16. NE 164 E             *       588.0     2753.0        5.0   *
     17. NE 82 E              *       506.0     2757.0        5.0   *
     18. NE CNR               *       440.0     2763.0        5.0   *
     19. NE 82 N              *       433.0     2827.0        5.0   *
     20. NE 164 N             *       433.0     2911.0        5.0   *
     21. NE MID N             *       436.0     3044.0        5.0   *
     22. NW MID N             *       328.0     3045.0        5.0   *
     23. NW 164 N             *       323.0     2917.0        5.0   *
     24. NW 82 N              *       320.0     2833.0        5.0   *
     25. NW CNR               *       313.0     2765.0        5.0   *
     26. NW 82 W              *       247.0     2766.0        5.0   *
     27. NW 164 W             *       166.0     2767.0        5.0   *
     28. NW MID W             *       -36.0     2773.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 4 Opt 3 2030 AM - 4B3AM30.DAT                   RUN: Site 4 Opt 3 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.4   1.3   1.5   1.7   1.1   1.0    .8   1.2   1.5   1.3   1.2   1.4    .6    .5    .0    .1    .2    .6    .7    .7
   5.  *   1.4   1.3   1.5   1.7   1.3   1.2    .9    .9   1.2   1.2   1.0   1.4    .5    .5    .0    .0    .1    .4    .6    .6
  10.  *   1.4   1.5   1.6   2.0   1.3   1.3   1.1    .6    .9    .7    .8   1.2    .4    .5    .0    .0    .0    .2    .3    .5
  15.  *   1.3   1.5   1.8   2.0   1.3   1.2   1.0    .4    .7    .6    .8   1.2    .4    .5    .0    .0    .0    .1    .2    .2
  20.  *   1.3   1.5   1.8   2.1   1.3   1.2   1.2    .3    .5    .7    .8   1.2    .5    .5    .0    .0    .0    .1    .1    .1
  25.  *   1.4   1.5   1.9   1.9   1.1   1.3   1.1    .2    .5    .5    .8   1.1    .4    .5    .0    .0    .0    .0    .1    .1
  30.  *   1.6   1.7   2.0   1.8   1.3   1.4    .9    .0    .3    .5    .8   1.1    .5    .5    .0    .0    .0    .0    .0    .1
  35.  *   1.6   1.8   2.0   1.6   1.4   1.5    .8    .0    .3    .5    .9   1.0    .5    .5    .0    .0    .0    .0    .0    .0
```

```
  40.  *   1.7   1.8   2.2   1.5   1.1   1.5    .7    .0    .2    .4    .8   1.0    .4    .5    .0    .0    .0    .0    .0    .0
  45.  *   1.8   2.0   2.3   1.3   1.2   1.5    .6    .0    .1    .4    .9    .9    .5    .5    .0    .0    .0    .0    .0    .0
  50.  *   1.8   2.1   2.3   1.5   1.3   1.6    .7    .1    .1    .3    .9    .8    .5    .5    .0    .0    .0    .0    .0    .0
  55.  *   1.8   2.1   2.0   1.4   1.3   1.5    .6    .0    .1    .3    .8    .7    .5    .5    .0    .0    .0    .0    .0    .0
  60.  *   2.1   2.1   2.0   1.2   1.4   1.5    .5    .0    .2    .3    .7    .7    .5    .5    .0    .0    .0    .0    .0    .0
  65.  *   2.2   2.1   2.0   1.2   1.5   1.4    .5    .0    .2    .2    .6    .7    .5    .5    .0    .0    .0    .0    .0    .0
  70.  *   2.3   2.0   2.0   1.2   1.5   1.4    .5    .0    .2    .2    .7    .7    .7    .6    .1    .0    .0    .0    .0    .0
  75.  *   2.3   2.3   1.8   1.2   1.5   1.4    .5    .0    .2    .2    .6    .6    .7    .6    .1    .0    .1    .0    .0    .0
  80.  *   2.1   2.2   1.7   1.1   1.6   1.3    .5    .0    .1    .2    .5    .6    .6    .6    .1    .2    .2    .2    .0    .0
  85.  *   2.0   2.0   1.4   1.3   1.5   1.2    .5    .0    .0    .2    .4    .5    .5    .5    .3    .3    .3    .4    .0    .0
  90.  *   1.8   1.7   1.4   1.3   1.4   1.1    .5    .0    .0    .1    .3    .5    .4    .4    .3    .4    .4    .5    .0    .0
  95.  *   1.5   1.2   1.3   1.2   1.3   1.0    .5    .0    .0    .0    .2    .3    .3    .3    .4    .4    .5    .7    .2    .0
 100.  *   1.0   1.0   1.0   1.0   1.3   1.0    .5    .0    .0    .0    .1    .3    .3    .3    .5    .5    .7   1.0    .2    .0
 105.  *    .8    .8    .9   1.0   1.3    .9    .5    .0    .0    .0    .1    .1    .1    .1    .5    .6    .8   1.1    .2    .2
 110.  *    .6    .7    .7   1.0   1.3    .8    .5    .0    .0    .0    .0    .1    .1    .1    .5    .6   1.0   1.3    .3    .2
 115.  *    .4    .7    .8   1.0   1.3    .7    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1   1.3    .4    .2
 120.  *    .4    .6    .8   1.1   1.3    .6    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1   1.3    .3    .2
 125.  *    .2    .5    .7   1.1   1.3    .6    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.2   1.3    .4    .1
 130.  *    .1    .4    .7   1.2   1.2    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.2   1.2    .5    .1
 135.  *    .1    .3    .6   1.2   1.1    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.2   1.1    .5    .2
 140.  *    .1    .4    .6   1.2   1.1    .5    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.3   1.1    .5    .3
 145.  *    .1    .3    .5   1.2   1.0    .6    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.3   1.0    .6    .3
 150.  *    .1    .3    .4   1.1   1.0    .6    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.3    .9    .6    .4
 155.  *    .1    .2    .4   1.1    .9    .6    .6    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.4    .8    .5    .5
 160.  *    .0    .2    .3   1.0    .9    .6    .5    .0    .1    .1    .0    .0    .0    .0    .4    .4   1.4    .6    .5    .5
 165.  *    .0    .1    .3    .8    .8    .6    .6    .1    .2    .1    .0    .0    .0    .0    .4    .4   1.4    .8    .7    .7
 170.  *    .0    .1    .2    .7    .8    .5    .5    .2    .2    .4    .2    .0    .0    .0    .4    .4   1.4    .9    .7    .8
 175.  *    .0    .0    .2    .5    .5    .5    .4    .2    .4    .4    .3    .0    .0    .0    .4    .4   1.4   1.0    .9   1.0
 180.  *    .0    .0    .1    .5    .4    .4    .4    .4    .5    .8    .6    .1    .0    .0    .4    .4   1.5   1.2   1.2   1.3
 185.  *    .0    .0    .0    .2    .3    .2    .2    .6    .7   1.0    .7    .1    .1    .0    .4    .5   1.7   1.2   1.4   1.5
 190.  *    .0    .0    .0    .2    .2    .2    .2    .6    .8   1.3    .9    .3    .1    .0    .4    .5   1.8   1.5   1.5   1.4
 195.  *    .0    .0    .0    .0    .1    .1    .1    .7    .7   1.4   1.2    .4    .1    .0    .4    .5   2.0   1.6   1.4   1.7
 200.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.6   1.3    .5    .1    .1    .5    .6   2.1   1.5   1.6   1.7
 205.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.7   1.5    .6    .3    .1    .5    .9   2.2   1.5   1.5   1.9
1
                                                                                                                PAGE  4
      JOB: Site 4 Opt 3 2030 AM - 4B3AM30.DAT                  RUN: Site 4 Opt 3 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.8   1.5    .7    .3    .1    .5    .9   2.1   1.4   1.4   1.9
 215.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.9   1.6    .7    .4    .1    .5   1.0   2.1   1.2   1.5   1.7
 220.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.8   1.5    .8    .4    .1    .5   1.1   2.0   1.3   1.5   1.7
 225.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.9   1.6    .8    .4    .1    .6   1.3   2.0   1.2   1.6   1.8
 230.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.9   1.5    .9    .5    .2    .6   1.5   1.8   1.4   1.7   1.8
 235.  *    .1    .0    .0    .0    .0    .0    .0    .5    .7   1.9   1.5    .9    .6    .2    .6   1.5   1.6   1.4   1.8   1.6
 240.  *    .1    .1    .1    .0    .0    .0    .0    .5    .7   1.9   1.5    .8    .6    .2    .7   1.4   1.9   1.4   2.0   1.5
 245.  *    .2    .2    .1    .0    .0    .0    .0    .5    .8   1.7   1.4    .8    .5    .2    .9   1.6   1.6   1.4   2.1   1.5
 250.  *    .2    .2    .2    .2    .0    .0    .0    .6    .9   1.7   1.3    .8    .5    .3    .9   1.6   1.5   1.6   2.1   1.4
 255.  *    .4    .5    .5    .2    .0    .0    .0    .5   1.0   1.7   1.3    .8    .6    .4   1.1   1.8   1.7   1.9   2.2   1.3
 260.  *    .7    .7    .6    .4    .0    .0    .0    .5   1.1   1.7   1.4   1.0    .8    .5   1.1   1.9   1.8   2.0   2.1   1.1
 265.  *    .9   1.0   1.0    .6    .1    .0    .0    .5   1.2   1.9   1.4   1.1    .9    .8   1.3   1.7   1.8   2.1   2.0   1.1
 270.  *   1.2   1.3   1.2   1.0    .3    .0    .0    .5   1.4   2.1   1.6   1.3   1.1    .9    .9   1.6   1.6   2.1   1.9    .7
 275.  *   1.6   1.6   1.6   1.3    .4    .0    .0    .5   1.6   2.2   1.5   1.2   1.2   1.1   1.0   1.4   1.3   2.0   1.8    .7
 280.  *   1.7   1.9   1.8   1.4    .4    .3    .0    .6   1.8   2.2   1.5   1.4   1.5   1.1    .9   1.1   1.2   1.6   1.4    .7
 285.  *   1.9   2.0   1.9   1.5    .6    .3    .0    .5   1.8   2.3   1.8   1.6   1.6   1.0    .7   1.0   1.1   1.5   1.4    .7
 290.  *   2.0   2.0   1.9   1.6    .7    .4    .0    .6   2.0   2.4   1.5   1.5   1.6   1.2    .3    .7    .9   1.5   1.3    .7
 295.  *   1.9   1.9   1.9   1.5    .7    .4    .1    .8   2.1   2.4   1.6   1.4   1.7    .9    .3    .5    .7   1.3   1.2    .7
 300.  *   1.9   1.9   1.8   1.5    .7    .4    .3    .9   2.1   2.4   1.3   1.6   1.5    .9    .2    .5    .7   1.4   1.2    .7
 305.  *   1.8   1.7   1.7   1.5    .7    .4    .3    .8   2.3   2.4   1.2   1.6   1.5    .9    .1    .4    .7   1.4   1.1    .7
 310.  *   1.7   1.7   1.7   1.3    .7    .4    .3    .8   2.3   2.2   1.4   1.5   1.5    .6    .1    .4    .6   1.4   1.0    .8
 315.  *   1.7   1.7   1.5   1.3    .7    .4    .3    .9   2.3   2.3   1.4   1.5   1.4    .5    .2    .3    .6   1.3   1.0    .8
 320.  *   1.5   1.5   1.5   1.3    .6    .4    .3   1.0   2.3   2.1   1.4   1.7   1.3    .6    .2    .3    .5   1.2   1.0    .9
 325.  *   1.4   1.4   1.4   1.2    .6    .4    .3   1.0   2.4   2.2   1.5   1.7   1.2    .7    .2    .3    .5   1.1    .9    .9
 330.  *   1.4   1.4   1.3   1.2    .6    .4    .3   1.1   2.5   2.0   1.5   1.7   1.1    .7    .2    .3    .5   1.1   1.1    .9
 335.  *   1.4   1.3   1.3   1.2    .6    .4    .3   1.3   2.5   2.1   1.4   1.8   1.0    .7    .2    .3    .5   1.1   1.0   1.0
 340.  *   1.3   1.3   1.3   1.1    .6    .4    .3   1.4   2.4   1.9   1.4   1.8    .8    .6    .1    .3    .5   1.1   1.0   1.1
 345.  *   1.3   1.3   1.3   1.2    .5    .4    .3   1.6   2.2   2.1   1.4   1.7    .8    .6    .1    .3    .4    .9   1.0   1.1
 350.  *   1.3   1.3   1.3   1.3    .7    .6    .5   1.4   1.9   1.7   1.4   1.5    .6    .5    .0    .2    .3    .8   1.0   1.0
 355.  *   1.4   1.3   1.3   1.5    .9    .8    .8   1.4   1.8   1.6   1.1   1.6    .5    .5    .0    .1    .3    .8    .9    .9
 360.  *   1.4   1.3   1.5   1.7   1.1   1.0    .8   1.2   1.5   1.3   1.2   1.4    .6    .5    .0    .1    .2    .6    .7    .7
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   2.3   2.3   2.3   2.1   1.6   1.6   1.2   1.6   2.5   2.4   1.8   1.8   1.7   1.2   1.3   1.9   2.2   2.1   2.2   1.9
 DEGR. *   70    75    45    20    80    50    20   345   330   290   285   335   295   290   265   260   205   265   255   205

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                                                                                                                PAGE  5
      JOB: Site 4 Opt 3 2030 AM - 4B3AM30.DAT                  RUN: Site 4 Opt 3 2030 AM

       MODEL RESULTS
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       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .7    .6    .6    .7    .7    .2    .0    .0
   5.  *    .6    .7    .8    .9    .9    .2    .0    .0
  10.  *    .3    .8    .8   1.1   1.2    .3    .2    .0
  15.  *    .2    .9    .9   1.2   1.5    .4    .2    .0
  20.  *    .1    .9   1.0   1.3   1.7    .4    .2    .0
  25.  *    .1    .9    .9   1.4   1.8    .5    .3    .1
  30.  *    .1    .9    .9   1.4   1.9    .5    .3    .2
  35.  *    .0    .8    .9   1.5   1.9    .6    .4    .2
  40.  *    .0    .8    .8   1.6   1.9    .7    .3    .2
  45.  *    .0    .8    .8   1.6   1.9    .7    .4    .2
  50.  *    .0    .8    .7   1.6   1.8    .8    .4    .1
```

```
  55.  *    .0    .7    .7   1.7   1.8    .9    .5    .1
  60.  *    .0    .7    .6   1.7   1.8    .9    .4    .1
  65.  *    .0    .6    .6   1.7   1.7   1.0    .5    .3
  70.  *    .0    .6    .6   1.8   1.6   1.0    .6    .4
  75.  *    .0    .6    .6   1.8   1.5   1.0    .6    .5
  80.  *    .0    .6    .6   1.9   1.6   1.1    .7    .7
  85.  *    .0    .6    .6   1.9   1.7   1.3   1.1    .9
  90.  *    .0    .6    .7   2.0   1.8   1.3   1.2   1.2
  95.  *    .0    .7    .7   2.1   1.8   1.4   1.5   1.5
 100.  *    .0    .7    .6   2.2   1.8   1.4   1.8   1.7
 105.  *    .0    .6    .7   2.3   1.8   1.4   1.8   1.7
 110.  *    .0    .7    .9   2.1   1.7   1.5   1.6   1.7
 115.  *    .0    .7    .8   2.3   1.6   1.6   1.7   1.8
 120.  *    .0    .6   1.0   2.3   1.7   1.7   1.6   1.7
 125.  *    .0    .7   1.3   2.3   1.6   1.7   1.8   1.7
 130.  *    .1    .8   1.4   2.5   1.5   1.8   1.8   1.6
 135.  *    .1    .9   1.5   2.5   1.5   1.7   1.8   1.4
 140.  *    .0    .9   1.6   2.4   1.6   1.8   1.7   1.4
 145.  *    .0   1.1   1.9   2.5   1.6   1.8   1.6   1.4
 150.  *    .0   1.1   2.0   2.3   1.6   1.8   1.7   1.4
 155.  *    .2   1.2   1.9   2.2   1.6   1.8   1.7   1.4
 160.  *    .2   1.2   1.9   2.0   1.8   1.6   1.5   1.3
 165.  *    .2   1.3   2.2   2.1   1.8   1.5   1.5   1.3
 170.  *    .5   1.3   2.1   1.8   1.6   1.5   1.4   1.3
 175.  *    .7   1.4   2.1   1.7   1.6   1.3   1.4   1.3
 180.  *   1.0   1.4   1.6   1.3   1.3   1.4   1.3   1.2
 185.  *   1.3   1.2   1.3   1.1   1.3   1.2   1.3   1.3
 190.  *   1.3    .7   1.1   1.0   1.0   1.1   1.3   1.3
 195.  *   1.6    .6    .6    .6   1.0   1.1   1.3   1.3
 200.  *   1.6    .5    .6    .6   1.0   1.1   1.3   1.3
 205.  *   1.4    .4    .5    .6   1.1   1.1   1.3   1.3
1
                                                                                                                 PAGE  6
      JOB: Site 4 Opt 3 2030 AM - 4B3AM30.DAT                   RUN: Site 4 Opt 3 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.4    .3    .5    .6   1.2   1.3   1.3   1.3
 215.  *   1.4    .3    .4    .6   1.2   1.3   1.3   1.3
 220.  *   1.2    .3    .4    .6   1.2   1.3   1.3   1.3
 225.  *   1.2    .3    .4    .6   1.3   1.3   1.3   1.3
 230.  *   1.1    .3    .4    .7   1.3   1.4   1.4   1.4
 235.  *   1.0    .3    .4    .7   1.4   1.4   1.5   1.4
 240.  *   1.0    .3    .4    .7   1.4   1.5   1.5   1.5
 245.  *   1.0    .3    .4    .7   1.5   1.5   1.6   1.4
 250.  *   1.1    .2    .4    .7   1.6   1.6   1.7   1.5
 255.  *    .9    .0    .3    .7   1.7   1.7   1.7   1.6
 260.  *    .7    .0    .3    .5   1.5   1.5   1.5   1.4
 265.  *    .7    .0    .2    .5   1.4   1.4   1.4   1.3
 270.  *    .7    .0    .0    .3   1.1   1.1   1.2   1.0
 275.  *    .7    .0    .0    .2    .9    .9    .9    .8
 280.  *    .7    .0    .0    .0    .6    .6    .6    .5
 285.  *    .7    .0    .0    .0    .4    .4    .4    .4
 290.  *    .7    .0    .0    .0    .2    .2    .2    .1
 295.  *    .7    .0    .0    .0    .1    .1    .1    .1
 300.  *    .7    .0    .0    .0    .0    .0    .0    .0
 305.  *    .7    .0    .0    .0    .0    .0    .0    .0
 310.  *    .8    .0    .0    .0    .0    .0    .0    .0
 315.  *    .8    .0    .0    .0    .0    .0    .0    .0
 320.  *    .8    .0    .0    .0    .0    .0    .0    .0
 325.  *    .8    .0    .0    .0    .0    .0    .0    .0
 330.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 335.  *   1.0    .1    .0    .1    .0    .0    .0    .0
 340.  *   1.0    .1    .1    .1    .0    .0    .0    .0
 345.  *   1.0    .1    .2    .1    .1    .0    .0    .0
 350.  *   1.0    .3    .3    .3    .4    .0    .0    .0
 355.  *    .9    .4    .5    .4    .5    .0    .0    .0
 360.  *    .7    .6    .6    .7    .7    .2    .0    .0
 ------*------------------------------------------------
 MAX   *   1.6   1.4   2.2   2.5   1.9   1.8   1.8   1.8
 DEGR. *  195   175   165   130    30   130   100   115

 THE HIGHEST CONCENTRATION IS    2.50 PPM AT  130 DEGREES FROM REC24.
 THE 2ND HIGHEST CONCENTRATION IS    2.50 PPM AT  330 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    2.40 PPM AT  290 DEGREES FROM REC10.
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Site 4 Opt 3 2014 PM - 4B3PM14.DAT      60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Opt 3 2014 PM                     15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.     84111.4   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.     84111.4   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        62       2.0  841  102.2 1264 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    150311.4   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    203511.4   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    203511.4   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        62       2.0 2035  102.2 1361 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.    171811.4   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    169511.4   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
       120        62       2.0 1695  102.2  967 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.    113311.4   0  32   30.
```

```
  1
WB        Rt7A aprchAG  1388.  2708.   655.  2720.    143011.4   0  44   30.
  1
WB        Rt7A aprchAG   655.  2720.   387.  2730.    143011.4   0  56   30.
  2
WB        Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        62       2.0 1430  102.2  608 1 3
  1
WB        Rt7A deparAG   386.  2733.  -609.  2763.    164711.4   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 4 Opt 3 2014 PM - 4B3PM14.DAT                   RUN: Site 4 Opt 3 2014 PM
      DATE: 05/08/2009   TIME: 09:00:00.21


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG    841.  11.4    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG    841.  11.4    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     391.4    2587.8 *      71.   181. AG    567. 100.0    .0 48.0  .37   3.6
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1503.  11.4    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG   2035.  11.4    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG   2035.  11.4    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     359.1    2947.2 *     183.     1. AG    567. 100.0    .0 48.0  .83   9.3
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG   1718.  11.4    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1695.  11.4    .0 44.0
      10. EB        Rt7A aprch*    309.0    2719.0   -4229.4    2851.5 *    4540.   272. AG    283. 100.0    .0 24.0 1.95 230.6
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG   1133.  11.4    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   1430.  11.4    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   1430.  11.4    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0    2758.1    2656.5 *    2300.    92. AG    425. 100.0    .0 36.0 1.74 116.8
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1647.  11.4    .0 44.0
1
                                                                                                                        PAGE  2
      JOB: Site 4 Opt 3 2014 PM - 4B3PM14.DAT                   RUN: Site 4 Opt 3 2014 PM
      DATE: 05/08/2009   TIME: 09:00:00.21

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE      RATE
                              *     (SEC)   (SEC)     (SEC)     (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       62       2.0        841       1264     102.20      1        3
       7. SB        Rt4 aprch *     120       62       2.0       2035       1361     102.20      1        3
      10. EB        Rt7A aprch*     120       62       2.0       1695        967     102.20      1        3
      14. WB        Rt7A aprch*     120       62       2.0       1430        608     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0    *
      2. SW 164 W             *       151.0     2697.0       5.0    *
      3. SW 82 W              *       234.0     2693.0       5.0    *
      4. SW CNR               *       310.0     2683.0       5.0    *
      5. SW 82 S              *       316.0     2608.0       5.0    *
      6. SW 164 S             *       313.0     2527.0       5.0    *
      7. SW MID S             *       311.0     2362.0       5.0    *
      8. SE MID S             *       428.0     2361.0       5.0    *
      9. SE 164 S             *       431.0     2516.0       5.0    *
     10. SE 82 S              *       432.0     2598.0       5.0    *
     11. SE CNR               *       448.0     2662.0       5.0    *
     12. SE 82 E              *       506.0     2676.0       5.0    *
     13. SE 164 E             *       589.0     2673.0       5.0    *
     14. SE MID E             *       744.0     2669.0       5.0    *
     15. NE MID E             *       744.0     2746.0       5.0    *
     16. NE 164 E             *       588.0     2753.0       5.0    *
     17. NE 82 E              *       506.0     2757.0       5.0    *
     18. NE CNR               *       440.0     2763.0       5.0    *
     19. NE 82 N              *       433.0     2827.0       5.0    *
     20. NE 164 N             *       433.0     2911.0       5.0    *
     21. NE MID N             *       436.0     3044.0       5.0    *
     22. NW MID N             *       328.0     3045.0       5.0    *
     23. NW 164 N             *       323.0     2917.0       5.0    *
     24. NW 82 N              *       320.0     2833.0       5.0    *
     25. NW CNR               *       313.0     2765.0       5.0    *
     26. NW 82 W              *       247.0     2766.0       5.0    *
     27. NW 164 W             *       166.0     2767.0       5.0    *
     28. NW MID W             *       -36.0     2773.0       5.0    *
1
                                                                                                                        PAGE  3
      JOB: Site 4 Opt 3 2014 PM - 4B3PM14.DAT                   RUN: Site 4 Opt 3 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.9   1.8   1.9   2.5   1.8   1.5   1.4   1.3   1.5   1.6   1.4   1.9   1.8   1.7    .0    .1    .2    .8    .9    .9
   5.  *   1.9   1.9   2.2   2.7   2.2   1.6   1.6   1.1   1.1   1.4   1.5   1.9   1.7   1.7    .0    .0    .2    .5    .7    .7
  10.  *   1.9   2.1   2.2   3.0   2.2   1.7   1.7    .7   1.1   1.2   1.3   1.7   1.7   1.7    .0    .0    .0    .3    .4    .5
  15.  *   1.9   2.2   2.5   3.0   2.2   2.0   1.7    .7    .7    .9   1.2   1.7   1.7   1.7    .0    .0    .0    .1    .2    .3
  20.  *   2.0   2.3   2.6   3.1   2.2   2.2   1.8    .4    .5    .8   1.1   1.7   1.7   1.7    .0    .0    .0    .1    .1    .1
  25.  *   2.1   2.4   2.8   2.9   2.1   2.2   1.5    .4    .5    .8   1.2   1.7   1.7   1.7    .0    .0    .0    .0    .1    .1
  30.  *   2.1   2.4   2.9   2.5   1.8   2.0   1.4    .4    .5    .8   1.2   1.7   1.7   1.7    .0    .0    .0    .0    .0    .1
  35.  *   2.1   2.6   2.9   2.5   1.7   2.0   1.4    .4    .5    .9   1.3   1.7   1.8   1.7    .0    .0    .0    .0    .0    .0
```

```
  40.  *   2.2   2.8   2.9   2.3   1.8   1.7   1.3    .4    .5    .9   1.3   1.7   1.7   1.7    .0    .0    .0    .0    .0    .0
  45.  *   2.3   2.7   3.1   2.2   1.8   1.8   1.2    .4    .7    .9   1.5   1.8   1.8   1.8    .0    .0    .0    .0    .0    .0
  50.  *   2.5   2.8   2.9   2.1   2.0   1.7   1.3    .5    .7    .9   1.5   1.9   2.0   1.9    .0    .0    .0    .0    .0    .0
  55.  *   2.6   2.9   2.8   2.2   2.0   1.9   1.3    .5    .6   1.0   1.6   2.0   2.0   1.9    .0    .0    .0    .0    .0    .0
  60.  *   2.8   2.9   3.0   2.0   2.2   1.8   1.3    .5    .6   1.0   1.7   2.1   2.1   2.0    .0    .0    .1    .0    .0    .0
  65.  *   2.9   2.9   3.0   2.2   2.4   1.6   1.2    .5    .6   1.0   1.7   2.1   2.1   2.1    .2    .2    .2    .1    .0    .0
  70.  *   3.0   3.1   2.7   2.2   2.6   1.4   1.2    .5    .6   1.1   1.8   2.3   2.4   2.3    .3    .4    .3    .2    .0    .0
  75.  *   3.1   3.1   2.7   2.6   2.5   1.4    .9    .3    .6   1.0   1.8   2.3   2.3   2.3    .6    .6    .5    .5    .1    .0
  80.  *   3.2   3.0   2.8   2.6   2.6   1.3    .9    .2    .6   1.0   1.8   2.3   2.3   2.2   1.1   1.0   1.0    .8    .1    .0
  85.  *   3.0   3.0   2.7   2.5   2.5   1.3   1.0    .2    .5    .7   1.5   2.1   2.0   2.0   1.5   1.6   1.4   1.2    .4    .1
  90.  *   3.0   2.6   2.5   2.4   2.2   1.0    .9    .1    .2    .6   1.4   1.8   1.7   1.7   2.2   2.1   1.9   1.8    .6    .2
  95.  *   2.2   2.2   2.0   2.1   2.0   1.0    .8    .0    .1    .5   1.0   1.5   1.2   1.2   2.6   2.5   2.4   2.2    .8    .4
 100.  *   1.5   1.7   1.7   1.8   1.6    .8    .7    .0    .1    .2    .6    .9    .9    .8   3.0   2.8   2.8   2.5   1.1    .6
 105.  *    .9   1.2   1.1   1.7   1.3    .7    .6    .0    .0    .1    .3    .6    .6    .6   3.1   2.9   2.9   2.7   1.1    .7
 110.  *    .6    .8    .9   1.4   1.1    .7    .7    .0    .0    .0    .1    .2    .2    .2   3.0   2.9   2.9   2.5   1.2    .7
 115.  *    .3    .6    .9   1.4   1.0    .7    .7    .0    .0    .0    .0    .2    .1    .2   2.8   2.7   2.6   2.4   1.2    .7
 120.  *    .2    .5    .7   1.3   1.0    .8    .8    .0    .0    .0    .0    .0    .0    .0   2.7   2.6   2.6   2.2   1.2    .7
 125.  *    .2    .4    .7   1.3    .9    .8    .8    .0    .0    .0    .0    .0    .0    .0   2.6   2.5   2.4   2.0   1.2    .7
 130.  *    .1    .4    .6   1.4    .9    .8    .8    .0    .0    .0    .0    .0    .0    .0   2.4   2.4   2.3   1.9   1.0    .7
 135.  *    .1    .3    .5   1.4    .8    .8    .8    .0    .0    .0    .0    .0    .0    .0   2.4   2.3   2.3   1.8   1.1    .7
 140.  *    .1    .3    .5   1.3    .9    .9    .9    .0    .0    .0    .0    .0    .0    .0   2.3   2.2   2.2   1.5   1.1    .6
 145.  *    .1    .2    .5   1.2    .9    .9    .9    .0    .0    .0    .0    .0    .0    .0   2.1   2.1   2.0   1.4    .8    .6
 150.  *    .1    .3    .4   1.2    .9   1.0    .9    .0    .0    .0    .0    .0    .0    .0   2.1   2.0   1.9   1.3    .8    .7
 155.  *    .1    .3    .5   1.1   1.1   1.0   1.0    .0    .0    .0    .0    .0    .0    .0   2.1   1.9   1.9   1.2    .7    .7
 160.  *    .1    .3    .5   1.1   1.1   1.0   1.0    .0    .0    .0    .0    .0    .0    .0   2.0   1.9   1.9   1.1    .6    .7
 165.  *    .0    .3    .4   1.0   1.1   1.0   1.0    .1    .0    .1    .0    .0    .0    .0   2.0   1.9   1.9   1.0    .8    .6
 170.  *    .0    .1    .4    .9   1.1   1.0   1.0    .2    .3    .3    .1    .0    .0    .0   2.0   1.9   1.9   1.2    .9   1.0
 175.  *    .0    .1    .3    .8   1.0    .8    .8    .2    .3    .3    .3    .0    .0    .0   2.1   1.9   1.9   1.2   1.0   1.0
 180.  *    .0    .1    .1    .7    .8    .7    .7    .4    .4    .5    .4    .1    .0    .0   2.1   1.9   2.0   1.5   1.2   1.3
 185.  *    .0    .0    .1    .5    .6    .6    .6    .5    .7    .6    .5    .2    .0    .0   2.1   2.0   2.1   1.6   1.5   1.6
 190.  *    .0    .0    .0    .3    .4    .3    .3    .6    .7    .8    .7    .3    .1    .0   2.0   2.0   2.3   1.8   1.7   1.9
 195.  *    .0    .0    .0    .2    .2    .2    .2    .8    .8    .8    .8    .4    .2    .0   2.0   2.1   2.3   2.0   1.8   2.0
 200.  *    .0    .0    .0    .1    .1    .1    .1    .8    .8    .8   1.1    .4    .2    .1   2.1   2.2   2.3   1.8   1.9   2.0
 205.  *    .0    .0    .0    .0    .1    .1    .1    .7    .8    .7   1.1    .5    .3    .1   2.1   2.3   2.4   1.7   1.8   2.3
1
                                                                                                                 PAGE  4
      JOB: Site 4 Opt 3 2014 PM - 4B3PM14.DAT                  RUN: Site 4 Opt 3 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8    .8   1.3    .5    .3    .2   2.2   2.2   2.5   1.7   1.8   2.2
 215.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7    .8   1.4    .5    .3    .2   2.2   2.4   2.6   1.9   2.0   2.4
 220.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7    .8   1.4    .5    .3    .1   2.3   2.5   2.4   1.8   2.0   2.5
 225.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7    .9   1.5    .6    .3    .1   2.4   2.7   2.4   1.6   2.0   2.7
 230.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7    .9   1.6    .6    .4    .1   2.6   2.8   2.4   1.8   2.3   2.7
 235.  *    .1    .0    .0    .0    .0    .0    .0    .7    .7   1.0   1.6    .7    .4    .1   2.8   2.8   2.4   1.8   2.4   2.6
 240.  *    .1    .1    .0    .0    .0    .0    .0    .6    .6   1.1   1.6    .8    .5    .2   2.9   2.8   2.5   2.1   2.5   2.6
 245.  *    .2    .1    .1    .0    .0    .0    .0    .5    .6   1.1   1.5    .8    .5    .3   3.0   3.1   2.5   2.2   2.6   2.7
 250.  *    .3    .2    .2    .2    .0    .0    .0    .5    .6   1.2   1.5    .9    .5    .4   3.2   2.8   2.3   2.4   2.8   2.7
 255.  *    .5    .5    .5    .4    .0    .0    .0    .5    .6   1.3   1.6   1.0    .9    .6   3.3   3.2   2.4   2.8   2.8   2.6
 260.  *    .9    .9    .8    .6    .1    .0    .0    .6    .6   1.6   1.7   1.3    .9   1.0   3.2   3.0   2.7   2.7   2.9   2.4
 265.  *   1.4   1.3   1.3   1.0    .3    .1    .0    .6    .7   1.9   1.7   1.4   1.5   1.2   3.5   2.9   2.7   3.0   2.8   2.5
 270.  *   1.9   2.0   1.8   1.5    .5    .2    .1    .6    .8   2.3   2.0   1.8   1.6   1.6   2.8   2.6   2.4   2.8   2.6   2.3
 275.  *   2.3   2.3   2.2   1.8    .7    .4    .1    .6   1.0   2.4   2.1   2.1   2.2   2.2   2.3   2.1   2.1   2.6   2.3   2.0
 280.  *   2.5   2.5   2.5   2.1    .8    .5    .2    .8   1.1   2.7   2.2   2.3   2.5   2.7   1.8   1.8   1.9   2.4   2.2   1.8
 285.  *   2.8   2.7   2.6   2.2    .9    .5    .2    .8   1.1   2.8   2.3   2.2   2.3   2.5   1.3   1.4   1.6   2.0   2.0   1.6
 290.  *   2.7   2.7   2.6   2.2   1.0    .6    .4   1.0   1.3   2.9   1.9   2.2   2.4   2.7    .9   1.2   1.4   1.9   1.9   1.5
 295.  *   2.6   2.5   2.5   2.0   1.0    .7    .4    .9   1.3   3.0   2.1   2.2   2.5   2.5    .5    .9   1.2   1.8   2.0   1.5
 300.  *   2.5   2.4   2.3   2.0   1.0    .7    .4    .9   1.4   2.9   1.9   2.2   2.6   2.3    .4    .9   1.2   1.8   2.0   1.4
 305.  *   2.4   2.3   2.3   2.0   1.0    .7    .4   1.0   1.3   2.8   1.8   2.2   2.4   2.4    .4    .8   1.1   1.8   2.0   1.3
 310.  *   2.3   2.2   2.1   1.8   1.0    .6    .4   1.1   1.4   2.9   1.8   2.3   2.5   2.3    .4    .8   1.1   1.8   1.9   1.3
 315.  *   2.1   2.1   2.0   1.8    .8    .6    .4   1.1   1.6   2.7   2.1   2.4   2.4   2.3    .2    .6   1.1   1.8   2.0   1.3
 320.  *   2.1   2.0   2.0   1.7    .8    .6    .4   1.0   1.7   2.6   1.9   2.5   2.4   2.1    .2    .5   1.1   1.9   1.9   1.2
 325.  *   2.0   2.0   1.9   1.6    .8    .6    .3   1.0   1.8   2.7   2.0   2.6   2.3   1.9    .2    .5    .9   1.7   1.9   1.3
 330.  *   1.9   1.9   1.8   1.5    .8    .6    .3   1.1   1.6   2.8   2.1   2.5   2.2   1.9    .2    .5    .8   1.9   1.8   1.3
 335.  *   1.9   1.9   1.8   1.5    .8    .6    .3   1.3   2.0   2.6   2.3   2.5   2.2   1.9    .2    .4    .7   1.7   1.8   1.2
 340.  *   1.9   1.9   1.8   1.6   1.0    .7    .4   1.3   2.0   2.5   2.2   2.5   2.1   1.9    .2    .4    .7   1.6   1.5   1.3
 345.  *   1.9   1.9   1.8   1.7    .9    .9    .5   1.7   2.3   2.5   2.3   2.3   2.0   1.9    .2    .3    .6   1.5   1.6   1.3
 350.  *   1.9   1.9   1.7   1.9   1.4   1.1    .9   1.4   2.1   2.1   2.0   2.3   1.9   1.7    .0    .2    .4   1.2   1.4   1.3
 355.  *   1.9   1.9   1.8   2.2   1.6   1.3   1.1   1.5   1.9   2.0   1.7   2.0   1.9   1.7    .0    .2    .3    .9   1.2   1.0
 360.  *   1.9   1.8   1.9   2.5   1.8   1.5   1.4   1.3   1.5   1.6   1.4   1.9   1.8   1.7    .0    .1    .2    .8    .9    .9
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   3.2   3.1   3.1   3.1   2.6   2.2   1.8   1.7   2.3   3.0   2.3   2.6   2.6   2.7   3.5   3.2   2.9   3.0   2.9   2.7
 DEGR. *   80    70    45    20    70    20    20   345   345   295   285   325   300   280   265   255   105   265   260   225

1
                                                                                                                 PAGE  5
      JOB: Site 4 Opt 3 2014 PM - 4B3PM14.DAT                  RUN: Site 4 Opt 3 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .8   1.0   1.0   1.5   1.3    .2    .1    .0
   5.  *    .7   1.2   1.3   1.9   1.7    .4    .1    .0
  10.  *    .4   1.3   1.6   2.2   2.2    .5    .2    .0
  15.  *    .2   1.4   1.8   2.7   2.5    .6    .3    .0
  20.  *    .1   1.5   1.9   2.8   2.7    .8    .3    .1
  25.  *    .1   1.4   1.8   2.8   2.8   1.0    .4    .2
  30.  *    .1   1.3   1.9   2.9   2.9   1.0    .6    .2
  35.  *    .0   1.3   1.9   2.9   2.7   1.1    .5    .2
  40.  *    .0   1.2   2.0   2.9   2.6   1.2    .7    .2
  45.  *    .0   1.2   1.9   2.8   2.6   1.3    .8    .2
  50.  *    .0   1.1   2.0   2.7   2.5   1.3    .7    .2
```

```
   55.  *    .0   1.0   2.1   2.6   2.4   1.2    .7    .4
   60.  *    .0   1.0   2.2   2.6   2.4   1.3    .7    .5
   65.  *    .0   1.0   2.3   2.5   2.2   1.3    .9    .4
   70.  *    .0   1.0   2.3   2.4   2.2   1.5   1.0    .5
   75.  *    .0   1.0   2.3   2.5   2.3   1.5   1.0    .8
   80.  *    .0    .9   2.5   2.6   2.7   1.9   1.5   1.1
   85.  *    .0   1.0   2.7   2.9   2.9   2.0   1.8   1.7
   90.  *    .1   1.1   2.8   3.2   3.2   2.4   2.2   2.3
   95.  *    .1   1.3   3.0   3.5   3.2   2.5   2.5   2.5
  100.  *    .2   1.2   3.2   3.5   3.2   2.5   2.6   2.8
  105.  *    .3   1.4   3.2   3.5   3.1   2.7   2.8   2.5
  110.  *    .4   1.5   3.2   3.5   2.9   2.7   2.6   2.5
  115.  *    .5   1.5   3.4   3.5   2.9   2.4   2.6   2.4
  120.  *    .5   1.5   3.3   3.4   2.4   2.2   2.5   2.3
  125.  *    .5   1.5   3.4   3.3   2.4   2.4   2.3   2.2
  130.  *    .5   1.6   3.3   3.2   2.4   2.3   2.2   2.0
  135.  *    .5   1.8   3.4   3.2   2.2   2.3   2.2   1.9
  140.  *    .5   1.9   3.3   3.3   2.4   2.2   2.2   1.9
  145.  *    .6   2.0   3.3   3.2   2.2   2.2   2.1   1.8
  150.  *    .5   2.1   3.5   3.1   2.3   2.2   2.0   1.8
  155.  *    .5   2.1   3.7   2.9   2.3   2.1   1.9   1.8
  160.  *    .5   2.4   3.6   3.0   2.1   2.2   2.0   1.8
  165.  *    .5   2.6   3.4   2.6   2.4   2.1   1.9   1.7
  170.  *    .8   2.7   3.0   2.4   2.2   2.0   1.8   1.7
  175.  *   1.0   2.4   2.7   2.3   2.2   1.9   1.8   1.7
  180.  *   1.4   2.2   2.3   2.0   2.2   1.8   1.7   1.6
  185.  *   1.7   1.8   2.0   1.6   1.8   1.7   1.6   1.6
  190.  *   2.1   1.3   1.5   1.2   1.7   1.7   1.7   1.7
  195.  *   2.3    .9   1.2   1.0   1.7   1.6   1.7   1.7
  200.  *   2.3    .6   1.0    .9   1.6   1.6   1.6   1.6
  205.  *   2.3    .5    .8    .9   1.6   1.6   1.7   1.7
1
                                                                                                                 PAGE  6
      JOB: Site 4 Opt 3 2014 PM - 4B3PM14.DAT                   RUN: Site 4 Opt 3 2014 PM

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
  ------*------------------------------------------------
  210.  *   2.1    .4    .7   1.0   1.6   1.6   1.7   1.7
  215.  *   2.0    .5    .7   1.0   1.6   1.7   1.7   1.7
  220.  *   1.9    .4    .7   1.0   1.6   1.7   1.7   1.7
  225.  *   1.9    .4    .7   1.0   1.7   1.8   1.8   1.8
  230.  *   1.7    .4    .7   1.0   1.8   1.8   1.8   1.8
  235.  *   1.5    .4    .7    .9   1.8   1.8   2.0   2.0
  240.  *   1.5    .4    .7   1.0   2.0   2.1   2.1   2.1
  245.  *   1.5    .4    .7   1.0   2.1   2.1   2.1   2.1
  250.  *   1.3    .4    .7   1.0   2.1   2.1   2.2   2.2
  255.  *   1.4    .4    .7   1.0   2.3   2.3   2.3   2.3
  260.  *   1.3    .2    .5    .9   2.3   2.3   2.3   2.3
  265.  *   1.2    .2    .5    .8   2.1   2.1   2.2   2.1
  270.  *   1.0    .1    .4    .6   1.8   1.8   1.9   1.8
  275.  *   1.0    .1    .1    .4   1.4   1.4   1.4   1.4
  280.  *   1.0    .0    .1    .2    .9   1.0   1.0   1.0
  285.  *    .9    .0    .0    .1    .6    .6    .6    .6
  290.  *    .9    .0    .0    .0    .4    .4    .4    .4
  295.  *    .9    .0    .0    .0    .1    .1    .1    .1
  300.  *    .9    .0    .0    .0    .0    .1    .1    .1
  305.  *    .9    .0    .1    .0    .0    .0    .0    .0
  310.  *    .9    .0    .1    .1    .0    .0    .0    .0
  315.  *   1.1    .0    .1    .1    .0    .0    .0    .0
  320.  *   1.1    .0    .1    .1    .0    .0    .0    .0
  325.  *   1.1    .1    .1    .1    .0    .0    .0    .0
  330.  *   1.2    .1    .1    .1    .0    .0    .0    .0
  335.  *   1.2    .1    .1    .1    .1    .0    .0    .0
  340.  *   1.2    .2    .2    .2    .1    .0    .0    .0
  345.  *   1.3    .3    .3    .4    .3    .0    .0    .0
  350.  *   1.2    .5    .5    .8    .6    .0    .0    .0
  355.  *   1.0    .7    .7   1.0    .9    .1    .0    .0
  360.  *    .8   1.0   1.0   1.5   1.3    .2    .1    .0
  ------*------------------------------------------------
  MAX   *   2.3   2.7   3.7   3.5   3.2   2.7   2.8   2.8
  DEGR. *  195   170   155   105    90   105   105   100

  THE HIGHEST CONCENTRATION IS    3.70 PPM AT  155 DEGREES FROM REC23.
  THE 2ND HIGHEST CONCENTRATION IS    3.50 PPM AT  265 DEGREES FROM REC15.
  THE 3RD HIGHEST CONCENTRATION IS    3.50 PPM AT  105 DEGREES FROM REC24.
```

```
Site 4 Opt 3 2030 PM - 4B3PM30.DAT      60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Opt 3 2030 PM                     15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.     850 9.2   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.     850 9.2   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        63       2.0  850   84.1 1288 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    1280 9.2   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    2065 9.2   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    2065 9.2   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        63       2.0 2065   84.1 1406 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.    1680 9.2   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    1125 9.2   0  56   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  36   2
       120        65       2.0 1125   84.1 1167 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.    1185 9.2   0  32   30.
```

```
  1
WB        Rt7A aprchAG  1388.  2708.   655.  2720.    1200 9.2   0  44   30.
  1
WB        Rt7A aprchAG   655.  2720.   387.  2730.    1200 9.2   0  56   30.
  2
WB        Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        65       2.0 1200   84.1  864 1 3
  1
WB        Rt7A deparAG   386.  2733.  -609.  2763.    1095 9.2   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 4 Opt 3 2030 PM - 4B3PM30.DAT                   RUN: Site 4 Opt 3 2030 PM
      DATE: 05/11/2009   TIME: 03:48:27.26


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-----------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG    850.   9.2    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG    850.   9.2    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     391.4    2586.0 *      73.   181. AG    474. 100.0    .0 48.0  .37   3.7
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1280.   9.2    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG   2065.   9.2    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG   2065.   9.2    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     359.2    2953.3 *     189.     1. AG    474. 100.0    .0 48.0  .83   9.6
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG   1680.   9.2    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1125.   9.2    .0 56.0
      10. EB        Rt7A aprch*    309.0    2719.0    -672.8    2747.7 *     982.   272. AG    244. 100.0    .0 36.0 1.14  49.9
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG   1185.   9.2    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   1200.   9.2    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   1200.   9.2    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0    1027.6    2709.6 *     569.    92. AG    367. 100.0    .0 36.0 1.09  28.9
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1095.   9.2    .0 44.0
1
                                                                                                                      PAGE  2
      JOB: Site 4 Opt 3 2030 PM - 4B3PM30.DAT                   RUN: Site 4 Opt 3 2030 PM
      DATE: 05/11/2009   TIME: 03:48:27.26

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*----------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       63       2.0        850       1288      84.10      1        3
       7. SB        Rt4 aprch *     120       63       2.0       2065       1406      84.10      1        3
      10. EB        Rt7A aprch*     120       65       2.0       1125       1167      84.10      1        3
      14. WB        Rt7A aprch*     120       65       2.0       1200        864      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0    *
      2. SW 164 W             *       151.0     2697.0       5.0    *
      3. SW 82 W              *       234.0     2693.0       5.0    *
      4. SW CNR               *       310.0     2683.0       5.0    *
      5. SW 82 S              *       316.0     2608.0       5.0    *
      6. SW 164 S             *       313.0     2527.0       5.0    *
      7. SW MID S             *       311.0     2362.0       5.0    *
      8. SE MID S             *       428.0     2361.0       5.0    *
      9. SE 164 S             *       431.0     2516.0       5.0    *
     10. SE 82 S              *       432.0     2598.0       5.0    *
     11. SE CNR               *       448.0     2662.0       5.0    *
     12. SE 82 E              *       506.0     2676.0       5.0    *
     13. SE 164 E             *       589.0     2673.0       5.0    *
     14. SE MID E             *       744.0     2669.0       5.0    *
     15. NE MID E             *       744.0     2746.0       5.0    *
     16. NE 164 E             *       588.0     2753.0       5.0    *
     17. NE 82 E              *       506.0     2757.0       5.0    *
     18. NE CNR               *       440.0     2763.0       5.0    *
     19. NE 82 N              *       433.0     2827.0       5.0    *
     20. NE 164 N             *       433.0     2911.0       5.0    *
     21. NE MID N             *       436.0     3044.0       5.0    *
     22. NW MID N             *       328.0     3045.0       5.0    *
     23. NW 164 N             *       323.0     2917.0       5.0    *
     24. NW 82 N              *       320.0     2833.0       5.0    *
     25. NW CNR               *       313.0     2765.0       5.0    *
     26. NW 82 W              *       247.0     2766.0       5.0    *
     27. NW 164 W             *       166.0     2767.0       5.0    *
     28. NW MID W             *       -36.0     2773.0       5.0    *
1
                                                                                                                      PAGE  3
      JOB: Site 4 Opt 3 2030 PM - 4B3PM30.DAT                   RUN: Site 4 Opt 3 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *   1.3   1.2   1.3   1.7   1.4   1.1   1.0    .9   1.4   1.1   1.1   1.6   1.4   1.3    .0    .0    .2    .7    .7    .6
   5.  *   1.3   1.3   1.6   2.1   1.6   1.5   1.2   1.0   1.0   1.0   1.1   1.5   1.4   1.3    .0    .0    .1    .3    .4    .4
  10.  *   1.3   1.3   1.6   2.2   1.6   1.5   1.1    .7    .8    .9    .9   1.4   1.4   1.3    .0    .0    .0    .3    .3    .3
  15.  *   1.2   1.4   1.7   2.1   1.6   1.8   1.2    .5    .7    .5   1.0   1.4   1.4   1.3    .0    .0    .0    .1    .1    .2
  20.  *   1.4   1.4   1.9   2.3   1.6   1.2   1.3    .4    .4    .5   1.0   1.4   1.4   1.4    .0    .0    .0    .0    .1    .1
  25.  *   1.4   1.6   2.0   2.1   1.5   1.5   1.2    .3    .5    .5    .9   1.4   1.4   1.4    .0    .0    .0    .0    .1    .1
  30.  *   1.6   1.7   2.0   1.8   1.7   1.6   1.2    .3    .5    .6   1.1   1.4   1.3   1.4    .0    .0    .0    .0    .0    .0
  35.  *   1.6   1.9   2.1   1.7   1.4   1.4   1.2    .3    .5    .6   1.1   1.4   1.3   1.4    .0    .0    .0    .0    .0    .0
```

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  40.  *   1.7   2.1   2.4   1.7   1.4   1.5   1.0    .3    .5    .6   1.1   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0
  45.  *   1.8   2.1   2.4   1.5   1.4   1.5   1.0    .4    .5    .6   1.2   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0
  50.  *   2.0   2.2   2.3   1.6   1.3   1.6   1.0    .4    .5    .6   1.2   1.6   1.6   1.6    .0    .0    .0    .0    .0    .0
  55.  *   1.9   2.2   2.1   1.3   1.5   1.5   1.1    .4    .5    .8   1.2   1.6   1.6   1.6    .0    .0    .0    .0    .0    .0
  60.  *   2.1   2.2   2.1   1.4   1.8   1.5    .8    .3    .5    .9   1.3   1.7   1.7   1.6    .0    .0    .0    .0    .0    .0
  65.  *   2.2   2.4   2.0   1.6   1.9   1.3    .8    .3    .5    .8   1.4   1.8   1.6   1.7    .2    .1    .0    .0    .0    .0
  70.  *   2.4   2.2   2.2   1.7   2.0   1.1    .6    .0    .4    .7   1.4   1.7   1.7   1.6    .2    .1    .2    .1    .0    .0
  75.  *   2.4   2.5   2.0   2.0   2.0   1.0    .5    .0    .4    .7   1.3   1.8   1.8   1.6    .3    .4    .4    .3    .0    .0
  80.  *   2.2   2.4   2.1   1.8   1.9    .9    .5    .0    .3    .5   1.2   1.7   1.7   1.5    .7    .7    .7    .5    .0    .0
  85.  *   2.1   2.3   2.0   1.8   1.7    .7    .6    .0    .1    .4   1.1   1.5   1.3   1.1   1.0   1.0   1.0    .9    .1    .0
  90.  *   2.0   1.9   1.9   1.7   1.8    .6    .6    .0    .0    .3    .8   1.3   1.1   1.0   1.3   1.3   1.3   1.1    .3    .0
  95.  *   1.6   1.6   1.5   1.7   1.5    .5    .6    .0    .0    .2    .6    .8    .9    .7   1.7   1.7   1.7   1.5    .5    .1
 100.  *   1.2   1.3   1.2   1.5   1.1    .5    .5    .0    .0    .0    .4    .6    .5    .5   1.9   1.9   1.9   1.7    .6    .2
 105.  *    .9   1.0    .9   1.1    .9    .5    .5    .0    .0    .0    .2    .2    .3    .2   2.2   2.2   2.3   1.9    .7    .4
 110.  *    .6    .7    .9   1.1    .9    .5    .5    .0    .0    .0    .0    .2    .2    .1   2.3   2.3   2.2   2.0    .8    .4
 115.  *    .3    .5    .7   1.0    .9    .6    .5    .0    .0    .0    .0    .0    .0    .0   2.2   2.2   2.2   1.8    .9    .5
 120.  *    .3    .4    .7   1.0    .8    .6    .5    .0    .0    .0    .0    .0    .0    .0   2.2   2.2   2.1   1.7    .9    .5
 125.  *    .2    .4    .5   1.0    .8    .7    .6    .0    .0    .0    .0    .0    .0    .0   2.1   1.9   1.9   1.6    .8    .5
 130.  *    .2    .3    .5   1.0    .8    .7    .6    .0    .0    .0    .0    .0    .0    .0   1.9   1.9   1.8   1.5    .8    .6
 135.  *    .1    .3    .4   1.2    .7    .7    .7    .0    .0    .0    .0    .0    .0    .0   1.9   1.8   1.8   1.4    .8    .5
 140.  *    .1    .2    .4   1.1    .7    .6    .7    .0    .0    .0    .0    .0    .0    .0   1.8   1.7   1.7   1.3    .8    .5
 145.  *    .1    .2    .3   1.0    .8    .6    .7    .0    .0    .0    .0    .0    .0    .0   1.8   1.6   1.7   1.1    .8    .5
 150.  *    .1    .2    .3   1.0    .8    .8    .8    .0    .0    .0    .0    .0    .0    .0   1.7   1.6   1.6   1.0    .7    .5
 155.  *    .1    .2    .3    .8    .7    .8    .8    .0    .0    .0    .0    .0    .0    .0   1.6   1.6   1.5    .9    .7    .5
 160.  *    .1    .2    .3    .8    .8    .8    .8    .0    .0    .0    .0    .0    .0    .0   1.6   1.5   1.5    .8    .6    .6
 165.  *    .0    .1    .3    .9    .9    .9    .9    .0    .0    .1    .0    .0    .0    .0   1.6   1.5   1.5    .8    .5    .5
 170.  *    .0    .1    .3    .8    .9    .7    .7    .1    .3    .2    .0    .0    .0    .0   1.6   1.5   1.5   1.0    .9    .7
 175.  *    .0    .1    .2    .7    .8    .7    .7    .2    .3    .3    .2    .0    .0    .0   1.6   1.5   1.5    .9    .8    .8
 180.  *    .0    .0    .1    .5    .6    .6    .6    .3    .4    .5    .3    .1    .0    .0   1.7   1.6   1.7   1.2   1.0    .9
 185.  *    .0    .0    .1    .3    .5    .5    .5    .4    .5    .5    .5    .2    .0    .0   1.7   1.6   1.7   1.3   1.1   1.2
 190.  *    .0    .0    .0    .2    .3    .3    .2    .5    .6    .6    .6    .2    .1    .0   1.6   1.6   1.8   1.4   1.0   1.3
 195.  *    .0    .0    .0    .1    .2    .2    .2    .6    .6    .7    .8    .4    .2    .0   1.6   1.6   2.0   1.4   1.2   1.4
 200.  *    .0    .0    .0    .1    .1    .1    .1    .6    .6    .7    .8    .4    .2    .0   1.7   1.6   1.9   1.5   1.2   1.6
 205.  *    .0    .0    .0    .0    .1    .1    .1    .6    .6    .6    .9    .3    .2    .1   1.7   1.6   2.0   1.4   1.3   1.7
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                                                                                                                  PAGE  4
      JOB: Site 4 Opt 3 2030 PM - 4B3PM30.DAT                  RUN: Site 4 Opt 3 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .6    .5    .7   1.0    .4    .1    .1   1.7   1.8   2.0   1.4   1.4   1.7
 215.  *    .0    .0    .0    .0    .0    .0    .0    .6    .6    .7   1.1    .4    .2    .1   1.8   2.0   2.1   1.3   1.6   1.9
 220.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .7   1.2    .5    .2    .1   1.9   2.0   2.1   1.3   1.4   1.9
 225.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .8   1.3    .5    .2    .1   1.9   2.1   2.1   1.3   1.5   2.0
 230.  *    .0    .0    .0    .0    .0    .0    .0    .5    .5    .7   1.4    .6    .3    .1   2.0   2.2   1.9   1.4   1.7   2.0
 235.  *    .1    .1    .0    .0    .0    .0    .0    .5    .5    .8   1.3    .7    .3    .1   2.1   2.2   1.9   1.3   1.9   2.0
 240.  *    .1    .1    .1    .0    .0    .0    .0    .5    .5    .8   1.3    .7    .3    .1   2.3   2.2   1.8   1.4   2.0   2.0
 245.  *    .2    .2    .2    .0    .0    .0    .0    .5    .5    .9   1.3    .7    .4    .1   2.4   2.3   2.0   1.4   2.1   1.9
 250.  *    .2    .2    .2    .2    .0    .0    .0    .5    .5   1.0   1.2    .7    .4    .2   2.4   2.3   1.9   1.6   2.1   1.9
 255.  *    .4    .4    .4    .2    .0    .0    .0    .5    .5   1.2   1.2    .9    .6    .3   2.5   2.3   2.1   2.0   2.2   1.9
 260.  *    .8    .8    .6    .5    .0    .0    .0    .6    .5   1.3   1.2   1.1    .8    .5   2.5   2.3   1.8   1.9   2.2   1.9
 265.  *   1.1   1.1    .9    .7    .1    .0    .0    .5    .5   1.5   1.3   1.1   1.0   1.0   2.5   2.1   1.7   2.0   2.0   1.9
 270.  *   1.5   1.5   1.3   1.1    .2    .0    .0    .5    .6   1.7   1.4   1.2   1.1   1.3   2.0   1.8   1.5   2.0   1.9   1.7
 275.  *   1.6   1.6   1.6   1.3    .4    .1    .0    .5    .6   2.0   1.5   1.3   1.6   1.4   1.8   1.5   1.6   1.9   1.8   1.6
 280.  *   1.9   2.0   1.8   1.4    .5    .2    .0    .5    .7   2.1   1.5   1.5   1.6   1.8   1.4   1.3   1.2   1.6   1.6   1.4
 285.  *   2.0   2.0   1.9   1.7    .6    .4    .1    .6    .9   2.2   1.6   1.6   1.7   2.0   1.0   1.1   1.2   1.5   1.5   1.4
 290.  *   1.9   1.9   1.9   1.7    .7    .4    .1    .6    .9   2.3   1.4   1.8   1.9   2.2    .6    .8   1.1   1.5   1.5   1.3
 295.  *   1.9   1.9   1.8   1.5    .7    .4    .1    .7    .9   2.3   1.5   1.6   2.0   2.1    .5    .7    .9   1.3   1.5   1.2
 300.  *   1.8   1.8   1.8   1.5    .7    .4    .2    .8   1.0   2.3   1.4   1.7   1.9   2.0    .4    .7    .9   1.4   1.5   1.1
 305.  *   1.8   1.7   1.6   1.5    .7    .4    .3    .8   1.0   2.2   1.5   1.7   2.0   1.9    .4    .6    .9   1.5   1.6   1.2
 310.  *   1.6   1.6   1.6   1.4    .6    .4    .3    .8   1.1   2.1   1.3   1.7   2.1   1.9    .3    .4    .9   1.5   1.6   1.1
 315.  *   1.6   1.6   1.5   1.2    .6    .4    .3    .8   1.1   2.1   1.3   1.9   2.0   2.0    .2    .5    .8   1.5   1.5   1.0
 320.  *   1.5   1.5   1.5   1.2    .6    .4    .3    .8   1.3   1.9   1.5   2.0   1.9   1.6    .2    .4    .7   1.6   1.5    .9
 325.  *   1.5   1.5   1.5   1.1    .5    .4    .3    .9   1.5   2.1   1.6   2.0   1.9   1.6    .2    .4    .8   1.5   1.5   1.0
 330.  *   1.4   1.4   1.2   1.1    .5    .4    .3    .9   1.5   2.0   1.5   2.0   1.8   1.6    .2    .2    .7   1.4   1.4    .9
 335.  *   1.4   1.3   1.2   1.1    .5    .4    .3   1.1   1.7   2.0   1.7   2.1   1.8   1.5    .2    .2    .5   1.4   1.3   1.0
 340.  *   1.2   1.2   1.2   1.0    .6    .4    .4   1.1   1.7   2.2   1.7   1.9   1.6   1.5    .2    .2    .6   1.2   1.3    .9
 345.  *   1.3   1.2   1.2   1.2    .7    .7    .4   1.1   1.6   2.0   1.4   1.8   1.6   1.3    .0    .2    .5   1.1   1.1    .9
 350.  *   1.2   1.2   1.2   1.3    .9    .7    .7   1.0   1.7   1.6   1.4   1.8   1.6   1.3    .0    .2    .4   1.0   1.0    .9
 355.  *   1.3   1.2   1.3   1.6   1.2   1.0   1.0    .8   1.7   1.6   1.2   1.6   1.6   1.3    .0    .2    .2    .8    .9    .8
 360.  *   1.3   1.2   1.3   1.7   1.4   1.1   1.0    .9   1.4   1.1   1.1   1.6   1.4   1.3    .0    .0    .2    .7    .7    .6
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   2.4   2.5   2.4   2.3   2.0   1.8   1.3   1.1   1.7   2.3   1.7   2.1   2.1   2.2   2.5   2.3   2.3   2.0   2.2   2.0
 DEGR. *   70    75    40    20    70    15    20   345   335   290   335   335   310   290   255   245   105   255   255   225

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                                                                                                                  PAGE  5
      JOB: Site 4 Opt 3 2030 PM - 4B3PM30.DAT                  RUN: Site 4 Opt 3 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .6    .8    .9   1.1   1.1    .1    .0    .0
   5.  *    .4   1.0   1.1   1.6   1.5    .3    .1    .0
  10.  *    .3   1.1   1.3   1.9   1.8    .5    .1    .0
  15.  *    .2   1.1   1.4   2.1   2.0    .5    .2    .0
  20.  *    .1   1.2   1.6   2.4   2.2    .7    .3    .1
  25.  *    .1   1.1   1.6   2.4   2.3    .8    .3    .1
  30.  *    .0   1.1   1.7   2.5   2.2    .9    .4    .2
  35.  *    .0   1.0   1.7   2.3   2.2   1.1    .4    .2
  40.  *    .0    .9   1.7   2.3   2.2   1.0    .5    .2
  45.  *    .0    .8   1.7   2.2   2.1   1.0    .6    .2
  50.  *    .0    .8   1.7   2.2   2.1   1.0    .6    .2
```

```
  55.  *    .0    .8   1.8   2.2   2.0   1.0    .6    .4
  60.  *    .0    .8   1.9   2.1   1.9   1.0    .7    .3
  65.  *    .0    .8   1.8   2.0   1.8   1.0    .7    .3
  70.  *    .0    .7   1.9   2.0   1.8   1.1    .8    .5
  75.  *    .0    .7   1.9   2.0   1.8   1.1    .9    .6
  80.  *    .0    .7   2.0   2.0   1.9   1.4    .9    .9
  85.  *    .0    .7   2.1   2.2   2.2   1.5   1.4   1.1
  90.  *    .0    .8   2.1   2.5   2.3   1.7   1.6   1.3
  95.  *    .0    .8   2.2   2.6   2.3   1.7   1.7   1.5
 100.  *    .0    .8   2.4   2.7   2.4   1.8   1.9   1.7
 105.  *    .0    .9   2.4   2.6   2.3   1.8   1.8   1.8
 110.  *    .1   1.0   2.5   2.7   1.9   2.0   1.8   1.8
 115.  *    .2   1.1   2.5   2.6   1.9   1.6   1.7   1.7
 120.  *    .3   1.2   2.8   2.7   1.8   1.7   1.6   1.5
 125.  *    .4   1.2   2.7   2.7   1.8   1.8   1.6   1.5
 130.  *    .4   1.2   2.7   2.5   1.7   1.6   1.6   1.4
 135.  *    .4   1.3   2.8   2.5   1.5   1.6   1.7   1.4
 140.  *    .3   1.4   2.8   2.6   1.5   1.6   1.7   1.4
 145.  *    .3   1.6   2.8   2.5   1.6   1.6   1.5   1.3
 150.  *    .3   1.7   2.8   2.6   1.4   1.6   1.4   1.3
 155.  *    .4   1.8   3.0   2.5   1.5   1.6   1.4   1.3
 160.  *    .5   2.0   2.7   2.2   1.5   1.6   1.4   1.3
 165.  *    .5   2.0   2.6   2.0   1.6   1.5   1.3   1.2
 170.  *    .6   1.9   2.5   1.8   1.7   1.4   1.3   1.2
 175.  *    .9   1.9   2.3   1.6   1.7   1.3   1.3   1.2
 180.  *   1.0   1.8   1.9   1.3   1.5   1.2   1.3   1.1
 185.  *   1.4   1.4   1.5   1.1   1.2   1.2   1.2   1.2
 190.  *   1.4   1.1   1.0    .9   1.1   1.1   1.2   1.2
 195.  *   1.5    .9    .9    .6   1.1   1.1   1.2   1.2
 200.  *   1.9    .6    .6    .6   1.1   1.1   1.2   1.2
 205.  *   1.9    .5    .6    .6   1.1   1.1   1.2   1.2
1
                                                                                                                             PAGE  6
      JOB: Site 4 Opt 3 2030 PM - 4B3PM30.DAT                   RUN: Site 4 Opt 3 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.8    .4    .5    .6   1.1   1.2   1.2   1.2
 215.  *   1.6    .3    .5    .6   1.1   1.2   1.2   1.2
 220.  *   1.5    .3    .5    .6   1.1   1.2   1.2   1.2
 225.  *   1.4    .4    .5    .8   1.2   1.2   1.3   1.3
 230.  *   1.4    .4    .5    .7   1.3   1.3   1.3   1.3
 235.  *   1.3    .4    .4    .7   1.3   1.3   1.4   1.4
 240.  *   1.2    .4    .4    .7   1.4   1.4   1.4   1.4
 245.  *   1.1    .3    .4    .8   1.4   1.5   1.5   1.5
 250.  *   1.0    .3    .4    .8   1.5   1.6   1.6   1.6
 255.  *    .7    .1    .4    .7   1.6   1.6   1.6   1.6
 260.  *    .8    .1    .4    .6   1.6   1.6   1.6   1.5
 265.  *    .7    .0    .2    .4   1.3   1.3   1.4   1.3
 270.  *    .7    .0    .1    .4   1.2   1.2   1.2   1.1
 275.  *    .8    .0    .0    .3    .9    .9    .9    .8
 280.  *    .6    .0    .0    .1    .6    .6    .6    .5
 285.  *    .6    .0    .0    .0    .3    .3    .4    .4
 290.  *    .6    .0    .0    .0    .2    .2    .2    .2
 295.  *    .6    .0    .0    .0    .0    .1    .1    .1
 300.  *    .7    .0    .0    .0    .0    .0    .0    .0
 305.  *    .8    .0    .0    .0    .0    .0    .0    .0
 310.  *    .8    .0    .0    .0    .0    .0    .0    .0
 315.  *    .8    .0    .1    .0    .0    .0    .0    .0
 320.  *    .8    .0    .1    .1    .0    .0    .0    .0
 325.  *    .8    .0    .1    .1    .0    .0    .0    .0
 330.  *    .9    .1    .1    .1    .0    .0    .0    .0
 335.  *    .9    .1    .1    .1    .0    .0    .0    .0
 340.  *    .9    .1    .2    .2    .1    .0    .0    .0
 345.  *    .9    .2    .2    .4    .3    .0    .0    .0
 350.  *    .8    .4    .4    .5    .5    .0    .0    .0
 355.  *    .8    .6    .7    .9    .7    .1    .0    .0
 360.  *    .6    .8    .9   1.1   1.1    .1    .0    .0
 ------*------------------------------------------------
 MAX   *   1.9   2.0   3.0   2.7   2.4   2.0   1.9   1.8
 DEGR. *  200   160   155   120   100   110   100   105

 THE HIGHEST CONCENTRATION IS    3.00 PPM AT  155 DEGREES FROM REC23.
 THE 2ND HIGHEST CONCENTRATION IS    2.70 PPM AT  120 DEGREES FROM REC24.
 THE 3RD HIGHEST CONCENTRATION IS    2.50 PPM AT   75 DEGREES FROM REC2 .
```

```
Site 4 Opt 8 2014 AM - 4B8AM14.DAT      60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Opt 8 2014 AM                     15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.    171011.4   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.    171011.4   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        62       2.0 1710  102.2 1319 1 3
  1
NB        Rt4 departAG    395.  2719.   416.  3717.    192511.4   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    131011.4   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    131011.4   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        62       2.0 1310  102.2 1200 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.     65011.4   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    119011.4   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
       120        62       2.0 1190  102.2 1077 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.     92011.4   0  32   30.
```

```
  1
WB        Rt7A aprchAG  1388.  2708.   655.  2720.    104011.4   0  44   30.
  1
WB        Rt7A aprchAG   655.  2720.   387.  2730.    104011.4   0  56   30.
  2
WB        Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        62       2.0 1040  102.2 1085 1 3
  1
WB        Rt7A deparAG   386.  2733.  -609.  2763.    175511.4   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 4 Opt 8 2014 AM - 4B8AM14.DAT                   RUN: Site 4 Opt 8 2014 AM
      DATE: 05/08/2009   TIME: 11:16:03.19


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG   1710.  11.4    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG   1710.  11.4    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     389.8    2514.3 *     145.   181. AG    567. 100.0    .0 48.0  .72   7.4
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1925.  11.4    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG   1310.  11.4    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG   1310.  11.4    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     357.9    2874.8 *     111.     1. AG    567. 100.0    .0 48.0  .61   5.6
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG    650.  11.4    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1190.  11.4    .0 44.0
      10. EB        Rt7A aprch*    309.0    2719.0   -1116.5    2760.6 *    1426.   272. AG    283. 100.0    .0 24.0 1.23  72.4
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG    920.  11.4    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   1040.  11.4    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   1040.  11.4    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     576.2    2723.4 *     117.    92. AG    425. 100.0    .0 36.0  .71   6.0
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1755.  11.4    .0 44.0
1
                                                                                                                 PAGE  2
      JOB: Site 4 Opt 8 2014 AM - 4B8AM14.DAT                   RUN: Site 4 Opt 8 2014 AM
      DATE: 05/08/2009   TIME: 11:16:03.19

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *    120        62        2.0      1710       1319     102.20      1        3
       7. SB        Rt4 aprch *    120        62        2.0      1310       1200     102.20      1        3
      10. EB        Rt7A aprch*    120        62        2.0      1190       1077     102.20      1        3
      14. WB        Rt7A aprch*    120        62        2.0      1040       1085     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0        5.0   *
      2. SW 164 W             *       151.0     2697.0        5.0   *
      3. SW 82 W              *       234.0     2693.0        5.0   *
      4. SW CNR               *       310.0     2683.0        5.0   *
      5. SW 82 S              *       316.0     2608.0        5.0   *
      6. SW 164 S             *       313.0     2527.0        5.0   *
      7. SW MID S             *       311.0     2362.0        5.0   *
      8. SE MID S             *       428.0     2361.0        5.0   *
      9. SE 164 S             *       431.0     2516.0        5.0   *
     10. SE 82 S              *       432.0     2598.0        5.0   *
     11. SE CNR               *       448.0     2662.0        5.0   *
     12. SE 82 E              *       506.0     2676.0        5.0   *
     13. SE 164 E             *       589.0     2673.0        5.0   *
     14. SE MID E             *       744.0     2669.0        5.0   *
     15. NE MID E             *       744.0     2746.0        5.0   *
     16. NE 164 E             *       588.0     2753.0        5.0   *
     17. NE 82 E              *       506.0     2757.0        5.0   *
     18. NE CNR               *       440.0     2763.0        5.0   *
     19. NE 82 N              *       433.0     2827.0        5.0   *
     20. NE 164 N             *       433.0     2911.0        5.0   *
     21. NE MID N             *       436.0     3044.0        5.0   *
     22. NW MID N             *       328.0     3045.0        5.0   *
     23. NW 164 N             *       323.0     2917.0        5.0   *
     24. NW 82 N              *       320.0     2833.0        5.0   *
     25. NW CNR               *       313.0     2765.0        5.0   *
     26. NW 82 W              *       247.0     2766.0        5.0   *
     27. NW 164 W             *       166.0     2767.0        5.0   *
     28. NW MID W             *       -36.0     2773.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 4 Opt 8 2014 AM - 4B8AM14.DAT                   RUN: Site 4 Opt 8 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.7   1.6   1.8   2.0   1.5   1.1   1.3   1.5   1.8   1.5   1.3   1.8    .9    .6    .0    .1    .3    .8   1.0   1.0
   5.  *   1.7   1.8   1.8   2.2   1.6   1.5   1.4   1.2   1.5   1.4   1.1   1.6    .7    .6    .0    .0    .1    .5    .7    .7
  10.  *   1.7   1.9   2.0   2.5   1.8   1.4   1.5    .9   1.1    .9   1.0   1.6    .7    .6    .0    .0    .1    .4    .5    .6
  15.  *   1.7   1.9   2.1   2.5   1.7   1.5   1.5    .7    .7    .8   1.0   1.5    .6    .6    .0    .0    .0    .2    .3    .3
  20.  *   1.8   2.0   2.3   2.6   1.5   1.5   1.4    .5    .7    .7   1.0   1.5    .6    .6    .0    .0    .0    .1    .2    .2
  25.  *   1.9   2.1   2.4   2.4   1.5   1.8   1.4    .4    .5    .7   1.0   1.5    .6    .6    .0    .0    .0    .0    .1    .1
  30.  *   1.9   2.1   2.5   2.2   1.5   1.8   1.4    .2    .4    .6   1.0   1.5    .6    .6    .0    .0    .0    .0    .1    .1
  35.  *   2.0   2.2   2.5   2.1   1.5   1.7   1.3    .1    .4    .6   1.1   1.4    .6    .6    .0    .0    .0    .0    .0    .1
```

```
   40.  *   2.0   2.2   2.5   2.0   1.5   1.9   1.1    .1    .3    .6   1.1   1.4    .7    .6    .0    .0    .0    .0    .0    .0
   45.  *   2.2   2.3   2.8   2.0   1.3   1.9    .9    .2    .3    .5   1.3   1.4    .7    .7    .0    .0    .0    .0    .0    .0
   50.  *   2.1   2.5   2.7   1.7   1.5   1.9    .8    .2    .4    .4   1.3   1.4    .7    .7    .0    .0    .0    .0    .0    .0
   55.  *   2.3   2.6   2.5   1.7   1.6   1.8    .8    .2    .2    .5   1.2   1.3    .8    .7    .0    .0    .0    .0    .0    .0
   60.  *   2.5   2.6   2.4   1.5   1.7   2.0    .8    .2    .2    .5   1.1   1.3    .8    .7    .0    .0    .0    .0    .0    .0
   65.  *   2.5   2.7   2.5   1.7   1.9   1.9    .7    .2    .2    .5   1.1   1.2    .7    .7    .1    .0    .0    .0    .0    .0
   70.  *   2.5   2.6   2.3   1.7   2.0   1.7    .7    .0    .2    .4   1.0   1.2    .8    .8    .1    .0    .1    .0    .0    .0
   75.  *   2.6   2.6   2.1   1.7   2.0   1.7    .6    .0    .2    .3    .9   1.1    .9    .8    .1    .2    .2    .2    .0    .0
   80.  *   2.6   2.4   2.1   1.7   1.9   1.6    .6    .0    .2    .2    .7   1.0    .9    .8    .2    .3    .4    .3    .0    .0
   85.  *   2.4   2.3   1.9   1.7   1.8   1.6    .6    .0    .0    .2    .6    .8    .7    .7    .4    .4    .5    .6    .0    .0
   90.  *   2.2   1.9   1.8   1.6   1.8   1.3    .6    .0    .0    .2    .5    .7    .6    .6    .5    .6    .7    .7    .1    .0
   95.  *   1.6   1.6   1.4   1.3   1.7   1.2    .5    .0    .0    .1    .3    .5    .5    .4    .7    .7   1.0   1.1    .2    .0
  100.  *   1.2   1.2   1.4   1.3   1.6   1.1    .6    .0    .0    .0    .2    .3    .3    .3    .8    .7   1.2   1.4    .2    .1
  105.  *    .7   1.0    .9   1.2   1.6   1.0    .6    .0    .0    .0    .1    .2    .2    .2    .8    .8   1.4   1.5    .4    .2
  110.  *    .5    .8    .9   1.2   1.6    .9    .5    .0    .0    .0    .0    .1    .1    .1    .9    .9   1.6   1.6    .4    .2
  115.  *    .4    .7    .7   1.2   1.6    .8    .5    .0    .0    .0    .0    .0    .0    .0    .8    .8   1.6   1.7    .5    .2
  120.  *    .3    .6    .8   1.3   1.5    .7    .6    .0    .0    .0    .0    .0    .0    .0    .8    .7   1.7   1.6    .5    .2
  125.  *    .2    .6    .8   1.4   1.5    .7    .6    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.7   1.6    .6    .2
  130.  *    .2    .5    .8   1.4   1.4    .6    .6    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.8   1.6    .7    .4
  135.  *    .1    .3    .7   1.5   1.3    .6    .6    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.8   1.5    .7    .3
  140.  *    .1    .4    .6   1.4   1.3    .7    .7    .0    .0    .0    .0    .0    .0    .0    .6    .6   1.8   1.4    .8    .4
  145.  *    .1    .3    .6   1.4   1.2    .7    .7    .0    .0    .0    .0    .0    .0    .0    .6    .6   1.8   1.3    .8    .4
  150.  *    .1    .3    .6   1.3   1.2    .7    .7    .0    .0    .0    .0    .0    .0    .0    .6    .6   1.8   1.2    .7    .5
  155.  *    .1    .2    .4   1.4   1.1    .8    .7    .0    .0    .1    .0    .0    .0    .0    .6    .5   1.8   1.0    .7    .6
  160.  *    .1    .2    .3   1.2    .9    .7    .7    .1    .1    .1    .0    .0    .0    .0    .6    .5   1.7    .9    .8    .6
  165.  *    .0    .2    .3   1.0    .9    .8    .7    .1    .2    .2    .0    .0    .0    .0    .6    .5   1.6   1.0    .9    .7
  170.  *    .0    .1    .2    .9    .8    .7    .7    .2    .2    .4    .2    .0    .0    .0    .6    .7   1.7   1.2   1.1    .9
  175.  *    .0    .1    .2    .7    .6    .7    .6    .3    .4    .6    .3    .1    .0    .0    .6    .7   1.9   1.2   1.4   1.2
  180.  *    .0    .0    .2    .5    .6    .4    .4    .5    .7    .9    .7    .1    .0    .0    .6    .8   1.9   1.6   1.5   1.5
  185.  *    .0    .0    .0    .3    .4    .3    .3    .7    .8   1.1    .9    .2    .1    .0    .6    .9   2.1   1.7   1.7   1.8
  190.  *    .0    .0    .0    .2    .2    .2    .2    .8    .9   1.4   1.2    .4    .1    .0    .6   1.0   2.2   1.9   1.7   2.0
  195.  *    .0    .0    .0    .1    .1    .1    .1    .8    .9   1.8   1.4    .5    .1    .0    .7   1.2   2.2   1.9   1.7   2.1
  200.  *    .0    .0    .0    .0    .0    .0    .0    .9   1.0   1.9   1.5    .5    .2    .1    .7   1.4   2.3   2.1   1.9   2.1
  205.  *    .0    .0    .0    .0    .0    .0    .0    .9   1.0   2.1   1.8    .6    .3    .1    .7   1.7   2.5   2.0   1.8   2.2
1
                                                                                                                 PAGE  4
      JOB: Site 4 Opt 8 2014 AM - 4B8AM14.DAT                   RUN: Site 4 Opt 8 2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
  210.  *    .0    .0    .0    .0    .0    .0    .0    .9    .9   2.2   1.8    .8    .3    .1    .7   1.9   2.6   1.7   1.8   2.4
  215.  *    .0    .0    .0    .0    .0    .0    .0    .8    .9   2.3   1.9    .8    .4    .1    .7   2.1   2.6   1.8   1.9   2.3
  220.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   2.3   1.8    .9    .5    .1    .8   2.2   2.6   1.6   1.9   2.3
  225.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   2.2   1.9   1.0    .5    .2    .9   2.3   2.4   1.6   2.0   2.3
  230.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   2.2   1.8   1.1    .6    .2    .8   2.3   2.3   1.7   2.2   2.2
  235.  *    .0    .0    .0    .0    .0    .0    .0    .6    .8   2.2   1.8   1.1    .6    .2    .9   2.5   2.4   1.8   2.4   2.1
  240.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   2.2   1.7   1.0    .7    .2   1.1   2.5   2.3   1.9   2.4   2.0
  245.  *    .1    .1    .1    .0    .0    .0    .0    .7    .8   2.1   1.7   1.0    .7    .2   1.1   2.7   2.1   1.9   2.6   2.0
  250.  *    .2    .2    .2    .1    .0    .0    .0    .6    .9   2.0   1.6   1.0    .7    .3   1.5   2.6   2.2   2.2   2.8   1.9
  255.  *    .5    .5    .4    .3    .0    .0    .0    .6   1.0   2.0   1.6   1.2   1.0    .5   1.5   2.6   2.2   2.4   2.8   1.7
  260.  *    .8    .9    .7    .6    .1    .0    .0    .6   1.1   2.1   1.8   1.3   1.0    .8   1.6   2.8   2.4   2.6   2.8   1.6
  265.  *   1.2   1.3   1.1    .8    .1    .0    .0    .6   1.3   2.3   1.8   1.5   1.4   1.1   1.9   2.5   2.2   2.6   2.7   1.5
  270.  *   1.6   1.7   1.6   1.2    .4    .1    .0    .6   1.6   2.6   1.9   1.7   1.5   1.3   1.5   2.5   2.1   2.8   2.4   1.3
  275.  *   2.0   2.0   2.0   1.5    .5    .2    .0    .7   1.8   2.7   2.0   1.8   1.8   1.6   1.4   2.0   2.0   2.6   2.2   1.1
  280.  *   2.2   2.3   2.2   1.8    .7    .4    .1    .7   2.0   2.9   2.1   2.2   2.1   1.8   1.0   1.6   1.7   2.1   2.0    .9
  285.  *   2.4   2.4   2.3   1.9    .8    .4    .1    .8   2.1   2.8   1.9   1.8   2.1   1.6    .8   1.3   1.5   2.0   1.7    .9
  290.  *   2.5   2.5   2.2   2.0    .9    .6    .2    .9   2.3   2.9   1.9   1.9   2.2   1.5    .5   1.0   1.3   1.9   1.7    .9
  295.  *   2.3   2.2   2.2   1.9    .9    .6    .3   1.0   2.5   2.8   2.0   1.9   2.2   1.3    .3    .6   1.2   1.8   1.6    .9
  300.  *   2.2   2.2   2.1   1.8    .9    .6    .4   1.1   2.5   2.8   1.9   2.0   2.1   1.2    .3    .6    .9   1.8   1.5    .9
  305.  *   2.2   2.1   2.0   1.8    .9    .6    .4   1.0   2.7   2.9   1.7   2.0   2.1   1.1    .2    .4    .9   1.7   1.5   1.0
  310.  *   2.0   2.0   2.0   1.6    .9    .5    .4   1.0   2.7   2.8   1.9   2.1   2.0   1.1    .2    .4    .8   1.7   1.4   1.0
  315.  *   2.0   2.0   1.8   1.6    .8    .5    .4   1.1   2.8   2.8   1.6   2.2   2.0   1.0    .2    .4    .7   1.6   1.3   1.1
  320.  *   2.0   1.8   1.8   1.6    .8    .5    .4   1.1   2.8   2.6   1.9   2.1   1.8    .9    .2    .4    .7   1.6   1.3   1.2
  325.  *   1.8   1.8   1.7   1.5    .7    .5    .3   1.1   2.8   2.6   1.7   2.1   1.8    .8    .2    .4    .7   1.5   1.2   1.1
  330.  *   1.7   1.7   1.6   1.4    .7    .5    .3   1.3   3.1   2.9   1.8   2.2   1.7    .8    .2    .3    .7   1.4   1.3   1.3
  335.  *   1.7   1.7   1.6   1.4    .7    .5    .3   1.5   3.0   2.8   1.8   2.2   1.5    .8    .2    .3    .6   1.5   1.2   1.3
  340.  *   1.7   1.7   1.6   1.3    .7    .5    .3   1.8   2.8   2.5   1.7   2.1   1.4    .8    .2    .3    .6   1.3   1.2   1.3
  345.  *   1.7   1.7   1.6   1.5    .8    .6    .3   1.8   2.7   2.4   1.8   2.0   1.4    .7    .1    .3    .5   1.2   1.4   1.4
  350.  *   1.7   1.7   1.6   1.6   1.0    .9    .6   1.9   2.6   2.3   1.7   1.9   1.3    .6    .0    .3    .4   1.2   1.3   1.4
  355.  *   1.7   1.7   1.6   1.8   1.4   1.1    .9   1.7   2.3   1.9   1.3   1.9   1.0    .6    .0    .1    .3    .9   1.2   1.1
  360.  *   1.7   1.6   1.8   2.0   1.5   1.1   1.3   1.5   1.8   1.5   1.3   1.8    .9    .6    .0    .1    .3    .8   1.0   1.0
 ------*-----------------------------------------------------------------------------------------------------------------------
 MAX   *   2.6   2.7   2.8   2.6   2.0   2.0   1.5   1.9   3.1   2.9   2.1   2.2   2.2   1.8   1.9   2.8   2.6   2.8   2.8   2.4
 DEGR. *  75    65    45    20    70    60    10   350   330   290   280   280   290   280   265   260   210   270   250   210

1
                                                                                                                 PAGE  5
      JOB: Site 4 Opt 8 2014 AM - 4B8AM14.DAT                   RUN: Site 4 Opt 8 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
    0.  *   1.0    .7    .8    .8    .9    .2    .0    .0
    5.  *    .7    .9    .9   1.1   1.3    .2    .2    .0
   10.  *    .5   1.1   1.1   1.4   1.6    .4    .2    .0
   15.  *    .3   1.1   1.2   1.6   1.8    .4    .2    .0
   20.  *    .2   1.2   1.2   1.6   2.1    .5    .3    .0
   25.  *    .1   1.1   1.2   1.7   2.3    .7    .3    .2
   30.  *    .1   1.1   1.1   1.8   2.3    .8    .4    .2
   35.  *    .1   1.1   1.1   1.9   2.3    .7    .4    .2
   40.  *    .0   1.0   1.0   1.9   2.4    .8    .4    .2
   45.  *    .0   1.0    .9   2.0   2.4    .9    .4    .2
   50.  *    .0    .9    .9   2.1   2.3   1.0    .4    .2
```

```
  55.  *    .0    .9    .9   2.2   2.2   1.1    .5    .1
  60.  *    .0    .9    .8   2.1   2.2   1.1    .7    .3
  65.  *    .0    .8    .8   2.2   2.1   1.2    .7    .4
  70.  *    .0    .8    .8   2.2   2.0   1.2    .8    .4
  75.  *    .0    .8    .8   2.3   2.1   1.1    .9    .5
  80.  *    .0    .8    .8   2.3   2.2   1.5   1.0    .8
  85.  *    .0    .8    .8   2.3   2.3   1.5   1.6   1.2
  90.  *    .0    .9    .9   2.6   2.3   1.7   1.6   1.6
  95.  *    .0    .9    .9   2.7   2.5   2.0   1.9   2.1
 100.  *    .0    .8    .9   2.7   2.4   2.1   2.0   2.2
 105.  *    .0    .9   1.0   2.8   2.5   2.1   2.2   2.2
 110.  *    .1    .9   1.1   2.8   2.3   1.9   2.3   2.1
 115.  *    .1   1.0   1.4   2.9   2.2   2.1   2.3   2.2
 120.  *    .2   1.1   1.5   2.9   2.2   2.2   2.3   2.2
 125.  *    .2   1.1   1.6   2.9   2.1   2.1   2.4   2.1
 130.  *    .2   1.0   1.8   3.2   2.1   2.0   2.4   2.0
 135.  *    .2   1.1   1.9   3.0   2.2   2.1   2.3   1.9
 140.  *    .2   1.3   2.1   2.9   2.1   2.2   2.2   1.8
 145.  *    .2   1.5   2.3   3.1   2.1   2.1   2.1   1.7
 150.  *    .4   1.4   2.4   3.1   2.1   2.0   1.9   1.6
 155.  *    .4   1.7   2.7   3.0   2.2   2.1   1.9   1.6
 160.  *    .4   1.7   2.8   2.7   2.3   2.0   1.8   1.6
 165.  *    .5   1.5   2.6   2.6   2.2   1.8   1.6   1.4
 170.  *    .8   1.8   2.5   2.3   2.1   1.8   1.7   1.5
 175.  *   1.1   1.6   2.4   2.1   2.0   1.6   1.6   1.5
 180.  *   1.4   1.6   2.0   1.9   1.8   1.6   1.4   1.4
 185.  *   1.6   1.5   1.6   1.4   1.6   1.5   1.4   1.4
 190.  *   1.8   1.0   1.2   1.4   1.4   1.4   1.5   1.5
 195.  *   1.9    .6    .9    .9   1.4   1.4   1.5   1.5
 200.  *   2.0    .5    .7    .8   1.3   1.4   1.4   1.4
 205.  *   1.9    .4    .6    .9   1.4   1.4   1.5   1.5
1
                                                                                                                          PAGE  6
      JOB: Site 4 Opt 8 2014 AM - 4B8AM14.DAT                  RUN: Site 4 Opt 8 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.8    .4    .6    .8   1.4   1.4   1.5   1.5
 215.  *   1.6    .4    .6    .8   1.4   1.5   1.6   1.6
 220.  *   1.5    .4    .5    .8   1.5   1.6   1.7   1.7
 225.  *   1.6    .4    .5    .8   1.7   1.7   1.7   1.7
 230.  *   1.4    .4    .5    .8   1.7   1.7   1.7   1.7
 235.  *   1.4    .4    .5    .8   1.7   1.8   1.9   1.9
 240.  *   1.4    .4    .5    .9   1.9   1.9   1.9   1.9
 245.  *   1.3    .4    .6    .9   1.9   2.0   2.0   2.0
 250.  *   1.3    .4    .6    .9   2.0   2.0   2.0   2.0
 255.  *   1.2    .2    .5    .9   2.0   2.1   2.2   2.1
 260.  *   1.1    .1    .4    .9   2.0   2.0   2.1   2.1
 265.  *   1.1    .1    .4    .6   2.0   2.0   2.0   1.9
 270.  *   1.0    .0    .2    .5   1.6   1.7   1.7   1.6
 275.  *   1.0    .0    .1    .4   1.2   1.2   1.3   1.2
 280.  *    .8    .0    .0    .2    .8    .9   1.0    .8
 285.  *    .9    .0    .0    .0    .6    .6    .6    .6
 290.  *    .9    .0    .0    .0    .3    .3    .3    .3
 295.  *    .9    .0    .0    .0    .1    .1    .1    .1
 300.  *    .9    .0    .0    .0    .1    .1    .1    .1
 305.  *   1.0    .0    .0    .0    .0    .0    .1    .1
 310.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 315.  *   1.0    .0    .0    .0    .0    .0    .0    .0
 320.  *   1.1    .0    .0    .0    .0    .0    .0    .0
 325.  *   1.1    .0    .0    .0    .0    .0    .0    .0
 330.  *   1.2    .0    .1    .1    .0    .0    .0    .0
 335.  *   1.2    .1    .1    .1    .0    .0    .0    .0
 340.  *   1.2    .1    .1    .1    .1    .0    .0    .0
 345.  *   1.3    .2    .2    .2    .1    .0    .0    .0
 350.  *   1.3    .4    .4    .4    .4    .0    .0    .0
 355.  *   1.1    .5    .5    .5    .6    .1    .0    .0
 360.  *   1.0    .7    .8    .8    .9    .2    .0    .0
 ------*------------------------------------------------
 MAX   *   2.0   1.8   2.8   3.2   2.5   2.2   2.4   2.2
 DEGR. *  200   170   160   130    95   120   125   100

 THE HIGHEST CONCENTRATION IS    3.20 PPM AT  130 DEGREES FROM REC24.
 THE 2ND HIGHEST CONCENTRATION IS    3.10 PPM AT  330 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    2.90 PPM AT  290 DEGREES FROM REC10.
```

```
Site 4 Opt 8 2030 AM - 4B8AM30.DAT      60.0321.0.0000.000280.30480000    1
1
SW MID W                 -47.      2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                 -36.      2773.       5.0
Site 4 Opt 8 2030 AM                     15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.    1735 9.2   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.    1735 9.2   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        64       2.0 1735   84.1 1329 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    1905 9.2   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    1220 9.2   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    1220 9.2   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        64       2.0 1220   84.1 1213 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.     725 9.2   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    1120 9.2   0  56   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  36   2
       120        64       2.0 1120   84.1 1234 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.     885 9.2   0  32   30.
```

```
  1
WB        Rt7A aprchAG  1388.  2708.   655.  2720.     840 9.2   0  44   30.
  1
WB        Rt7A aprchAG   655.  2720.   387.  2730.     840 9.2   0  56   30.
  2
WB        Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        64       2.0  840   84.1 1024 1 3
  1
WB        Rt7A deparAG   386.  2733.  -609.  2763.    1400 9.2   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 4 Opt 8 2030 AM - 4B8AM30.DAT                   RUN: Site 4 Opt 8 2030 AM
      DATE: 05/08/2009   TIME: 12:25:10.88


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG  1735.   9.2    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG  1735.   9.2    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     389.6    2507.5 *     152.   181. AG   481. 100.0    .0 48.0  .75   7.7
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG  1905.   9.2    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG  1220.   9.2    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG  1220.   9.2    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     357.8    2870.7 *     107.     1. AG   481. 100.0    .0 48.0  .58   5.4
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG   725.   9.2    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG  1120.   9.2    .0 56.0
      10. EB        Rt7A aprch*    309.0    2719.0    -260.7    2735.6 *     570.   272. AG   241. 100.0    .0 36.0 1.05  29.0
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG   885.   9.2    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   840.   9.2    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   840.   9.2    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     556.9    2724.0 *      98.    92. AG   361. 100.0    .0 36.0  .63   5.0
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG  1400.   9.2    .0 44.0
1
                                                                                                               PAGE  2
      JOB: Site 4 Opt 8 2030 AM - 4B8AM30.DAT                   RUN: Site 4 Opt 8 2030 AM
      DATE: 05/08/2009   TIME: 12:25:10.88

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE      RATE
                              *     (SEC)   (SEC)     (SEC)     (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       64       2.0      1735       1329      84.10      1        3
       7. SB        Rt4 aprch *     120       64       2.0      1220       1213      84.10      1        3
      10. EB        Rt7A aprch*     120       64       2.0      1120       1234      84.10      1        3
      14. WB        Rt7A aprch*     120       64       2.0       840       1024      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0    *
      2. SW 164 W             *       151.0     2697.0       5.0    *
      3. SW 82 W              *       234.0     2693.0       5.0    *
      4. SW CNR               *       310.0     2683.0       5.0    *
      5. SW 82 S              *       316.0     2608.0       5.0    *
      6. SW 164 S             *       313.0     2527.0       5.0    *
      7. SW MID S             *       311.0     2362.0       5.0    *
      8. SE MID S             *       428.0     2361.0       5.0    *
      9. SE 164 S             *       431.0     2516.0       5.0    *
     10. SE 82 S              *       432.0     2598.0       5.0    *
     11. SE CNR               *       448.0     2662.0       5.0    *
     12. SE 82 E              *       506.0     2676.0       5.0    *
     13. SE 164 E             *       589.0     2673.0       5.0    *
     14. SE MID E             *       744.0     2669.0       5.0    *
     15. NE MID E             *       744.0     2746.0       5.0    *
     16. NE 164 E             *       588.0     2753.0       5.0    *
     17. NE 82 E              *       506.0     2757.0       5.0    *
     18. NE CNR               *       440.0     2763.0       5.0    *
     19. NE 82 N              *       433.0     2827.0       5.0    *
     20. NE 164 N             *       433.0     2911.0       5.0    *
     21. NE MID N             *       436.0     3044.0       5.0    *
     22. NW MID N             *       328.0     3045.0       5.0    *
     23. NW 164 N             *       323.0     2917.0       5.0    *
     24. NW 82 N              *       320.0     2833.0       5.0    *
     25. NW CNR               *       313.0     2765.0       5.0    *
     26. NW 82 W              *       247.0     2766.0       5.0    *
     27. NW 164 W             *       166.0     2767.0       5.0    *
     28. NW MID W             *       -36.0     2773.0       5.0    *
1
                                                                                                               PAGE  3
      JOB: Site 4 Opt 8 2030 AM - 4B8AM30.DAT                   RUN: Site 4 Opt 8 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.4   1.3   1.5   1.7   1.0   1.0   1.0   1.2   1.6   1.3   1.3   1.2    .5    .4    .0    .1    .1    .6    .7    .7
   5.  *   1.4   1.3   1.5   1.8   1.3   1.2    .9    .9   1.1   1.2   1.1   1.2    .4    .4    .0    .0    .1    .4    .6    .6
  10.  *   1.3   1.5   1.6   2.0   1.3   1.3   1.1    .6    .9    .7    .9   1.1    .4    .4    .0    .0    .0    .2    .3    .5
  15.  *   1.3   1.5   1.8   2.0   1.4   1.3   1.2    .4    .7    .6    .9   1.1    .4    .4    .0    .0    .0    .1    .2    .2
  20.  *   1.3   1.5   1.8   2.0   1.3   1.2   1.3    .3    .5    .7    .8   1.1    .4    .4    .0    .0    .0    .1    .1    .1
  25.  *   1.4   1.5   1.9   2.0   1.1   1.3   1.2    .2    .5    .5    .9   1.1    .4    .4    .0    .0    .0    .0    .1    .1
  30.  *   1.6   1.7   1.9   1.8   1.2   1.5    .9    .0    .3    .5    .9   1.1    .4    .4    .0    .0    .0    .0    .0    .1
  35.  *   1.6   1.8   2.0   1.6   1.4   1.5    .9    .0    .3    .5    .9   1.1    .5    .5    .0    .0    .0    .0    .0    .0
```

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   40.  *   1.7   1.9   2.2   1.5   1.1   1.5    .8    .0    .3    .5   1.0   1.0    .5    .5    .0    .0    .0    .0    .0    .0
   45.  *   1.7   2.1   2.3   1.3   1.2   1.6    .6    .0    .1    .4   1.0   1.0    .6    .5    .0    .0    .0    .0    .0    .0
   50.  *   1.8   2.1   2.3   1.5   1.4   1.6    .6    .0    .1    .4    .9    .9    .5    .5    .0    .0    .0    .0    .0    .0
   55.  *   1.8   2.1   2.0   1.4   1.3   1.6    .5    .0    .2    .3    .9    .8    .5    .5    .0    .0    .0    .0    .0    .0
   60.  *   2.2   2.1   2.0   1.2   1.4   1.5    .5    .0    .2    .3    .8    .7    .5    .5    .0    .0    .0    .0    .0    .0
   65.  *   2.2   2.2   2.0   1.2   1.5   1.4    .5    .0    .2    .2    .6    .8    .6    .5    .0    .0    .0    .0    .0    .0
   70.  *   2.2   2.2   2.0   1.2   1.5   1.5    .5    .0    .2    .2    .6    .8    .6    .6    .1    .0    .0    .0    .0    .0
   75.  *   2.3   2.2   1.8   1.3   1.6   1.5    .5    .0    .2    .2    .6    .7    .7    .6    .1    .1    .1    .0    .0    .0
   80.  *   2.1   2.3   1.7   1.3   1.6   1.4    .5    .0    .1    .2    .5    .6    .6    .6    .1    .2    .2    .2    .0    .0
   85.  *   2.0   1.9   1.5   1.3   1.5   1.2    .5    .0    .0    .2    .5    .5    .5    .5    .3    .3    .3    .4    .0    .0
   90.  *   1.8   1.7   1.4   1.3   1.4   1.2    .5    .0    .0    .1    .3    .5    .4    .4    .4    .4    .5    .5    .0    .0
   95.  *   1.5   1.2   1.3   1.3   1.3   1.1    .5    .0    .0    .0    .2    .3    .3    .3    .4    .4    .5    .8    .2    .0
  100.  *   1.0   1.3   1.0   1.0   1.3   1.0    .5    .0    .0    .0    .1    .3    .3    .3    .6    .6    .7   1.0    .2    .0
  105.  *    .8    .9    .9   1.0   1.3    .9    .5    .0    .0    .0    .1    .1    .1    .1    .6    .6    .9   1.2    .2    .1
  110.  *    .6    .7    .7   1.1   1.3    .8    .5    .0    .0    .0    .0    .1    .1    .1    .6    .6   1.1   1.3    .4    .2
  115.  *    .4    .7    .8   1.0   1.3    .7    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.2   1.3    .4    .2
  120.  *    .4    .6    .8   1.1   1.3    .7    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.2   1.3    .4    .2
  125.  *    .2    .5    .7   1.1   1.3    .6    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.3   1.3    .4    .2
  130.  *    .1    .4    .7   1.2   1.2    .6    .5    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.3   1.3    .5    .1
  135.  *    .1    .3    .6   1.2   1.2    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.4   1.2    .5    .3
  140.  *    .1    .4    .6   1.2   1.1    .5    .5    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.4   1.2    .6    .3
  145.  *    .1    .3    .5   1.2   1.0    .6    .5    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.5    .9    .6    .3
  150.  *    .1    .3    .4   1.1   1.1    .6    .5    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.4    .8    .6    .4
  155.  *    .1    .2    .4   1.1   1.0    .7    .7    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.4    .7    .5    .5
  160.  *    .0    .2    .3   1.0    .9    .7    .6    .0    .1    .1    .0    .0    .0    .0    .4    .4   1.4    .6    .5    .5
  165.  *    .0    .2    .3    .9    .8    .6    .6    .1    .2    .1    .0    .0    .0    .0    .4    .4   1.4    .8    .7    .7
  170.  *    .0    .1    .2    .7    .8    .6    .6    .2    .2    .4    .2    .0    .0    .0    .4    .4   1.4    .8    .8    .8
  175.  *    .0    .0    .2    .5    .6    .5    .4    .2    .4    .4    .3    .0    .0    .0    .4    .4   1.4    .9   1.0   1.0
  180.  *    .0    .0    .1    .5    .4    .4    .4    .4    .5    .8    .6    .1    .0    .0    .4    .5   1.5   1.2   1.2   1.3
  185.  *    .0    .0    .0    .2    .3    .3    .3    .6    .7   1.0    .7    .1    .1    .0    .4    .5   1.7   1.3   1.4   1.4
  190.  *    .0    .0    .0    .2    .2    .2    .2    .6    .8   1.3    .9    .3    .1    .0    .4    .5   1.8   1.5   1.5   1.4
  195.  *    .0    .0    .0    .1    .1    .1    .1    .7    .7   1.5   1.2    .4    .1    .0    .4    .6   2.0   1.6   1.4   1.7
  200.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.6   1.3    .5    .1    .1    .5    .8   2.1   1.6   1.6   1.7
  205.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.8   1.6    .6    .3    .1    .5   1.0   2.2   1.5   1.5   1.9
1
                                                                                                                     PAGE  4
      JOB: Site 4 Opt 8 2030 AM - 4B8AM30.DAT                RUN: Site 4 Opt 8 2030 AM

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
  ------*------------------------------------------------------------------------------------------------------------------------
  210.  *    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.8   1.6    .7    .3    .1    .5   1.0   2.0   1.4   1.4   1.9
  215.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.9   1.6    .7    .4    .1    .5   1.1   2.0   1.2   1.5   1.7
  220.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.9   1.6    .8    .4    .1    .6   1.4   2.1   1.3   1.8   1.7
  225.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.9   1.6    .8    .4    .1    .7   1.6   2.1   1.2   1.6   1.8
  230.  *    .0    .0    .0    .0    .0    .0    .0    .6    .7   1.9   1.6    .9    .5    .2    .7   1.7   1.9   1.4   1.7   1.8
  235.  *    .1    .1    .0    .0    .0    .0    .0    .5    .8   1.9   1.5    .9    .6    .2    .7   1.7   1.6   1.4   1.9   1.6
  240.  *    .1    .1    .1    .0    .0    .0    .0    .5    .8   1.9   1.5    .9    .6    .2    .9   1.7   2.0   1.4   2.0   1.5
  245.  *    .2    .2    .1    .0    .0    .0    .0    .5    .8   1.7   1.4    .8    .6    .2   1.0   1.7   1.8   1.4   2.1   1.4
  250.  *    .2    .2    .2    .2    .0    .0    .0    .6    .9   1.7   1.3    .8    .6    .3    .9   1.8   1.6   1.6   2.2   1.4
  255.  *    .4    .5    .5    .2    .0    .0    .0    .5   1.0   1.7   1.4    .9    .7    .4   1.1   1.8   1.7   1.9   2.2   1.2
  260.  *    .7    .7    .6    .5    .0    .0    .0    .5   1.2   1.7   1.5   1.0    .9    .5   1.2   2.0   1.9   2.0   2.2   1.1
  265.  *   1.0   1.1    .9    .6    .0    .0    .0    .5   1.3   1.8   1.5   1.1    .7    .9   1.3   2.0   1.8   2.2   2.0   1.1
  270.  *   1.2   1.3   1.2   1.0    .3    .0    .0    .5   1.5   2.2   1.6   1.2   1.1    .9   1.0   1.6   1.6   2.1   1.8    .7
  275.  *   1.5   1.6   1.6   1.3    .3    .0    .0    .5   1.6   2.2   1.5   1.3   1.2   1.1    .9   1.4   1.3   2.0   1.8    .7
  280.  *   1.7   1.9   1.8   1.4    .4    .3    .0    .6   1.9   2.2   1.7   1.5   1.6   1.2    .9   1.1   1.2   1.6   1.4    .7
  285.  *   1.9   2.0   1.9   1.7    .7    .3    .0    .5   1.9   2.3   1.8   1.4   1.8   1.2    .7   1.0   1.1   1.5   1.4    .7
  290.  *   1.9   1.9   1.9   1.7    .7    .3    .0    .5   2.1   2.4   1.5   1.5   1.7   1.2    .3    .7    .8   1.4   1.3    .7
  295.  *   1.9   1.9   1.9   1.6    .7    .4    .1    .8   2.1   2.4   1.5   1.4   1.7    .9    .3    .5    .7   1.4   1.2    .7
  300.  *   1.9   1.9   1.8   1.5    .7    .4    .3    .9   2.2   2.4   1.4   1.6   1.6    .9    .1    .5    .7   1.4   1.1    .7
  305.  *   1.8   1.7   1.7   1.5    .7    .4    .3    .8   2.3   2.4   1.3   1.6   1.6    .9    .1    .4    .7   1.4   1.1    .7
  310.  *   1.7   1.7   1.7   1.4    .7    .4    .3    .8   2.3   2.3   1.4   1.5   1.6    .7    .1    .4    .6   1.4   1.0    .8
  315.  *   1.7   1.7   1.6   1.3    .7    .4    .3    .9   2.4   2.3   1.4   1.5   1.4    .6    .2    .3    .6   1.3   1.0    .8
  320.  *   1.6   1.5   1.5   1.3    .7    .4    .3   1.0   2.4   2.1   1.4   1.7   1.4    .6    .2    .3    .5   1.2    .9    .9
  325.  *   1.5   1.5   1.4   1.2    .6    .4    .3   1.0   2.4   2.2   1.5   1.7   1.3    .7    .2    .3    .5   1.2    .9   1.0
  330.  *   1.4   1.4   1.3   1.2    .6    .4    .3   1.1   2.5   2.0   1.5   1.7   1.2    .7    .2    .3    .5   1.1   1.0    .9
  335.  *   1.3   1.3   1.3   1.1    .6    .4    .3   1.3   2.5   2.1   1.4   1.7    .9    .6    .2    .3    .5   1.1   1.0   1.0
  340.  *   1.3   1.3   1.3   1.1    .6    .4    .3   1.5   2.4   1.8   1.4   1.7    .9    .5    .1    .3    .5   1.1   1.0   1.1
  345.  *   1.3   1.3   1.3   1.2    .5    .4    .3   1.6   2.2   2.1   1.3   1.6    .8    .5    .1    .3    .4   1.0   1.0   1.1
  350.  *   1.3   1.3   1.3   1.3    .8    .6    .5   1.4   1.9   1.7   1.4   1.5    .7    .4    .0    .2    .3    .8   1.0   1.0
  355.  *   1.3   1.3   1.3   1.4   1.1    .8    .8   1.4   1.8   1.6   1.2   1.4    .5    .4    .0    .1    .3    .8    .9    .9
  360.  *   1.4   1.3   1.5   1.7   1.0   1.0   1.0   1.2   1.6   1.3   1.3   1.2    .5    .4    .0    .1    .1    .6    .7    .7
  ------*------------------------------------------------------------------------------------------------------------------------
  MAX   *   2.3   2.3   2.3   2.0   1.6   1.6   1.3   1.6   2.5   2.4   1.8   1.7   1.8   1.2   1.3   2.0   2.2   2.2   2.2   1.9
  DEGR. *   75    80    45    20    75    45    20   345   330   290   285   320   285   285   265   260   205   265   250   205

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                                                                                                                     PAGE  5
      JOB: Site 4 Opt 8 2030 AM - 4B8AM30.DAT                RUN: Site 4 Opt 8 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
  ------*------------------------------------------------
    0.  *    .7    .6    .6    .6    .7    .2    .0    .0
    5.  *    .6    .7    .8    .9    .9    .2    .0    .0
   10.  *    .3    .8    .8   1.0   1.2    .3    .2    .0
   15.  *    .2    .9    .9   1.2   1.6    .4    .2    .0
   20.  *    .1    .9    .9   1.3   1.7    .4    .2    .0
   25.  *    .1    .9    .9   1.4   1.8    .5    .3    .1
   30.  *    .1    .9    .9   1.4   1.9    .5    .3    .2
   35.  *    .0    .8    .9   1.4   2.0    .6    .4    .2
   40.  *    .0    .8    .8   1.5   1.9    .7    .3    .2
   45.  *    .0    .8    .8   1.6   1.9    .7    .4    .2
   50.  *    .0    .8    .7   1.6   1.8    .8    .4    .1
```

```
  55.  *    .0    .7    .6   1.6   1.8    .9    .5    .1
  60.  *    .0    .6    .6   1.7   1.8    .9    .5    .1
  65.  *    .0    .6    .6   1.7   1.7   1.0    .5    .3
  70.  *    .0    .6    .6   1.8   1.6   1.0    .6    .4
  75.  *    .0    .6    .6   1.8   1.5   1.0    .6    .5
  80.  *    .0    .6    .6   1.9   1.7   1.1    .7    .7
  85.  *    .0    .6    .6   1.9   1.7   1.3   1.1    .9
  90.  *    .0    .6    .7   1.9   1.8   1.4   1.2   1.2
  95.  *    .0    .7    .6   2.1   1.8   1.4   1.5   1.5
 100.  *    .0    .7    .6   2.2   1.9   1.4   1.8   1.8
 105.  *    .0    .6    .8   2.3   1.9   1.4   1.9   1.7
 110.  *    .0    .7    .9   2.4   1.8   1.6   1.6   1.8
 115.  *    .0    .7    .8   2.3   1.6   1.6   1.7   1.8
 120.  *    .0    .6   1.0   2.3   1.7   1.7   1.7   1.7
 125.  *    .0    .6   1.1   2.3   1.6   1.6   1.8   1.6
 130.  *    .0    .7   1.3   2.4   1.6   1.8   1.8   1.6
 135.  *    .0    .8   1.4   2.5   1.5   1.8   1.8   1.4
 140.  *    .0    .9   1.6   2.4   1.6   1.9   1.8   1.5
 145.  *    .0   1.0   1.9   2.6   1.6   1.8   1.6   1.4
 150.  *    .0   1.1   2.0   2.4   1.6   1.8   1.7   1.4
 155.  *    .2   1.1   1.9   2.2   1.7   1.8   1.7   1.4
 160.  *    .2   1.2   2.0   2.0   1.8   1.7   1.4   1.2
 165.  *    .2   1.3   2.2   2.1   1.8   1.6   1.4   1.3
 170.  *    .5   1.3   2.1   1.8   1.7   1.6   1.3   1.2
 175.  *    .7   1.4   2.0   1.6   1.7   1.4   1.3   1.2
 180.  *   1.2   1.3   1.6   1.3   1.4   1.4   1.2   1.2
 185.  *   1.3   1.2   1.3   1.1   1.4   1.2   1.2   1.2
 190.  *   1.4    .7   1.1   1.0   1.1   1.2   1.2   1.2
 195.  *   1.6    .6    .6    .7   1.2   1.2   1.3   1.3
 200.  *   1.7    .5    .6    .6   1.1   1.2   1.3   1.3
 205.  *   1.4    .4    .5    .6   1.2   1.2   1.3   1.2
1
                                                                                                                               PAGE  6
      JOB: Site 4 Opt 8 2030 AM - 4B8AM30.DAT                   RUN: Site 4 Opt 8 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.4    .3    .4    .6   1.2   1.2   1.3   1.3
 215.  *   1.4    .3    .4    .6   1.2   1.3   1.3   1.3
 220.  *   1.2    .3    .4    .6   1.2   1.3   1.3   1.3
 225.  *   1.2    .3    .4    .7   1.3   1.3   1.4   1.4
 230.  *   1.1    .3    .4    .7   1.4   1.4   1.4   1.4
 235.  *   1.0    .3    .4    .7   1.4   1.4   1.4   1.4
 240.  *   1.0    .3    .4    .7   1.4   1.4   1.5   1.4
 245.  *   1.0    .3    .4    .7   1.5   1.5   1.7   1.6
 250.  *   1.1    .2    .4    .7   1.7   1.7   1.7   1.6
 255.  *    .8    .0    .3    .7   1.7   1.7   1.6   1.5
 260.  *    .7    .0    .3    .5   1.5   1.6   1.6   1.3
 265.  *    .7    .0    .1    .5   1.4   1.4   1.4   1.2
 270.  *    .7    .0    .0    .3   1.2   1.2   1.2   1.0
 275.  *    .7    .0    .0    .3    .9    .9    .9    .8
 280.  *    .7    .0    .0    .0    .6    .6    .6    .5
 285.  *    .7    .0    .0    .0    .4    .4    .4    .4
 290.  *    .7    .0    .0    .0    .2    .1    .1    .1
 295.  *    .7    .0    .0    .0    .1    .1    .1    .1
 300.  *    .7    .0    .0    .0    .0    .0    .0    .0
 305.  *    .7    .0    .0    .0    .0    .0    .0    .0
 310.  *    .8    .0    .0    .0    .0    .0    .0    .0
 315.  *    .8    .0    .0    .0    .0    .0    .0    .0
 320.  *    .8    .0    .0    .0    .0    .0    .0    .0
 325.  *    .8    .0    .0    .0    .0    .0    .0    .0
 330.  *    .9    .0    .0    .0    .0    .0    .0    .0
 335.  *    .9    .1    .0    .0    .0    .0    .0    .0
 340.  *   1.0    .1    .1    .1    .0    .0    .0    .0
 345.  *   1.0    .1    .2    .1    .1    .0    .0    .0
 350.  *   1.0    .3    .3    .3    .4    .0    .0    .0
 355.  *    .9    .4    .5    .4    .4    .0    .0    .0
 360.  *    .7    .6    .6    .6    .7    .2    .0    .0
 ------*------------------------------------------------
 MAX   *   1.7   1.4   2.2   2.6   2.0   1.9   1.9   1.8
 DEGR. *  200   175   165   145    35   140   105   100

 THE HIGHEST CONCENTRATION IS    2.60 PPM AT  145 DEGREES FROM REC24.
 THE 2ND HIGHEST CONCENTRATION IS    2.50 PPM AT  330 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    2.40 PPM AT  290 DEGREES FROM REC10.
```

```
Site 4 Opt 8 2014 PM - 4B8PM14.DAT      60.0321.0.0000.000280.30480000    1
1
SW MID W                    -47.     2704.       5.0
SW 164 W                    151.     2697.       5.0
SW 82 W                     234.     2693.       5.0
SW CNR                      310.     2683.       5.0
SW 82 S                     316.     2608.       5.0
SW 164 S                    313.     2527.       5.0
SW MID S                    311.     2362.       5.0
SE MID S                    428.     2361.       5.0
SE 164 S                    431.     2516.       5.0
SE 82 S                     432.     2598.       5.0
SE CNR                      448.     2662.       5.0
SE 82 E                     506.     2676.       5.0
SE 164 E                    589.     2673.       5.0
SE MID E                    744.     2669.       5.0
NE MID E                    744.     2746.       5.0
NE 164 E                    588.     2753.       5.0
NE 82 E                     506.     2757.       5.0
NE CNR                      440.     2763.       5.0
NE 82 N                     433.     2827.       5.0
NE 164 N                    433.     2911.       5.0
NE MID N                    436.     3044.       5.0
NW MID N                    328.     3045.       5.0
NW 164 N                    323.     2917.       5.0
NW 82 N                     320.     2833.       5.0
NW CNR                      313.     2765.       5.0
NW 82 W                     247.     2766.       5.0
NW 164 W                    166.     2767.       5.0
NW MID W                    -36.     2773.       5.0
Site 4 Opt 8 2014 PM                     15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.    171011.4   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.    171011.4   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        62       2.0 1710  102.2 1317 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    116011.4   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    138011.4   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    138011.4   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        62       2.0 1380  102.2 1338 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.    162511.4   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    214511.4   0  44   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  24   2
       120        62       2.0 2145  102.2 1093 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.    181011.4   0  32   30.
```

```
  1
WB        Rt7A aprchAG  1388.  2708.   655.  2720.     87011.4   0  44   30.
  1
WB        Rt7A aprchAG   655.  2720.   387.  2730.     87011.4   0  56   30.
  2
WB        Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        62       2.0  870  102.2  590 1 3
  1
WB        Rt7A deparAG   386.  2733.  -609.  2763.    151011.4   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 4 Opt 8 2014 PM - 4B8PM14.DAT                  RUN: Site 4 Opt 8 2014 PM
      DATE: 05/08/2009   TIME: 11:28:10.18


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*------------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG  1710.  11.4    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG  1710.  11.4    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     389.8    2514.3 *     145.   181. AG   567. 100.0    .0 48.0  .72   7.4
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG  1160.  11.4    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG  1380.  11.4    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG  1380.  11.4    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     358.0    2880.9 *     117.     1. AG   567. 100.0    .0 48.0  .57   5.9
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG  1625.  11.4    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG  2145.  11.4    .0 44.0
      10. EB        Rt7A aprch*    309.0    2719.0   -6006.0    2903.4 *    6318.   272. AG   283. 100.0    .0 24.0 2.18 320.9
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG  1810.  11.4    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   870.  11.4    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   870.  11.4    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0     890.2    2713.8 *     431.    92. AG   425. 100.0    .0 36.0 1.09  21.9
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG  1510.  11.4    .0 44.0
1
                                                                                                               PAGE  2
      JOB: Site 4 Opt 8 2014 PM - 4B8PM14.DAT                  RUN: Site 4 Opt 8 2014 PM
      DATE: 05/08/2009   TIME: 11:28:10.18

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       62        2.0      1710       1317     102.20      1        3
       7. SB        Rt4 aprch *     120       62        2.0      1380       1338     102.20      1        3
      10. EB        Rt7A aprch*     120       62        2.0      2145       1093     102.20      1        3
      14. WB        Rt7A aprch*     120       62        2.0       870        590     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0    *
      2. SW 164 W             *       151.0     2697.0       5.0    *
      3. SW 82 W              *       234.0     2693.0       5.0    *
      4. SW CNR               *       310.0     2683.0       5.0    *
      5. SW 82 S              *       316.0     2608.0       5.0    *
      6. SW 164 S             *       313.0     2527.0       5.0    *
      7. SW MID S             *       311.0     2362.0       5.0    *
      8. SE MID S             *       428.0     2361.0       5.0    *
      9. SE 164 S             *       431.0     2516.0       5.0    *
     10. SE 82 S              *       432.0     2598.0       5.0    *
     11. SE CNR               *       448.0     2662.0       5.0    *
     12. SE 82 E              *       506.0     2676.0       5.0    *
     13. SE 164 E             *       589.0     2673.0       5.0    *
     14. SE MID E             *       744.0     2669.0       5.0    *
     15. NE MID E             *       744.0     2746.0       5.0    *
     16. NE 164 E             *       588.0     2753.0       5.0    *
     17. NE 82 E              *       506.0     2757.0       5.0    *
     18. NE CNR               *       440.0     2763.0       5.0    *
     19. NE 82 N              *       433.0     2827.0       5.0    *
     20. NE 164 N             *       433.0     2911.0       5.0    *
     21. NE MID N             *       436.0     3044.0       5.0    *
     22. NW MID N             *       328.0     3045.0       5.0    *
     23. NW 164 N             *       323.0     2917.0       5.0    *
     24. NW 82 N              *       320.0     2833.0       5.0    *
     25. NW CNR               *       313.0     2765.0       5.0    *
     26. NW 82 W              *       247.0     2766.0       5.0    *
     27. NW 164 W             *       166.0     2767.0       5.0    *
     28. NW MID W             *       -36.0     2773.0       5.0    *
1
                                                                                                               PAGE  3
      JOB: Site 4 Opt 8 2014 PM - 4B8PM14.DAT                  RUN: Site 4 Opt 8 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*--------------------------------------------------------------------------------------------------------------------------
   0.  *   2.0   1.9   2.0   2.3   1.6   1.2   1.4   1.6   1.7   1.5   1.5   1.9   1.7   1.7    .0    .0    .2    .5    .8    .7
   5.  *   2.0   2.0   2.1   2.4   1.8   1.7   1.6   1.3   1.5   1.3   1.3   1.8   1.7   1.7    .0    .0    .1    .4    .5    .5
  10.  *   2.0   2.2   2.2   2.6   2.0   1.7   1.9    .9   1.1    .9   1.2   1.7   1.7   1.7    .0    .0    .0    .3    .4    .4
  15.  *   2.0   2.2   2.2   2.7   2.1   1.9   2.0    .7    .8    .8   1.3   1.7   1.7   1.7    .0    .0    .0    .1    .2    .2
  20.  *   2.0   2.1   2.4   2.7   1.7   1.9   1.9    .5    .8    .7   1.2   1.7   1.7   1.7    .0    .0    .0    .1    .1    .1
  25.  *   2.1   2.2   2.5   2.5   1.8   2.2   1.8    .4    .7    .9   1.3   1.7   1.7   1.7    .0    .0    .0    .0    .1    .1
  30.  *   2.2   2.4   2.7   2.5   1.9   2.1   1.8    .3    .6    .8   1.3   1.7   1.7   1.7    .0    .0    .0    .0    .0    .0
  35.  *   2.2   2.4   2.7   2.3   1.9   2.3   1.7    .3    .6    .8   1.4   1.8   1.7   1.8    .0    .0    .0    .0    .0    .0
```

```
  40.  *   2.3   2.3   2.8   2.1   2.0   2.3   1.5    .3    .6    .9   1.4   1.9   1.9   1.8    .0    .0    .0    .0    .0    .0
  45.  *   2.5   2.6   2.9   2.2   1.9   2.5   1.4    .4    .6    .9   1.5   2.0   2.0   1.9    .0    .0    .0    .0    .0    .0
  50.  *   2.4   2.8   3.0   2.2   2.1   2.5   1.4    .3    .6    .9   1.5   2.0   2.0   1.9    .0    .0    .0    .0    .0    .0
  55.  *   2.7   2.9   2.8   2.1   2.2   2.5   1.3    .3    .6    .9   1.6   2.1   2.1   2.0    .0    .0    .0    .0    .0    .0
  60.  *   2.8   2.9   2.7   1.9   2.3   2.5   1.2    .3    .6   1.0   1.7   2.2   2.1   2.0    .0    .0    .0    .0    .0    .0
  65.  *   2.9   3.0   2.8   2.3   2.4   2.5   1.0    .1    .5   1.0   1.8   2.3   2.1   2.0    .0    .1    .1    .0    .0    .0
  70.  *   3.0   2.9   2.9   2.3   2.6   2.4   1.0    .1    .5    .8   1.7   2.2   2.2   1.9    .2    .1    .2    .1    .0    .0
  75.  *   3.2   3.0   2.7   2.4   2.7   2.3   1.0    .1    .4    .7   1.6   2.2   2.1   1.8    .3    .4    .3    .3    .0    .0
  80.  *   3.1   3.2   2.8   2.7   2.5   2.1    .9    .0    .3    .7   1.5   2.1   1.9   1.6    .6    .7    .7    .6    .0    .0
  85.  *   2.9   3.1   2.7   2.6   2.3   1.9    .9    .0    .1    .5   1.3   1.9   1.6   1.3    .9   1.1   1.1    .9    .2    .0
  90.  *   2.8   2.6   2.3   2.4   2.4   1.7    .9    .0    .1    .4   1.1   1.5   1.4   1.1   1.2   1.4   1.4   1.4    .3    .0
  95.  *   2.1   2.0   2.0   2.2   2.1   1.5    .8    .0    .0    .1    .7   1.1   1.0    .7   1.6   2.0   2.0   1.7    .4    .1
 100.  *   1.7   1.5   1.7   1.9   2.0   1.4    .9    .0    .0    .1    .5    .7    .7    .6   2.0   2.2   2.2   2.0    .6    .3
 105.  *   1.2   1.3   1.2   1.6   1.9   1.3    .9    .0    .0    .0    .2    .4    .4    .3   2.3   2.5   2.4   2.2    .7    .3
 110.  *    .7   1.2   1.1   1.6   1.9   1.2    .8    .0    .0    .0    .1    .3    .1    .1   2.4   2.5   2.6   2.4   1.0    .5
 115.  *    .6    .8   1.0   1.6   1.9   1.1    .8    .0    .0    .0    .0    .1    .1    .1   2.4   2.6   2.6   2.2   1.1    .6
 120.  *    .4    .8   1.0   1.6   1.8   1.0    .9    .0    .0    .0    .0    .0    .0    .0   2.4   2.5   2.5   2.1   1.1    .6
 125.  *    .4    .8   1.0   1.7   1.9   1.0   1.0    .0    .0    .0    .0    .0    .0    .0   2.4   2.4   2.4   1.9   1.0    .7
 130.  *    .4    .7   1.0   1.7   1.8   1.0   1.0    .0    .0    .0    .0    .0    .0    .0   2.4   2.4   2.2   1.7   1.0    .8
 135.  *    .3    .4    .9   1.8   1.7   1.0   1.0    .0    .0    .0    .0    .0    .0    .0   2.3   2.2   2.1   1.6   1.1    .7
 140.  *    .2    .5    .8   1.8   1.6   1.1   1.0    .0    .0    .0    .0    .0    .0    .0   2.1   2.0   2.0   1.5   1.0    .7
 145.  *    .2    .4    .8   1.8   1.6   1.0   1.1    .0    .0    .0    .0    .0    .0    .0   2.0   2.0   2.0   1.4    .9    .7
 150.  *    .2    .4    .8   1.7   1.6   1.1   1.1    .0    .0    .0    .0    .0    .0    .0   2.0   2.0   1.9   1.3    .9    .7
 155.  *    .2    .3    .6   1.8   1.5   1.2   1.1    .0    .0    .1    .0    .0    .0    .0   2.0   1.9   1.9   1.2    .8    .6
 160.  *    .2    .3    .5   1.6   1.4   1.1   1.2    .1    .1    .1    .0    .0    .0    .0   1.9   1.9   1.9   1.1    .8    .7
 165.  *    .0    .3    .5   1.4   1.4   1.3   1.2    .1    .2    .2    .0    .0    .0    .0   1.9   1.9   1.9   1.2    .9    .8
 170.  *    .0    .2    .3   1.3   1.3   1.2   1.2    .3    .3    .5    .2    .0    .0    .0   1.9   1.9   1.9   1.5   1.3   1.0
 175.  *    .0    .2    .3   1.1   1.0   1.1   1.0    .4    .5    .7    .4    .1    .0    .0   2.0   1.9   2.0   1.5   1.3   1.2
 180.  *    .0    .0    .2    .8    .9    .8    .8    .6    .8   1.0    .8    .2    .0    .0   2.0   1.9   2.1   1.8   1.5   1.4
 185.  *    .0    .0    .1    .6    .7    .5    .5    .8   1.0   1.3   1.0    .3    .1    .0   2.0   2.1   2.3   2.0   1.7   1.7
 190.  *    .0    .0    .0    .3    .4    .4    .4   1.0   1.1   1.6   1.4    .5    .2    .0   1.9   2.1   2.4   2.2   1.8   2.0
 195.  *    .0    .0    .0    .1    .2    .2    .2   1.0   1.2   2.0   1.6    .6    .2    .0   2.0   2.1   2.5   2.4   2.0   2.0
 200.  *    .0    .0    .0    .1    .1    .1    .1   1.1   1.2   2.1   1.8    .6    .2    .2   2.1   2.2   2.6   2.4   1.9   2.0
 205.  *    .0    .0    .0    .0    .1    .1    .1   1.1   1.2   2.3   2.1    .7    .4    .2   2.1   2.4   2.8   2.2   1.8   2.1
1
                                                                                                                          PAGE  4
      JOB: Site 4 Opt 8 2014 PM - 4B8PM14.DAT                  RUN: Site 4 Opt 8 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.1   2.4   2.0    .9    .4    .2   2.2   2.5   2.8   2.0   1.8   2.2
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.0   1.1   2.5   2.1    .9    .5    .2   2.2   2.7   2.8   2.0   1.8   2.2
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.0   1.0   2.6   2.0   1.0    .6    .2   2.4   2.7   2.8   1.9   1.8   2.1
 225.  *    .1    .0    .0    .0    .0    .0    .0   1.0   1.1   2.5   2.1   1.1    .6    .3   2.5   2.7   2.6   1.9   1.9   2.1
 230.  *    .1    .0    .0    .0    .0    .0    .0   1.0   1.0   2.5   2.0   1.2    .7    .3   2.6   2.9   2.6   1.7   2.1   2.1
 235.  *    .1    .1    .0    .0    .0    .0    .0    .8   1.0   2.4   2.0   1.2    .7    .3   2.7   2.9   2.5   1.7   2.2   2.0
 240.  *    .1    .1    .1    .0    .0    .0    .0    .8    .9   2.4   1.9   1.1    .8    .3   2.9   2.9   2.4   2.0   2.4   1.9
 245.  *    .2    .1    .1    .0    .0    .0    .0    .9   1.0   2.3   1.9   1.1    .8    .3   3.0   3.0   2.3   2.2   2.5   1.9
 250.  *    .3    .3    .3    .2    .0    .0    .0    .8   1.1   2.2   1.8   1.3    .9    .5   3.2   2.9   2.3   2.3   2.7   1.9
 255.  *    .6    .6    .6    .5    .0    .0    .0    .8   1.2   2.2   1.9   1.4   1.0    .8   3.3   2.8   2.4   2.6   2.7   1.8
 260.  *   1.0   1.0    .9    .7    .1    .0    .0    .8   1.3   2.3   2.1   1.5   1.3   1.1   3.3   3.1   2.4   2.4   2.7   1.6
 265.  *   1.6   1.6   1.4   1.1    .3    .1    .0    .8   1.6   2.7   2.1   1.9   1.6   1.6   3.1   2.7   2.7   2.7   2.6   1.4
 270.  *   2.1   2.1   2.0   1.6    .5    .2    .1    .9   1.9   2.9   2.4   2.1   2.0   1.8   2.7   2.5   2.3   2.7   2.5   1.2
 275.  *   2.6   2.5   2.4   2.1    .7    .3    .1   1.0   2.2   3.1   2.7   2.3   2.1   2.4   2.1   2.0   2.1   2.5   2.2    .9
 280.  *   2.9   2.8   2.7   2.2    .9    .5    .2   1.0   2.3   3.3   2.7   2.5   2.5   2.7   1.6   1.7   1.6   2.1   2.0    .8
 285.  *   2.9   2.8   2.8   2.4    .9    .6    .2   1.2   2.5   3.1   2.4   2.4   2.6   2.7   1.2   1.1   1.5   1.8   1.7    .7
 290.  *   2.9   2.9   2.9   2.4   1.0    .6    .3   1.2   2.6   3.2   2.4   2.6   2.6   2.7    .6   1.0   1.3   1.7   1.5    .7
 295.  *   2.8   2.7   2.6   2.2   1.0    .7    .4   1.2   2.8   3.2   2.2   2.3   2.5   2.7    .4    .6    .9   1.5   1.4    .7
 300.  *   2.6   2.6   2.4   2.2   1.0    .7    .4   1.3   2.9   3.1   2.1   2.2   2.7   2.4    .4    .4    .9   1.6   1.4    .7
 305.  *   2.5   2.4   2.4   2.0   1.0    .7    .4   1.3   3.0   3.1   2.0   2.1   2.3   2.4    .2    .4    .8   1.6   1.3    .7
 310.  *   2.4   2.4   2.3   1.9   1.0    .6    .5   1.3   3.0   3.0   2.2   2.3   2.3   2.4    .2    .3    .7   1.5   1.2    .7
 315.  *   2.3   2.3   2.2   1.9    .9    .6    .5   1.5   3.1   3.1   1.9   2.3   2.3   2.2    .2    .3    .7   1.5   1.1    .8
 320.  *   2.3   2.2   2.1   1.8    .8    .6    .5   1.5   3.0   3.0   1.9   2.4   2.2   2.1    .2    .3    .6   1.4   1.1    .9
 325.  *   2.1   2.0   2.0   1.7    .8    .6    .3   1.4   3.0   2.9   2.0   2.4   2.3   2.0    .2    .3    .6   1.3   1.1    .8
 330.  *   2.0   2.0   1.9   1.7    .8    .5    .3   1.6   3.2   3.0   2.2   2.2   2.0   1.9    .2    .2    .5   1.2   1.0    .9
 335.  *   2.0   2.0   1.8   1.7    .8    .5    .3   1.7   3.3   2.6   2.1   2.2   1.9   1.9    .2    .2    .4   1.2   1.0    .9
 340.  *   1.9   1.9   1.8   1.6    .8    .6    .4   1.9   2.9   2.6   1.8   2.1   1.9   1.9    .2    .2    .4   1.0   1.0    .9
 345.  *   2.0   1.9   1.8   1.8   1.0    .7    .4   2.0   2.9   2.5   1.9   2.1   1.9   1.7    .0    .2    .3    .9   1.0   1.0
 350.  *   2.0   2.0   1.8   1.8   1.3    .9    .6   2.1   2.6   2.2   1.8   2.0   1.9   1.7    .0    .2    .3    .9    .9   1.0
 355.  *   2.0   2.0   1.9   2.2   1.5   1.1   1.2   1.9   2.2   1.9   1.4   2.0   1.9   1.7    .0    .1    .3    .7    .8    .8
 360.  *   2.0   1.9   2.0   2.3   1.6   1.2   1.4   1.6   1.7   1.5   1.5   1.9   1.7   1.7    .0    .0    .2    .5    .8    .7
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   3.2   3.2   3.0   2.7   2.7   2.5   2.0   2.1   3.3   3.3   2.7   2.6   2.7   2.7   3.3   3.1   2.8   2.7   2.7   2.2
 DEGR. *   75    80    50    15    75    45    15   350   335   280   275   290   300   280   260   260   205   265   250   215

1
                                                                                                                          PAGE  5
      JOB: Site 4 Opt 8 2014 PM - 4B8PM14.DAT                  RUN: Site 4 Opt 8 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .7    .6    .7    .8    .9    .2    .0    .0
   5.  *    .5    .8    .9   1.0   1.2    .2    .1    .0
  10.  *    .4    .9    .9   1.3   1.6    .3    .2    .0
  15.  *    .2   1.0   1.0   1.5   1.8    .4    .2    .0
  20.  *    .1   1.0   1.0   1.6   2.0    .5    .2    .0
  25.  *    .1   1.0   1.0   1.8   2.1    .6    .2    .1
  30.  *    .0    .9    .9   1.9   2.2    .7    .3    .2
  35.  *    .0    .9    .9   1.9   2.2    .7    .3    .2
  40.  *    .0    .9    .9   1.9   2.3    .8    .4    .2
  45.  *    .0    .8    .8   2.0   2.3    .9    .3    .2
  50.  *    .0    .8    .8   2.1   2.2    .9    .3    .2
```

```
  55.  *    .0    .8    .7   2.0   2.1   1.0    .5    .2
  60.  *    .0    .8    .7   2.1   2.0   1.1    .6    .2
  65.  *    .0    .7    .6   2.0   1.9   1.1    .7    .4
  70.  *    .0    .6    .6   2.0   1.9   1.3    .8    .4
  75.  *    .0    .6    .6   2.1   1.8   1.1    .9    .6
  80.  *    .0    .6    .7   2.1   2.1   1.4   1.2   1.0
  85.  *    .0    .6    .7   2.4   2.4   1.8   1.5   1.3
  90.  *    .0    .7    .7   2.7   2.6   2.0   1.9   1.7
  95.  *    .0    .7    .9   2.8   2.7   2.2   2.3   2.3
 100.  *    .0    .7   1.0   3.0   2.9   2.3   2.6   2.5
 105.  *    .0    .8   1.1   2.9   2.9   2.5   2.5   2.6
 110.  *    .1    .9   1.3   3.1   2.5   2.4   2.7   2.6
 115.  *    .3   1.0   1.5   3.0   2.6   2.3   2.4   2.5
 120.  *    .3   1.1   1.8   2.9   2.5   2.5   2.8   2.4
 125.  *    .3   1.2   1.8   2.9   2.3   2.5   2.7   2.4
 130.  *    .4   1.1   1.9   2.9   2.4   2.4   2.7   2.3
 135.  *    .4   1.1   2.2   3.0   2.6   2.5   2.6   2.2
 140.  *    .3   1.1   2.1   3.1   2.4   2.6   2.5   2.1
 145.  *    .3   1.4   2.5   3.2   2.4   2.6   2.4   2.0
 150.  *    .3   1.4   2.5   3.0   2.6   2.4   2.3   2.0
 155.  *    .4   1.6   2.9   3.0   2.6   2.5   2.2   1.9
 160.  *    .5   1.7   3.0   3.2   2.8   2.4   2.1   1.9
 165.  *    .5   1.7   2.9   2.8   2.8   2.2   1.9   1.6
 170.  *    .9   2.1   2.7   2.6   2.7   2.2   1.9   1.7
 175.  *   1.1   1.9   2.7   2.3   2.5   1.9   1.9   1.7
 180.  *   1.2   1.7   2.2   2.1   2.3   1.9   1.8   1.7
 185.  *   1.6   1.6   1.8   1.6   2.1   1.8   1.6   1.7
 190.  *   1.8   1.1   1.4   1.5   1.8   1.7   1.7   1.7
 195.  *   1.6    .7   1.1    .9   1.6   1.6   1.7   1.7
 200.  *   1.7    .6    .9    .9   1.6   1.6   1.6   1.6
 205.  *   1.6    .5    .7    .9   1.6   1.6   1.7   1.7
1
                                                                                                                        PAGE  6
      JOB: Site 4 Opt 8 2014 PM - 4B8PM14.DAT                   RUN: Site 4 Opt 8 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.4    .5    .7    .8   1.6   1.6   1.7   1.7
 215.  *   1.3    .5    .7    .9   1.6   1.7   1.8   1.8
 220.  *   1.4    .5    .7    .9   1.7   1.8   1.8   1.8
 225.  *   1.4    .5    .6    .9   1.8   1.8   1.9   1.9
 230.  *   1.3    .5    .6    .9   1.9   1.9   1.9   1.9
 235.  *   1.2    .5    .6   1.0   1.9   2.0   2.1   2.1
 240.  *   1.2    .5    .7   1.1   2.1   2.1   2.1   2.1
 245.  *   1.1    .4    .7   1.1   2.1   2.1   2.3   2.3
 250.  *   1.1    .4    .7   1.1   2.3   2.3   2.3   2.3
 255.  *   1.1    .4    .7   1.1   2.4   2.4   2.4   2.4
 260.  *   1.1    .3    .6   1.0   2.3   2.3   2.3   2.3
 265.  *    .9    .2    .5    .9   2.2   2.3   2.3   2.2
 270.  *    .8    .1    .4    .8   1.8   1.9   1.9   1.9
 275.  *    .8    .1    .1    .5   1.4   1.4   1.6   1.5
 280.  *    .7    .0    .1    .3   1.1   1.1   1.1   1.0
 285.  *    .7    .0    .0    .1    .6    .6    .7    .6
 290.  *    .7    .0    .0    .0    .3    .3    .4    .4
 295.  *    .7    .0    .0    .0    .1    .1    .1    .1
 300.  *    .7    .0    .0    .0    .0    .1    .1    .1
 305.  *    .7    .0    .0    .0    .0    .0    .0    .0
 310.  *    .7    .0    .0    .0    .0    .0    .0    .0
 315.  *    .7    .0    .0    .0    .0    .0    .0    .0
 320.  *    .8    .0    .0    .0    .0    .0    .0    .0
 325.  *    .8    .0    .0    .0    .0    .0    .0    .0
 330.  *    .8    .1    .1    .1    .0    .0    .0    .0
 335.  *    .8    .1    .1    .1    .0    .0    .0    .0
 340.  *    .9    .1    .1    .1    .1    .0    .0    .0
 345.  *    .9    .2    .2    .2    .1    .0    .0    .0
 350.  *    .9    .3    .4    .3    .3    .0    .0    .0
 355.  *    .7    .5    .5    .7    .6    .1    .0    .0
 360.  *    .7    .6    .7    .8    .9    .2    .0    .0
 ------*------------------------------------------------
 MAX   *   1.8   2.1   3.0   3.2   2.9   2.6   2.8   2.6
 DEGR. *  190   170   160   160   105   140   120   105

 THE HIGHEST CONCENTRATION IS    3.30 PPM AT  260 DEGREES FROM REC15.
 THE 2ND HIGHEST CONCENTRATION IS    3.30 PPM AT  280 DEGREES FROM REC10.
 THE 3RD HIGHEST CONCENTRATION IS    3.30 PPM AT  335 DEGREES FROM REC9 .
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```
Site 4 Opt 8 2030 PM - 4B8PM30.DAT      60.0321.0.0000.000280.30480000    1
1
SW MID W                  -47.     2704.       5.0
SW 164 W                  151.     2697.       5.0
SW 82 W                   234.     2693.       5.0
SW CNR                    310.     2683.       5.0
SW 82 S                   316.     2608.       5.0
SW 164 S                  313.     2527.       5.0
SW MID S                  311.     2362.       5.0
SE MID S                  428.     2361.       5.0
SE 164 S                  431.     2516.       5.0
SE 82 S                   432.     2598.       5.0
SE CNR                    448.     2662.       5.0
SE 82 E                   506.     2676.       5.0
SE 164 E                  589.     2673.       5.0
SE MID E                  744.     2669.       5.0
NE MID E                  744.     2746.       5.0
NE 164 E                  588.     2753.       5.0
NE 82 E                   506.     2757.       5.0
NE CNR                    440.     2763.       5.0
NE 82 N                   433.     2827.       5.0
NE 164 N                  433.     2911.       5.0
NE MID N                  436.     3044.       5.0
NW MID N                  328.     3045.       5.0
NW 164 N                  323.     2917.       5.0
NW 82 N                   320.     2833.       5.0
NW CNR                    313.     2765.       5.0
NW 82 W                   247.     2766.       5.0
NW 164 W                  166.     2767.       5.0
NW MID W                  -36.     2773.       5.0
Site 4 Opt 8 2030 PM                     15  1   0
  1
NB        Rt4 aprch AG   373.  1724.   386.  2364.     835 9.2   0  56   30.
  1
NB        Rt4 aprch AG   386.  2364.   395.  2721.     835 9.2   0  68   30.
  2
NB        Rt4 aprch AG   393.  2659.   388.  2435.      0.  48   4
       120        64       2.0  835   84.1 1257 1 3
  1
NB        Rt4 departAG   395.  2719.   416.  3717.    1305 9.2   0  56   30.
  1
SB        Rt4 aprch AG   364.  3714.   361.  3032.    2035 9.2   0  56   30.
  1
SB        Rt4 aprch AG   361.  3032.   355.  2722.    2035 9.2   0  68   30.
  2
SB        Rt4 aprch AG   356.  2764.   360.  2999.      0.  48   4
       120        64       2.0 2035   84.1 1372 1 3
  1
SB        Rt4 departAG   354.  2716.   337.  1722.    1770 9.2   0  56   30.
  1
EB        Rt7A aprchAG  -612.  2747.   375.  2717.    1550 9.2   0  56   30.
  2
EB        Rt7A aprchAG   309.  2719.    35.  2727.      0.  36   2
       120        64       2.0 1550   84.1 1188 1 3
  1
EB        Rt7A deparAG   376.  2705.  1385.  2675.    1230 9.2   0  32   30.
```

```
  1
WB        Rt7A aprchAG  1388.  2708.   655.  2720.    1260 9.2   0  44   30.
  1
WB        Rt7A aprchAG   655.  2720.   387.  2730.    1260 9.2   0  56   30.
  2
WB        Rt7A aprchAG   459.  2727.   622.  2722.      0.  36   3
       120        64       2.0 1260   84.1  824 1 3
  1
WB        Rt7A deparAG   386.  2733.  -609.  2763.    1375 9.2   0  44   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 4 Opt 8 2030 PM - 4B8PM30.DAT                   RUN: Site 4 Opt 8 2030 PM
      DATE: 05/08/2009   TIME: 12:54:51.18


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt4 aprch *    373.0    1724.0     386.0    2364.0 *     640.     1. AG    835.   9.2    .0 56.0
       2. NB        Rt4 aprch *    386.0    2364.0     395.0    2721.0 *     357.     1. AG    835.   9.2    .0 68.0
       3. NB        Rt4 aprch *    393.0    2659.0     391.4    2586.2 *      73.   181. AG    481. 100.0    .0 48.0  .38   3.7
       4. NB        Rt4 depart*    395.0    2719.0     416.0    3717.0 *     998.     1. AG   1305.   9.2    .0 56.0
       5. SB        Rt4 aprch *    364.0    3714.0     361.0    3032.0 *     682.   180. AG   2035.   9.2    .0 56.0
       6. SB        Rt4 aprch *    361.0    3032.0     355.0    2722.0 *     310.   181. AG   2035.   9.2    .0 68.0
       7. SB        Rt4 aprch *    356.0    2764.0     359.3    2960.5 *     197.     1. AG    481. 100.0    .0 48.0  .86  10.0
       8. SB        Rt4 depart*    354.0    2716.0     337.0    1722.0 *     994.   181. AG   1770.   9.2    .0 56.0
       9. EB        Rt7A aprch*   -612.0    2747.0     375.0    2717.0 *     987.    92. AG   1550.   9.2    .0 56.0
      10. EB        Rt7A aprch*    309.0    2719.0   -2696.4    2806.7 *    3007.   272. AG    241. 100.0    .0 36.0 1.51 152.7
      11. EB        Rt7A depar*    376.0    2705.0    1385.0    2675.0 *    1009.    92. AG   1230.   9.2    .0 32.0
      12. WB        Rt7A aprch*   1388.0    2708.0     655.0    2720.0 *     733.   271. AG   1260.   9.2    .0 44.0
      13. WB        Rt7A aprch*    655.0    2720.0     387.0    2730.0 *     268.   272. AG   1260.   9.2    .0 56.0
      14. WB        Rt7A aprch*    459.0    2727.0    1334.1    2700.2 *     876.    92. AG    361. 100.0    .0 36.0 1.18  44.5
      15. WB        Rt7A depar*    386.0    2733.0    -609.0    2763.0 *     995.   272. AG   1375.   9.2    .0 44.0
1
                                                                                                                      PAGE  2
      JOB: Site 4 Opt 8 2030 PM - 4B8PM30.DAT                   RUN: Site 4 Opt 8 2030 PM
      DATE: 05/08/2009   TIME: 12:54:51.18

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt4 aprch *     120       64       2.0        835       1257      84.10      1        3
       7. SB        Rt4 aprch *     120       64       2.0       2035       1372      84.10      1        3
      10. EB        Rt7A aprch*     120       64       2.0       1550       1188      84.10      1        3
      14. WB        Rt7A aprch*     120       64       2.0       1260        824      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *       -47.0     2704.0       5.0    *
      2. SW 164 W             *       151.0     2697.0       5.0    *
      3. SW 82 W              *       234.0     2693.0       5.0    *
      4. SW CNR               *       310.0     2683.0       5.0    *
      5. SW 82 S              *       316.0     2608.0       5.0    *
      6. SW 164 S             *       313.0     2527.0       5.0    *
      7. SW MID S             *       311.0     2362.0       5.0    *
      8. SE MID S             *       428.0     2361.0       5.0    *
      9. SE 164 S             *       431.0     2516.0       5.0    *
     10. SE 82 S              *       432.0     2598.0       5.0    *
     11. SE CNR               *       448.0     2662.0       5.0    *
     12. SE 82 E              *       506.0     2676.0       5.0    *
     13. SE 164 E             *       589.0     2673.0       5.0    *
     14. SE MID E             *       744.0     2669.0       5.0    *
     15. NE MID E             *       744.0     2746.0       5.0    *
     16. NE 164 E             *       588.0     2753.0       5.0    *
     17. NE 82 E              *       506.0     2757.0       5.0    *
     18. NE CNR               *       440.0     2763.0       5.0    *
     19. NE 82 N              *       433.0     2827.0       5.0    *
     20. NE 164 N             *       433.0     2911.0       5.0    *
     21. NE MID N             *       436.0     3044.0       5.0    *
     22. NW MID N             *       328.0     3045.0       5.0    *
     23. NW 164 N             *       323.0     2917.0       5.0    *
     24. NW 82 N              *       320.0     2833.0       5.0    *
     25. NW CNR               *       313.0     2765.0       5.0    *
     26. NW 82 W              *       247.0     2766.0       5.0    *
     27. NW 164 W             *       166.0     2767.0       5.0    *
     28. NW MID W             *       -36.0     2773.0       5.0    *
1
                                                                                                                      PAGE  3
      JOB: Site 4 Opt 8 2030 PM - 4B8PM30.DAT                   RUN: Site 4 Opt 8 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.6   1.5   1.6   2.0   1.4   1.3   1.2    .9   1.4   1.1   1.2   1.5   1.3   1.4    .0    .0    .2    .7    .7    .6
   5.  *   1.6   1.6   1.9   2.3   1.7   1.5   1.3   1.0   1.0   1.0   1.2   1.5   1.3   1.4    .0    .0    .1    .3    .4    .4
  10.  *   1.5   1.6   1.9   2.4   1.8   1.5   1.2    .7    .8    .8   1.0   1.4   1.4   1.4    .0    .0    .0    .3    .3    .3
  15.  *   1.4   1.6   1.9   2.4   1.7   1.8   1.2    .5    .7    .5   1.0   1.4   1.4   1.4    .0    .0    .0    .1    .1    .2
  20.  *   1.5   1.6   2.1   2.6   1.6   1.6   1.2    .4    .4    .5    .9   1.4   1.4   1.4    .0    .0    .0    .0    .1    .1
  25.  *   1.5   1.8   2.3   2.4   1.7   1.5   1.3    .4    .5    .5   1.0   1.4   1.4   1.4    .0    .0    .0    .0    .1    .1
  30.  *   1.8   1.9   2.4   2.0   1.7   1.7   1.2    .3    .5    .6   1.0   1.4   1.4   1.4    .0    .0    .0    .0    .0    .0
  35.  *   1.8   2.1   2.4   1.9   1.5   1.4   1.3    .3    .5    .6   1.1   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0
```

```
  40.  *   1.8   2.2   2.4   1.8   1.5   1.4   1.1    .3    .5    .6   1.1   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0
  45.  *   1.9   2.2   2.5   1.7   1.4   1.5   1.0    .4    .5    .7   1.3   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0
  50.  *   2.3   2.4   2.4   1.8   1.4   1.6   1.0    .4    .6    .7   1.3   1.6   1.6   1.6    .0    .0    .0    .0    .0    .0
  55.  *   2.2   2.5   2.2   1.6   1.6   1.5   1.0    .4    .5    .9   1.2   1.6   1.7   1.6    .0    .0    .0    .0    .0    .0
  60.  *   2.3   2.5   2.3   1.7   1.8   1.6   1.0    .4    .5    .9   1.3   1.7   1.7   1.6    .0    .0    .0    .0    .0    .0
  65.  *   2.5   2.6   2.3   1.7   2.0   1.3   1.0    .4    .5    .9   1.4   1.8   1.7   1.7    .2    .1    .1    .0    .0    .0
  70.  *   2.6   2.4   2.5   1.8   2.0   1.1    .7    .1    .5    .9   1.4   1.8   1.9   1.7    .3    .1    .2    .1    .0    .0
  75.  *   2.7   2.6   2.1   2.1   2.1   1.1    .6    .1    .4    .7   1.4   1.9   1.9   1.7    .4    .5    .4    .3    .0    .0
  80.  *   2.6   2.7   2.3   1.9   2.1    .9    .7    .0    .4    .6   1.2   1.8   1.8   1.7    .8    .7    .7    .7    .1    .0
  85.  *   2.4   2.4   2.2   2.0   1.8   1.0    .7    .0    .2    .5   1.1   1.6   1.6   1.4   1.1   1.1   1.1   1.0    .1    .0
  90.  *   2.3   2.1   2.0   1.8   1.7    .7    .7    .0    .1    .4   1.0   1.4   1.2   1.2   1.5   1.5   1.4   1.2    .4    .1
  95.  *   1.9   1.8   1.9   1.7   1.4    .6    .7    .0    .0    .2    .7   1.0   1.0    .8   1.9   1.9   1.8   1.6    .5    .1
 100.  *   1.3   1.4   1.5   1.6   1.2    .6    .6    .0    .0    .1    .4    .6    .6    .6   2.1   2.1   2.1   1.9    .6    .3
 105.  *   1.0   1.1   1.1   1.2   1.0    .5    .6    .0    .0    .0    .2    .4    .4    .2   2.4   2.4   2.3   1.9    .8    .5
 110.  *    .6    .8    .9   1.1    .9    .5    .5    .0    .0    .0    .0    .2    .2    .2   2.5   2.4   2.2   2.0    .9    .5
 115.  *    .4    .5    .7   1.0    .9    .5    .6    .0    .0    .0    .0    .0    .0    .0   2.3   2.2   2.2   1.9    .9    .5
 120.  *    .3    .5    .7   1.0    .9    .6    .6    .0    .0    .0    .0    .0    .0    .0   2.2   2.2   2.1   1.7    .9    .6
 125.  *    .2    .5    .6   1.1    .8    .7    .6    .0    .0    .0    .0    .0    .0    .0   2.2   2.0   2.0   1.6    .9    .6
 130.  *    .2    .5    .6   1.1    .8    .7    .6    .0    .0    .0    .0    .0    .0    .0   2.0   1.9   1.8   1.5    .8    .7
 135.  *    .2    .4    .5   1.2    .7    .6    .7    .0    .0    .0    .0    .0    .0    .0   1.8   1.9   1.8   1.4    .8    .5
 140.  *    .2    .3    .4   1.1    .8    .6    .8    .0    .0    .0    .0    .0    .0    .0   1.8   1.7   1.7   1.3    .8    .5
 145.  *    .2    .2    .3   1.0    .8    .7    .8    .0    .0    .0    .0    .0    .0    .0   1.7   1.7   1.7   1.2    .7    .5
 150.  *    .1    .2    .4    .9    .8    .8    .8    .0    .0    .0    .0    .0    .0    .0   1.7   1.7   1.6   1.0    .7    .5
 155.  *    .1    .2    .4    .9    .7    .8    .8    .0    .0    .0    .0    .0    .0    .0   1.7   1.5   1.5    .9    .7    .5
 160.  *    .1    .2    .4    .8    .9    .9    .9    .0    .0    .0    .0    .0    .0    .0   1.6   1.5   1.5    .8    .6    .5
 165.  *    .0    .1    .3    .9    .9    .9    .9    .0    .0    .0    .0    .0    .0    .0   1.7   1.5   1.5    .8    .5    .5
 170.  *    .0    .1    .3    .8    .9    .8    .8    .1    .3    .2    .0    .0    .0    .0   1.7   1.5   1.5   1.0    .9    .7
 175.  *    .0    .1    .2    .7    .9    .7    .7    .2    .3    .3    .2    .0    .0    .0   1.7   1.6   1.6    .9    .8    .8
 180.  *    .0    .0    .1    .5    .7    .6    .6    .3    .4    .5    .3    .1    .0    .0   1.7   1.6   1.7   1.1   1.0    .9
 185.  *    .0    .0    .1    .3    .5    .5    .5    .4    .4    .5    .5    .2    .0    .0   1.7   1.6   1.7   1.3   1.2   1.2
 190.  *    .0    .0    .0    .2    .3    .3    .3    .6    .6    .6    .6    .2    .1    .0   1.7   1.7   1.9   1.4   1.1   1.3
 195.  *    .0    .0    .0    .1    .2    .2    .2    .6    .6    .7    .8    .4    .2    .0   1.6   1.6   2.0   1.5   1.2   1.6
 200.  *    .0    .0    .0    .1    .1    .1    .1    .6    .6    .8    .8    .4    .2    .0   1.7   1.6   1.9   1.5   1.4   1.6
 205.  *    .0    .0    .0    .0    .1    .1    .1    .6    .6    .6    .9    .3    .2    .1   1.7   1.6   2.0   1.4   1.6   1.7
1
                                                                                                                        PAGE  4
      JOB: Site 4 Opt 8 2030 PM - 4B8PM30.DAT                 RUN: Site 4 Opt 8 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .6    .5    .7   1.0    .4    .1    .1   1.8   1.9   1.9   1.4   1.4   1.7
 215.  *    .0    .0    .0    .0    .0    .0    .0    .6    .5    .7   1.1    .4    .2    .1   1.8   2.1   2.1   1.4   1.6   1.9
 220.  *    .1    .1    .0    .0    .0    .0    .0    .5    .5    .7   1.2    .5    .2    .1   1.9   2.1   2.1   1.4   1.5   1.9
 225.  *    .1    .1    .0    .0    .0    .0    .0    .5    .5    .7   1.3    .5    .2    .1   1.9   2.0   2.1   1.3   1.7   2.0
 230.  *    .1    .1    .1    .0    .0    .0    .0    .5    .5    .7   1.4    .6    .3    .1   2.0   2.2   1.9   1.4   1.9   2.0
 235.  *    .1    .1    .1    .0    .0    .0    .0    .5    .5    .8   1.4    .7    .3    .1   2.2   2.2   1.9   1.5   1.9   2.1
 240.  *    .1    .1    .1    .0    .0    .0    .0    .5    .5    .8   1.4    .7    .3    .1   2.4   2.3   2.0   1.5   2.1   2.1
 245.  *    .2    .2    .2    .0    .0    .0    .0    .5    .5    .9   1.4    .7    .4    .1   2.4   2.5   2.0   1.6   2.1   2.0
 250.  *    .4    .3    .3    .2    .0    .0    .0    .5    .5   1.0   1.3    .7    .4    .2   2.6   2.4   2.0   1.8   2.2   2.1
 255.  *    .6    .7    .5    .3    .0    .0    .0    .5    .5   1.2   1.4    .9    .7    .4   2.6   2.4   2.0   2.2   2.3   2.1
 260.  *   1.0    .9    .8    .6    .1    .0    .0    .5    .5   1.4   1.5   1.1    .9    .6   2.6   2.6   2.0   2.3   2.3   2.1
 265.  *   1.4   1.4   1.3    .9    .1    .1    .0    .5    .6   1.5   1.6   1.3   1.1   1.1   2.5   2.3   2.0   2.3   2.3   2.0
 270.  *   1.7   1.7   1.6   1.2    .4    .1    .0    .6    .6   1.9   1.6   1.5   1.4   1.3   2.1   2.1   1.9   2.3   2.1   1.8
 275.  *   2.1   2.0   2.0   1.6    .5    .3    .1    .6    .8   2.1   1.7   1.5   1.7   1.7   1.8   1.7   1.7   2.1   2.0   1.7
 280.  *   2.3   2.3   2.2   1.8    .7    .4    .1    .6    .9   2.3   1.7   1.7   1.9   1.9   1.6   1.3   1.6   1.9   1.6   1.7
 285.  *   2.4   2.4   2.3   1.8    .8    .5    .2    .7   1.0   2.4   1.8   1.7   1.9   2.2   1.2   1.1   1.2   1.6   1.6   1.4
 290.  *   2.3   2.3   2.2   1.9    .8    .5    .2    .8   1.0   2.5   1.7   1.8   2.0   2.3    .7    .9   1.1   1.5   1.5   1.4
 295.  *   2.2   2.2   2.1   1.8    .8    .5    .3    .9   1.0   2.4   1.7   1.6   2.0   2.0    .5    .7   1.0   1.3   1.5   1.3
 300.  *   2.1   2.1   2.0   1.7    .8    .5    .4    .9   1.1   2.4   1.4   1.7   2.0   2.1    .4    .7    .9   1.3   1.5   1.3
 305.  *   2.0   1.9   1.9   1.6    .8    .5    .4    .9   1.1   2.3   1.5   1.8   2.0   1.9    .3    .6    .9   1.4   1.6   1.2
 310.  *   1.9   1.9   1.9   1.5    .7    .5    .4    .9   1.1   2.4   1.5   1.8   2.1   1.9    .3    .4    .9   1.4   1.6   1.2
 315.  *   1.8   1.8   1.6   1.5    .7    .4    .3    .8   1.1   2.3   1.3   1.9   2.0   1.9    .2    .5    .8   1.5   1.6   1.1
 320.  *   1.6   1.6   1.6   1.5    .7    .4    .3    .8   1.2   2.0   1.6   2.0   1.9   1.7    .2    .4    .8   1.6   1.5   1.0
 325.  *   1.6   1.6   1.6   1.3    .7    .4    .3    .8   1.5   2.1   1.8   2.1   2.0   1.7    .2    .4    .8   1.5   1.5   1.0
 330.  *   1.6   1.6   1.5   1.3    .7    .4    .3    .9   1.6   2.1   1.7   2.2   1.8   1.7    .2    .2    .7   1.5   1.5   1.0
 335.  *   1.5   1.4   1.4   1.2    .7    .4    .3   1.1   1.7   2.0   1.8   2.1   1.8   1.6    .2    .2    .5   1.4   1.3   1.0
 340.  *   1.4   1.4   1.4   1.2    .8    .4    .4   1.2   1.7   2.2   1.8   1.9   1.6   1.6    .2    .2    .6   1.3   1.3    .9
 345.  *   1.4   1.4   1.4   1.4    .8    .7    .4   1.3   1.7   2.1   1.5   1.8   1.6   1.4    .0    .2    .5   1.1   1.1   1.0
 350.  *   1.5   1.4   1.4   1.5   1.1    .7    .7   1.2   1.8   1.7   1.5   1.8   1.6   1.4    .0    .2    .4   1.0   1.0    .9
 355.  *   1.5   1.5   1.6   1.7   1.3   1.0   1.0   1.0   1.7   1.6   1.3   1.5   1.6   1.4    .0    .2    .2    .8    .9    .8
 360.  *   1.6   1.5   1.6   2.0   1.4   1.3   1.2    .9   1.4   1.1   1.2   1.5   1.3   1.4    .0    .0    .2    .7    .7    .6
 ------*-------------------------------------------------------------------------------------------------------------------------
 MAX   *   2.7   2.7   2.5   2.6   2.1   1.8   1.3   1.3   1.8   2.5   1.8   2.2   2.1   2.3   2.6   2.6   2.3   2.3   2.3   2.1
 DEGR. *   75    80    45    20    75    15     5   345   350   290   325   330   310   290   250   260   105   260   255   235

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                                                                                                                        PAGE  5
      JOB: Site 4 Opt 8 2030 PM - 4B8PM30.DAT                 RUN: Site 4 Opt 8 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .6    .8    .8   1.1   1.2    .1    .0    .0
   5.  *    .4   1.0   1.2   1.7   1.6    .3    .1    .0
  10.  *    .3   1.0   1.4   1.9   1.9    .5    .2    .0
  15.  *    .2   1.1   1.4   2.2   2.1    .5    .2    .0
  20.  *    .1   1.2   1.7   2.4   2.4    .8    .3    .1
  25.  *    .1   1.1   1.7   2.4   2.3    .8    .2    .1
  30.  *    .0   1.1   1.8   2.5   2.2    .9    .4    .2
  35.  *    .0   1.0   1.8   2.4   2.2   1.1    .4    .2
  40.  *    .0   1.0   1.8   2.3   2.2   1.1    .5    .2
  45.  *    .0    .8   1.8   2.3   2.1   1.1    .5    .2
  50.  *    .0    .8   1.9   2.2   2.1   1.0    .6    .2
```

```
  55.  *    .0    .8   1.9   2.2   1.9   1.0    .7    .4
  60.  *    .0    .8   1.9   2.2   1.9   1.0    .7    .3
  65.  *    .0    .7   1.9   2.0   1.8   1.0    .7    .4
  70.  *    .0    .7   1.9   2.0   1.8   1.1    .8    .5
  75.  *    .0    .7   2.0   2.0   1.9   1.1    .9    .8
  80.  *    .0    .7   2.0   2.1   2.0   1.4   1.2    .9
  85.  *    .0    .7   2.1   2.2   2.2   1.7   1.6   1.4
  90.  *    .0    .8   2.3   2.5   2.3   1.7   1.7   1.4
  95.  *    .0    .8   2.3   2.6   2.5   1.9   1.9   1.7
 100.  *    .1    .9   2.4   2.7   2.5   2.1   2.1   2.1
 105.  *    .1    .9   2.5   2.8   2.4   2.0   2.1   2.1
 110.  *    .1   1.1   2.5   2.8   2.0   2.1   2.0   2.0
 115.  *    .4   1.2   2.5   2.7   1.9   1.8   1.9   1.9
 120.  *    .4   1.2   2.7   2.7   2.1   1.9   1.8   1.8
 125.  *    .4   1.2   2.7   2.7   1.9   2.0   1.8   1.7
 130.  *    .4   1.3   2.7   2.6   1.9   1.8   1.9   1.6
 135.  *    .4   1.3   2.8   2.5   1.7   1.7   1.9   1.6
 140.  *    .4   1.4   2.7   2.6   1.7   1.8   1.8   1.5
 145.  *    .3   1.6   2.9   2.7   1.8   1.9   1.7   1.5
 150.  *    .4   1.8   2.9   2.6   1.6   1.8   1.6   1.5
 155.  *    .4   1.8   3.0   2.6   1.7   1.8   1.6   1.5
 160.  *    .5   2.2   3.0   2.2   1.7   1.8   1.5   1.4
 165.  *    .5   2.1   2.8   2.1   1.8   1.6   1.5   1.4
 170.  *    .6   2.0   2.5   2.0   1.8   1.6   1.4   1.3
 175.  *    .9   2.1   2.4   1.9   1.9   1.5   1.4   1.3
 180.  *   1.0   1.9   1.9   1.5   1.7   1.4   1.4   1.3
 185.  *   1.4   1.4   1.5   1.3   1.4   1.4   1.3   1.3
 190.  *   1.3   1.2   1.1   1.1   1.3   1.3   1.3   1.3
 195.  *   1.7    .9    .9    .8   1.3   1.3   1.4   1.4
 200.  *   1.8    .6    .6    .8   1.3   1.3   1.4   1.4
 205.  *   1.9    .5    .6    .8   1.3   1.3   1.4   1.3
1
                                                                                                                         PAGE  6
      JOB: Site 4 Opt 8 2030 PM - 4B8PM30.DAT                   RUN: Site 4 Opt 8 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   1.8    .4    .5    .8   1.3   1.3   1.4   1.4
 215.  *   1.7    .3    .5    .8   1.3   1.4   1.4   1.4
 220.  *   1.6    .3    .5    .8   1.3   1.4   1.4   1.4
 225.  *   1.5    .4    .5    .7   1.4   1.4   1.4   1.5
 230.  *   1.5    .4    .5    .7   1.5   1.5   1.5   1.5
 235.  *   1.3    .4    .4    .7   1.5   1.5   1.6   1.6
 240.  *   1.2    .4    .5    .7   1.6   1.7   1.7   1.7
 245.  *   1.2    .4    .4    .8   1.7   1.7   1.8   1.8
 250.  *   1.1    .4    .5    .8   1.8   1.8   1.8   1.8
 255.  *   1.0    .3    .5    .8   1.8   1.9   1.9   1.9
 260.  *    .9    .2    .4    .8   1.8   1.9   1.9   1.9
 265.  *    .8    .1    .4    .7   1.6   1.7   1.7   1.7
 270.  *    .8    .1    .2    .5   1.5   1.5   1.5   1.4
 275.  *    .8    .0    .1    .4   1.2   1.2   1.2   1.1
 280.  *    .7    .0    .1    .1    .8    .8    .8    .8
 285.  *    .6    .0    .0    .1    .5    .5    .5    .5
 290.  *    .6    .0    .0    .0    .3    .3    .3    .3
 295.  *    .6    .0    .0    .0    .1    .1    .1    .1
 300.  *    .8    .0    .0    .0    .0    .0    .0    .0
 305.  *    .8    .0    .0    .0    .0    .0    .0    .0
 310.  *    .8    .0    .0    .0    .0    .0    .0    .0
 315.  *    .8    .0    .1    .0    .0    .0    .0    .0
 320.  *    .8    .0    .1    .1    .0    .0    .0    .0
 325.  *    .8    .0    .1    .1    .0    .0    .0    .0
 330.  *    .9    .1    .1    .1    .0    .0    .0    .0
 335.  *    .9    .1    .1    .1    .0    .0    .0    .0
 340.  *    .9    .1    .2    .2    .1    .0    .0    .0
 345.  *    .9    .2    .2    .4    .3    .0    .0    .0
 350.  *    .8    .3    .4    .5    .5    .0    .0    .0
 355.  *    .8    .6    .8    .9    .7    .1    .0    .0
 360.  *    .6    .8    .8   1.1   1.2    .1    .0    .0
 ------*------------------------------------------------
 MAX   *   1.9   2.2   3.0   2.8   2.5   2.1   2.1   2.1
 DEGR. *  205   160   155   105    95   100   100   100

 THE HIGHEST CONCENTRATION IS    3.00 PPM AT  155 DEGREES FROM REC23.
 THE 2ND HIGHEST CONCENTRATION IS    2.80 PPM AT  105 DEGREES FROM REC24.
 THE 3RD HIGHEST CONCENTRATION IS    2.70 PPM AT   75 DEGREES FROM REC1 .
```

Site 5

```
Site 5 Existing AM - 5EXAM.DAT          60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 Existing AM                       21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    153015.5  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    123015.5  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       145        88       2.0 1230  141.4 1570 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     30015.5  0.  32   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  12   1
       145       118       2.0  300  141.4 1752 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.     86515.5  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    116515.5  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    105515.5  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       145        88       2.0 1055  141.4 1673 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     11015.5  0.  32   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  12   1
```

```
       145       118       2.0  110  141.4 1752 1 3
  1
SB         Rt16 deparAG    21.  2799.   357.  1826.    212515.5  0.  56   30.
  1
EB         Rt27 aprchAG  -320.  2645.  -111.  2740.     46515.5  0.  56   30.
  1
EB         Rt27 aprchAG  -111.  2740.    56.  2763.     46515.5  0.  56   30.
  2
EB         Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  36   3
       145       123       2.0  465  141.4 1722 1 3
  1
EB         Rt27 deparAG    67.  2763.   996.  3083.     80015.5  0.  56   30.
  1
WB         Rt27 aprchAG   981.  3134.   454.  2944.    126515.5  0.  56   30.
  1
WB         Rt27 aprchAG   454.  2944.    52.  2807.    126515.5  0.  68   30.
  2
WB         Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       145       118       2.0 1265  141.4 1703 1 3
  1
WB         Rt27 deparAG    50.  2805.   -90.  2772.     63515.5  0.  32   30.
  1
WB         Rt27 deparAG   -90.  2772.  -337.  2669.     63515.5  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 5 Existing AM - 5EXAM.DAT                      RUN: Site 5 Existing AM
      DATE: 05/06/2009   TIME: 02:44:47.52


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2    *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*---------------------------------------*--------------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.   340. AG  1530.  15.5    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.   342. AG  1230.  15.5    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0     175.7    2515.9 *     197.   161. AG   691. 100.0    .0 36.0  .72  10.0
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.   341. AG   300.  15.5    .0 32.0
       5. NB        Rt16 left *     88.0    2690.0     254.4    2210.6 *     507.   161. AG   309. 100.0    .0 12.0 1.08  25.8
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.   341. AG   865.  15.5    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.   160. AG  1165.  15.5    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.   161. AG  1055.  15.5    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0     -51.7    3016.1 *     169.   341. AG   691. 100.0    .0 36.0  .57   8.6
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.   162. AG   110.  15.5    .0 32.0
      11. SB        Rt16 left *     25.0    2864.0       2.6    2931.3 *      71.   342. AG   309. 100.0    .0 12.0  .40   3.6
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.   161. AG  2125.  15.5    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.    66. AG   465.  15.5    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.    82. AG   465.  15.5    .0 56.0
      15. EB        Rt27 aprch*     -5.0    2754.0    -114.1    2739.9 *     110.   263. AG   965. 100.0    .0 36.0  .73   5.6
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.    71. AG   800.  15.5    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.   250. AG  1265.  15.5    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.   251. AG  1265.  15.5    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0     830.1    3071.4 *     750.    71. AG  1235. 100.0    .0 48.0 1.17  38.1
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.   257. AG   635.  15.5    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.   247. AG   635.  15.5    .0 32.0
1
                                                                                                                        PAGE  2
      JOB: Site 5 Existing AM - 5EXAM.DAT                      RUN: Site 5 Existing AM
      DATE: 05/06/2009   TIME: 02:44:47.52

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     145       88       2.0      1230       1570     141.40      1        3
       5. NB        Rt16 left *     145      118       2.0       300       1752     141.40      1        3
       9. SB        Rt16 thru *     145       88       2.0      1055       1673     141.40      1        3
      11. SB        Rt16 left *     145      118       2.0       110       1752     141.40      1        3
      15. EB        Rt27 aprch*     145      123       2.0       465       1722     141.40      1        3
      19. WB        Rt27 aprch*     145      118       2.0      1265       1703     141.40      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X            Y          Z       *
     -------------------------*--------------------------------------*
      1. SE MID S             *        207.0     2515.0        5.0   *
      2. SE 164 S             *        183.0     2590.0        5.0   *
      3. SE 82 S              *        154.0     2668.0        5.0   *
      4. SE CNR               *        140.0     2741.0        5.0   *
      5. SE 82 E              *        205.0     2774.0        5.0   *
      6. SE 164 E             *        283.0     2802.0        5.0   *
      7. SE MID E             *        356.0     2828.0        5.0   *
      8. NE MID E             *        323.0     2935.0        5.0   *
      9. NE 164 E             *        235.0     2907.0        5.0   *
     10. NE 82 E              *        157.0     2881.0        5.0   *
     11. NE CNR               *         95.0     2864.0        5.0   *
     12. NE 82 N              *         65.0     2927.0        5.0   *
     13. NE 164 N             *         40.0     3006.0        5.0   *
     14. NE MID N             *          8.0     3095.0        5.0   *
     15. NW MID N             *        -95.0     3048.0        5.0   *
     16. NW 164 N             *        -68.0     2971.0        5.0   *
     17. NW 82 N              *        -41.0     2894.0        5.0   *
     18. NW CNR               *        -31.0     2829.0        5.0   *
     19. NW 82 W              *        -91.0     2798.0        5.0   *
     20. NW 164 W             *       -165.0     2767.0        5.0   *
     21. NW MID W             *       -237.0     2736.0        5.0   *
     22. SW MID W             *       -218.0     2665.0        5.0   *
     23. SW 164 W             *       -153.0     2690.0        5.0   *
     24. SW 82 W              *        -77.0     2713.0        5.0   *
     25. SW CNR               *          6.0     2723.0        5.0   *
     26. SW 82 S              *         40.0     2651.0        5.0   *
     27. SW 164 S             *         68.0     2573.0        5.0   *
     28. SW MID S             *         91.0     2503.0        5.0   *
1
                                                                                                                        PAGE  3
      JOB: Site 5 Existing AM - 5EXAM.DAT                      RUN: Site 5 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
```

```
  0.  *   1.3   1.4   1.6   2.0   2.9   2.9   2.9    .0    .0    .0    .1    .1    .1    .1    .9   1.7   3.1   2.5    .7    .2
  5.  *   1.1   1.4   1.6   2.2   2.9   2.9   2.9    .0    .0    .0    .0    .0    .0    .0   1.0   1.9   3.2   2.7    .8    .3
 10.  *   1.2   1.3   1.7   2.3   2.9   2.9   2.9    .0    .0    .0    .0    .0    .0    .0    .9   2.0   3.3   2.5    .9    .4
 15.  *   1.1   1.4   1.8   2.4   2.9   2.9   2.9    .1    .0    .0    .0    .0    .0    .0    .9   2.1   3.1   2.6   1.1    .5
 20.  *   1.1   1.4   1.8   2.5   2.9   3.0   3.0    .1    .1    .0    .0    .0    .0    .0    .8   2.2   3.1   2.6   1.0    .6
 25.  *   1.1   1.3   1.9   2.8   3.1   3.1   3.2    .2    .1    .1    .0    .0    .0    .0    .8   2.3   3.1   2.6   1.2    .6
 30.  *   1.2   1.2   1.9   2.9   3.1   3.1   3.2    .2    .1    .1    .0    .0    .0    .0    .7   2.4   3.1   2.4   1.2    .6
 35.  *   1.1   1.3   1.9   3.0   3.3   3.4   3.3    .2    .2    .2    .0    .0    .0    .0    .8   2.4   2.9   2.3   1.2    .8
 40.  *    .9   1.3   1.9   3.0   3.4   3.3   3.4    .3    .2    .2    .2    .0    .0    .0    .8   2.4   2.9   2.1   1.2    .9
 45.  *    .8   1.2   1.9   3.1   3.5   3.4   3.4    .4    .3    .3    .2    .0    .0    .0    .7   2.5   2.9   2.0   1.2   1.0
 50.  *    .6   1.0   1.7   3.1   3.3   3.4   3.5    .7    .6    .6    .4    .0    .0    .0    .8   2.5   2.9   1.9   1.2   1.1
 55.  *    .5    .8   1.5   3.0   3.4   3.3   3.2   1.2   1.1   1.1    .9    .1    .0    .0    .7   2.6   3.1   2.0   1.4   1.2
 60.  *    .2    .6   1.3   2.6   3.1   2.9   2.9   2.0   1.8   1.8   1.5    .2    .0    .0    .7   2.6   3.2   2.4   1.7   1.6
 65.  *    .1    .3    .8   2.2   2.6   2.4   2.3   3.0   2.9   2.8   2.5    .5    .1    .0    .7   2.7   3.4   2.7   2.3   2.2
 70.  *    .0    .1    .6   1.6   1.8   2.0   1.8   3.9   3.8   3.9   3.4    .8    .2    .0    .8   2.9   4.0   3.1   2.8   2.6
 75.  *    .0    .0    .3   1.1   1.3   1.3   1.2   5.1   4.8   5.0   4.4   1.3    .4    .1    .9   3.2   4.5   3.5   2.8   3.0
 80.  *    .0    .0    .1    .6    .8    .8    .8   5.8   5.6   5.6   5.0   1.7    .6    .2   1.1   3.4   4.9   3.5   2.9   3.6
 85.  *    .0    .0    .0    .3    .4    .4    .4   6.1   6.0   6.0   5.4   2.1   1.0    .4   1.3   3.8   5.0   3.4   2.9   3.4
 90.  *    .0    .0    .0    .1    .2    .2    .2   6.4   6.2   6.2   5.6   2.3   1.3    .6   1.6   4.0   5.3   3.0   2.5   3.1
 95.  *    .0    .0    .0    .0    .1    .1    .1   6.1   5.9   5.9   5.1   2.6   1.4    .9   1.9   4.2   5.1   2.7   2.5   3.3
100.  *    .0    .0    .0    .0    .0    .0    .0   5.8   5.7   5.6   4.8   2.5   1.5   1.0   2.1   4.4   4.9   2.3   2.0   3.5
105.  *    .0    .0    .1    .0    .0    .0    .0   5.6   5.3   5.2   4.5   2.4   1.7   1.2   2.2   4.3   4.7   2.0   2.3   3.2
110.  *    .1    .0    .1    .0    .0    .0    .0   5.2   5.1   5.0   4.3   2.4   1.6   1.2   2.2   4.4   4.5   1.9   2.5   2.9
115.  *    .1    .1    .1    .0    .0    .0    .0   5.0   4.9   4.8   3.9   2.3   1.5   1.1   2.5   4.5   4.1   1.8   2.7   2.7
120.  *    .1    .1    .1    .0    .0    .0    .0   4.7   4.6   4.6   3.7   2.1   1.5   1.1   2.7   4.3   3.9   1.8   3.0   2.7
125.  *    .1    .1    .1    .0    .0    .0    .0   4.6   4.5   4.4   3.4   2.0   1.5   1.1   2.8   4.4   3.4   2.2   3.4   2.6
130.  *    .1    .1    .1    .0    .0    .0    .0   4.4   4.4   4.3   3.2   1.9   1.4   1.1   3.1   4.4   3.6   2.2   3.6   2.2
135.  *    .1    .1    .2    .0    .0    .0    .0   4.3   4.2   4.2   2.8   1.8   1.4   1.0   3.3   4.3   3.5   2.5   3.8   2.0
140.  *    .2    .2    .4    .2    .0    .0    .0   4.2   4.1   4.0   2.7   1.8   1.3   1.0   3.6   4.1   3.6   2.8   3.6   1.6
145.  *    .2    .4    .7    .4    .0    .0    .0   4.3   4.1   4.1   2.5   1.8   1.5   1.2   3.7   4.4   3.4   3.1   3.6   1.2
150.  *    .6    .7   1.2    .8    .0    .0    .0   4.3   4.2   4.2   2.7   2.0   1.7   1.3   3.5   4.2   3.4   3.0   3.4   1.1
155.  *    .9   1.1   1.7   1.3    .2    .0    .0   4.3   4.2   4.5   2.8   2.1   1.8   1.6   3.3   3.6   3.1   3.0   3.0    .9
160.  *   1.3   1.5   2.5   1.9    .2    .0    .0   4.4   4.4   4.7   2.8   2.5   1.9   1.9   2.8   3.0   2.6   2.5   2.9    .6
165.  *   1.6   2.1   3.2   2.5    .7    .2    .0   4.4   4.5   4.9   3.2   2.5   2.1   2.1   2.2   2.6   2.3   2.3   2.7    .6
170.  *   1.8   2.6   4.0   3.0    .7    .2    .2   4.5   4.7   5.3   3.2   2.5   2.4   2.1   1.7   1.9   1.9   2.2   2.4    .5
175.  *   2.0   3.1   4.3   3.6   1.0    .5    .2   4.5   4.7   5.3   3.1   2.5   2.1   2.4   1.0   1.4   1.6   1.8   2.3    .5
180.  *   2.2   3.6   4.8   3.6   1.4    .5    .2   4.7   4.8   5.4   3.1   2.4   2.1   2.2    .7    .9   1.3   1.8   2.1    .5
185.  *   2.2   3.7   4.6   3.6   1.4    .8    .4   4.8   5.2   5.4   2.6   1.9   2.3   2.2    .4    .7   1.2   1.8   2.0    .5
190.  *   2.2   3.8   4.7   3.5   1.6    .9    .4   5.0   5.5   5.5   2.2   1.8   2.1   2.2    .4    .6   1.1   1.7   1.9    .5
195.  *   2.1   3.8   4.6   3.4   1.8    .9    .5   5.2   5.6   5.3   2.1   1.9   2.2   2.2    .3    .5   1.0   1.7   1.7    .5
200.  *   1.9   3.9   4.4   3.1   1.8   1.0    .6   5.3   5.6   5.0   2.1   1.9   2.3   1.9    .2    .4   1.0   1.7   1.7    .5
205.  *   2.0   3.8   4.2   2.9   1.7   1.1    .7   5.6   5.7   4.6   1.9   1.9   2.3   1.7    .1    .4    .9   1.6   1.4    .6
1
                                                                                                                     PAGE  4
      JOB: Site 5 Existing AM - 5EXAM.DAT                       RUN: Site 5 Existing AM

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *   1.8   3.7   4.1   2.7   1.7   1.2    .7   5.8   5.7   4.6   2.0   2.0   2.1   1.5    .0    .3    .6   1.7   1.2    .6
215.  *   1.8   3.7   3.9   2.4   1.6   1.2    .7   5.9   5.7   4.2   2.0   2.1   2.1   1.4    .0    .1    .5   1.6    .9    .6
220.  *   1.7   3.7   3.8   2.1   1.6   1.2    .7   6.0   5.6   3.7   1.9   2.4   2.1   1.2    .0    .1    .4   1.5   1.0    .6
225.  *   1.7   3.6   3.8   1.9   1.5   1.1    .9   6.1   5.2   3.7   1.9   2.2   2.0   1.0    .0    .0    .3   1.2    .9    .6
230.  *   1.7   3.6   3.7   1.6   1.2   1.1    .8   5.9   4.9   3.5   1.8   2.2   1.8    .9    .0    .0    .3   1.1    .8    .6
235.  *   1.7   3.6   3.7   1.5   1.2   1.0    .8   5.9   4.7   3.0   2.1   2.1   1.7    .8    .0    .0    .1    .9    .7    .5
240.  *   1.8   3.6   3.7   1.5   1.2   1.1   1.1   5.2   4.3   2.8   1.9   2.2   1.7    .7    .0    .0    .1    .7    .4    .4
245.  *   1.9   3.6   3.7   1.3   1.2   1.2   1.1   4.7   3.7   2.5   1.7   2.2   1.7    .7    .0    .0    .0    .5    .4    .4
250.  *   2.0   3.6   3.8   1.3   1.2   1.2   1.3   4.0   2.8   2.0   1.5   2.1   1.7    .7    .0    .0    .0    .3    .3    .2
255.  *   2.1   3.6   3.7   1.6   1.4   1.4   1.6   3.0   2.3   1.6   1.5   2.0   1.6    .7    .0    .0    .0    .1    .2    .1
260.  *   2.3   3.6   3.8   1.9   1.5   1.4   2.0   2.1   1.7   1.2   1.3   2.0   1.6    .7    .0    .0    .0    .1    .1    .1
265.  *   2.5   3.6   3.8   2.0   1.7   1.9   2.6   1.7   1.3   1.3   1.4   2.0   1.5    .7    .0    .0    .0    .0    .1    .1
270.  *   2.7   3.6   3.7   2.2   1.6   2.2   2.8   1.1   1.1   1.2   1.5   1.9   1.4    .7    .0    .0    .0    .0    .0    .0
275.  *   2.8   3.6   3.9   2.3   1.9   2.7   3.2    .9    .9   1.1   1.6   1.9   1.3    .7    .0    .0    .0    .0    .0    .0
280.  *   3.0   3.8   4.1   2.1   1.7   2.8   3.3    .7    .9   1.2   1.7   1.8   1.1    .7    .0    .0    .0    .0    .0    .0
285.  *   3.1   3.9   4.2   2.1   2.0   3.2   3.4    .6    .7   1.2   1.9   1.8   1.0    .7    .0    .0    .0    .0    .0    .0
290.  *   3.4   4.1   4.0   2.1   2.2   3.2   3.5    .6    .6   1.2   1.9   1.7    .9    .7    .0    .0    .0    .0    .0    .0
295.  *   3.7   4.3   4.2   2.0   2.2   3.4   3.4    .5    .6   1.1   1.9   1.7    .9    .7    .0    .0    .1    .0    .0    .0
300.  *   3.9   4.4   3.9   1.8   2.7   3.4   3.4    .4    .5   1.0   1.8   1.6    .8    .9    .0    .1    .1    .0    .0    .0
305.  *   4.2   4.5   3.9   2.1   2.9   3.3   3.2    .3    .4    .7   1.8   1.6    .8    .9    .0    .1    .1    .0    .0    .0
310.  *   4.5   4.4   3.7   2.0   3.1   3.3   3.2    .2    .2    .7   1.8   1.4    .8    .9    .0    .1    .1    .0    .0    .0
315.  *   4.5   4.4   3.7   2.0   3.2   3.2   3.1    .2    .2    .6   1.6   1.3    .9    .9    .0    .1    .2    .0    .0    .0
320.  *   4.5   4.2   3.5   2.2   3.1   3.2   3.1    .2    .2    .6   1.4   1.3    .9    .9    .1    .2    .2    .0    .0    .0
325.  *   4.7   4.2   3.2   2.3   3.2   3.1   3.1    .2    .2    .4   1.4   1.1    .8   1.0    .1    .2    .5    .2    .0    .0
330.  *   4.2   3.8   2.8   2.4   3.2   3.1   2.9    .0    .2    .4   1.0   1.0    .8    .8    .2    .4    .7    .4    .0    .0
335.  *   4.1   3.2   2.6   2.1   3.0   3.1   2.9    .0    .2    .2    .8    .8    .8    .8    .5    .6   1.2    .8    .1    .0
340.  *   3.4   2.7   2.4   2.0   3.0   2.9   2.9    .0    .0    .2    .5    .6    .6    .6    .7    .8   1.6   1.2    .1    .0
345.  *   2.8   2.3   2.1   2.0   3.0   2.9   2.9    .0    .0    .1    .4    .4    .4    .4    .8   1.1   2.1   1.4    .2    .1
350.  *   2.0   1.8   2.0   2.1   2.9   2.9   2.9    .0    .0    .0    .3    .3    .3    .3    .9   1.4   2.6   1.9    .5    .1
355.  *   1.6   1.5   1.7   2.0   2.9   2.9   2.9    .0    .0    .0    .1    .2    .1    .1   1.0   1.6   2.9   2.3    .6    .2
360.  *   1.3   1.4   1.6   2.0   2.9   2.9   2.9    .0    .0    .0    .1    .1    .1    .1    .9   1.7   3.1   2.5    .7    .2
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   4.7   4.5   4.8   3.6   3.5   3.4   3.5   6.4   6.2   6.2   5.6   2.6   2.4   2.4   3.7   4.5   5.3   3.5   3.8   3.6
DEGR. *  325   305   180   175    45    35    50    90    90    90    90    95   170   175   145   115    90    75   135    80

1
                                                                                                                     PAGE  5
      JOB: Site 5 Existing AM - 5EXAM.DAT                       RUN: Site 5 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
------*------------------------------------------------
  0.  *    .2    .6    .7   3.6   2.6   2.7   2.7   3.4
  5.  *    .2    .6    .9   3.8   2.3   2.4   2.9   3.5
 10.  *    .2    .7   1.1   4.0   2.3   2.3   3.3   3.7
```

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  15.  *    .2    .9   1.2   4.0   2.2   2.4   3.5   3.8
  20.  *    .3   1.0   1.4   4.0   2.0   2.4   3.6   3.9
  25.  *    .4   1.0   1.5   4.1   1.9   2.8   3.9   4.0
  30.  *    .5   1.1   2.0   4.2   2.2   3.0   4.0   4.0
  35.  *    .5   1.2   2.3   4.3   2.4   3.4   4.2   4.1
  40.  *    .5   1.4   2.5   4.3   2.6   3.6   4.1   3.9
  45.  *    .6   1.7   2.9   4.4   3.2   3.8   4.2   3.9
  50.  *    .8   2.2   3.1   4.6   3.7   4.0   4.1   3.6
  55.  *   1.2   2.6   3.5   5.1   4.2   4.0   3.9   3.4
  60.  *   1.6   3.0   3.9   5.0   4.2   3.9   3.6   3.2
  65.  *   2.2   3.1   3.7   4.8   4.0   3.7   3.5   2.9
  70.  *   2.7   2.7   3.5   4.0   3.7   3.4   3.1   2.8
  75.  *   2.9   2.4   3.2   3.6   3.2   3.2   3.0   2.6
  80.  *   3.0   1.9   2.3   2.8   2.7   2.9   2.8   2.3
  85.  *   2.8   1.5   1.9   2.1   2.3   2.9   2.8   2.2
  90.  *   2.5   1.2   1.4   1.7   1.8   2.8   2.8   2.1
  95.  *   2.3   1.0   1.0   1.4   2.0   2.8   2.8   2.0
 100.  *   2.0    .8   1.0   1.2   1.9   2.8   2.7   1.9
 105.  *   1.8    .8    .9   1.3   2.1   2.9   2.7   2.1
 110.  *   1.7    .7    .9   1.4   2.3   2.9   2.7   2.0
 115.  *   1.4    .8    .9   1.4   2.4   3.0   2.6   2.1
 120.  *   1.4    .7    .9   1.4   2.6   2.9   2.8   2.1
 125.  *   1.2    .6    .9   1.4   2.7   3.1   2.7   2.3
 130.  *   1.1    .5    .8   1.2   2.9   3.2   2.7   2.3
 135.  *   1.0    .5    .6   1.1   3.0   3.1   2.7   2.5
 140.  *    .9    .4    .5   1.1   2.8   3.0   2.8   2.3
 145.  *    .8    .3    .5   1.1   2.8   3.0   2.6   2.4
 150.  *    .7    .2    .3    .7   2.5   2.8   2.5   2.3
 155.  *    .6    .1    .2    .5   2.0   2.3   2.2   2.1
 160.  *    .5    .0    .1    .4   1.6   2.0   1.9   1.9
 165.  *    .5    .0    .0    .1   1.1   1.4   1.5   1.4
 170.  *    .5    .0    .0    .1    .7   1.0   1.1   1.0
 175.  *    .5    .0    .0    .0    .3    .6    .7    .5
 180.  *    .5    .0    .0    .0    .2    .4    .4    .4
 185.  *    .5    .0    .0    .0    .1    .2    .3    .2
 190.  *    .5    .0    .0    .0    .1    .2    .2    .2
 195.  *    .5    .0    .0    .0    .0    .1    .1    .1
 200.  *    .5    .0    .0    .0    .0    .1    .1    .1
 205.  *    .6    .0    .0    .0    .0    .1    .1    .1
1
                                                                                                                             PAGE  6
      JOB: Site 5 Existing AM - 5EXAM.DAT                        RUN: Site 5 Existing AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .6    .0    .0    .0    .0    .1    .1    .1
 215.  *    .6    .1    .0    .0    .0    .1    .1    .1
 220.  *    .5    .1    .0    .0    .0    .1    .1    .1
 225.  *    .5    .1    .1    .0    .0    .0    .1    .0
 230.  *    .4    .1    .1    .0    .0    .0    .0    .0
 235.  *    .4    .1    .1    .1    .0    .0    .0    .0
 240.  *    .4    .2    .2    .1    .1    .0    .0    .0
 245.  *    .2    .2    .2    .1    .1    .0    .0    .0
 250.  *    .2    .2    .3    .3    .5    .0    .0    .0
 255.  *    .1    .3    .4    .3    .8    .0    .0    .0
 260.  *    .1    .4    .4    .3   1.1    .0    .0    .0
 265.  *    .0    .4    .4    .6   1.4    .0    .0    .0
 270.  *    .0    .4    .5    .7   1.9    .1    .0    .0
 275.  *    .0    .4    .5    .9   2.3    .3    .0    .0
 280.  *    .0    .5    .5   1.1   2.7    .4    .1    .1
 285.  *    .0    .5    .5   1.3   2.9    .5    .1    .1
 290.  *    .0    .5    .5   1.5   3.1    .7    .2    .1
 295.  *    .0    .5    .5   1.6   3.1    .8    .3    .1
 300.  *    .0    .4    .4   1.9   3.1   1.0    .4    .2
 305.  *    .0    .4    .4   2.1   2.9   1.1    .5    .2
 310.  *    .0    .4    .4   2.2   2.8   1.2    .7    .3
 315.  *    .0    .4    .4   2.5   2.6   1.4    .7    .4
 320.  *    .0    .4    .4   2.6   2.6   1.4    .8    .6
 325.  *    .0    .4    .4   2.7   2.6   1.6   1.1    .8
 330.  *    .0    .4    .4   2.7   2.7   1.8   1.5   1.2
 335.  *    .0    .4    .4   2.8   2.9   2.0   1.9   1.6
 340.  *    .0    .4    .4   3.0   2.8   2.3   2.1   2.1
 345.  *    .0    .4    .5   3.3   3.0   2.5   2.4   2.3
 350.  *    .1    .5    .5   3.6   3.0   2.5   2.6   2.8
 355.  *    .1    .5    .6   3.7   3.0   2.6   2.7   3.1
 360.  *    .2    .6    .7   3.6   2.6   2.7   2.7   3.4
 ------*------------------------------------------------
 MAX   *   3.0   3.1   3.9   5.1   4.2   4.0   4.2   4.1
 DEGR. *   80    65    60    55    55    50    35    35

 THE HIGHEST CONCENTRATION IS    6.40 PPM AT   90 DEGREES FROM REC8 .
 THE 2ND HIGHEST CONCENTRATION IS    6.20 PPM AT   90 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    6.20 PPM AT   90 DEGREES FROM REC10.
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Site 5 Existing PM - 5EXPM.DAT          60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 Existing PM                       21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    172515.5  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    151515.5  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       145         88       2.0 1515  141.4 1573 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     21015.5  0.  32   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  12   1
       145        118       2.0  210  141.4 1752 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    116515.5  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    115015.5  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.     82015.5  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       145         88       2.0  820  141.4 1672 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     33015.5  0.  32   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  12   1
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       145       118       2.0  330  141.4 1752 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    192015.5  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.     70015.5  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.     70015.5  0.  56   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  36   3
       145       123       2.0  700  141.4 1722 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    135015.5  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.     93515.5  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.     93515.5  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       145       118       2.0  935  141.4 1703 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.     38015.5  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.     38015.5  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 5 Existing PM - 5EXPM.DAT                       RUN: Site 5 Existing PM
      DATE: 05/06/2009   TIME: 03:28:27.41


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.   340. AG   1725.  15.5    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.   342. AG   1515.  15.5    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0     198.8    2447.0 *     270.   161. AG    691. 100.0    .0 36.0  .88  13.7
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.   341. AG    210.  15.5    .0 32.0
       5. NB        Rt16 left *     88.0    2690.0     134.8    2555.1 *     143.   161. AG    309. 100.0    .0 12.0  .76   7.3
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.   341. AG   1165.  15.5    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.   160. AG   1150.  15.5    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.   161. AG    820.  15.5    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0     -39.7    2980.6 *     131.   341. AG    691. 100.0    .0 36.0  .45   6.7
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.   162. AG    330.  15.5    .0 32.0
      11. SB        Rt16 left *     25.0    2864.0    -237.7    3652.2 *     831.   342. AG    309. 100.0    .0 12.0 1.19  42.2
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.   161. AG   1920.  15.5    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.    66. AG    700.  15.5    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.    82. AG    700.  15.5    .0 56.0
      15. EB        Rt27 aprch*     -5.0    2754.0    -432.6    2698.8 *     431.   263. AG    965. 100.0    .0 36.0 1.09  21.9
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.    71. AG   1350.  15.5    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.   250. AG    935.  15.5    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.   251. AG    935.  15.5    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0     285.1    2886.1 *     174.    71. AG   1235. 100.0    .0 48.0  .86   8.9
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.   257. AG    380.  15.5    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.   247. AG    380.  15.5    .0 32.0
1
                                                                                                                   PAGE  2
      JOB: Site 5 Existing PM - 5EXPM.DAT                       RUN: Site 5 Existing PM
      DATE: 05/06/2009   TIME: 03:28:27.41

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE    SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*-------------------------------------------------------------------------------
       3. NB        Rt16 thru *     145       88        2.0       1515       1573     141.40      1        3
       5. NB        Rt16 left *     145      118        2.0        210       1752     141.40      1        3
       9. SB        Rt16 thru *     145       88        2.0        820       1672     141.40      1        3
      11. SB        Rt16 left *     145      118        2.0        330       1752     141.40      1        3
      15. EB        Rt27 aprch*     145      123        2.0        700       1722     141.40      1        3
      19. WB        Rt27 aprch*     145      118        2.0        935       1703     141.40      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z       *
     -------------------------*-------------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0    *
      2. SE 164 S             *       183.0     2590.0       5.0    *
      3. SE 82 S              *       154.0     2668.0       5.0    *
      4. SE CNR               *       140.0     2741.0       5.0    *
      5. SE 82 E              *       205.0     2774.0       5.0    *
      6. SE 164 E             *       283.0     2802.0       5.0    *
      7. SE MID E             *       356.0     2828.0       5.0    *
      8. NE MID E             *       323.0     2935.0       5.0    *
      9. NE 164 E             *       235.0     2907.0       5.0    *
     10. NE 82 E              *       157.0     2881.0       5.0    *
     11. NE CNR               *        95.0     2864.0       5.0    *
     12. NE 82 N              *        65.0     2927.0       5.0    *
     13. NE 164 N             *        40.0     3006.0       5.0    *
     14. NE MID N             *         8.0     3095.0       5.0    *
     15. NW MID N             *       -95.0     3048.0       5.0    *
     16. NW 164 N             *       -68.0     2971.0       5.0    *
     17. NW 82 N              *       -41.0     2894.0       5.0    *
     18. NW CNR               *       -31.0     2829.0       5.0    *
     19. NW 82 W              *       -91.0     2798.0       5.0    *
     20. NW 164 W             *      -165.0     2767.0       5.0    *
     21. NW MID W             *      -237.0     2736.0       5.0    *
     22. SW MID W             *      -218.0     2665.0       5.0    *
     23. SW 164 W             *      -153.0     2690.0       5.0    *
     24. SW 82 W              *       -77.0     2713.0       5.0    *
     25. SW CNR               *         6.0     2723.0       5.0    *
     26. SW 82 S              *        40.0     2651.0       5.0    *
     27. SW 164 S             *        68.0     2573.0       5.0    *
     28. SW MID S             *        91.0     2503.0       5.0    *
1
                                                                                                                   PAGE  3
      JOB: Site 5 Existing PM - 5EXPM.DAT                       RUN: Site 5 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
```

```
   0.  *   1.1   1.3   1.7   2.3   3.0   2.0    .9    .0    .0    .0    .1    .1    .1    .1   1.5   1.5   3.2   2.8   1.0    .4
   5.  *   1.1   1.2   1.8   2.4   2.9   1.8    .9    .0    .0    .0    .0    .1    .0    .0   1.5   1.4   3.3   2.9   1.0    .4
  10.  *    .9   1.1   1.7   2.5   2.9   1.6    .9    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   3.5   2.9   1.2    .4
  15.  *    .7   1.0   1.7   2.7   2.9   1.5   1.0    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   3.5   2.8   1.3    .6
  20.  *    .6    .9   1.7   2.7   2.8   1.3   1.0    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   3.5   2.8   1.3    .7
  25.  *    .5    .7   1.5   2.8   2.7   1.2   1.0    .1    .0    .0    .0    .0    .0    .0   1.4   1.4   3.6   2.7   1.5    .7
  30.  *    .6    .6   1.4   2.7   2.5   1.1   1.1    .1    .0    .0    .0    .0    .0    .0   1.2   1.3   3.5   2.6   1.5    .7
  35.  *    .4    .6   1.2   2.7   2.4   1.2   1.1    .1    .1    .0    .0    .0    .0    .0   1.2   1.3   3.3   2.4   1.5    .8
  40.  *    .3    .5    .9   2.5   2.1   1.2   1.1    .1    .1    .2    .0    .0    .0    .0   1.2   1.3   3.3   2.1   1.4    .8
  45.  *    .3    .3    .7   2.2   2.1   1.2   1.2    .1    .1    .2    .2    .0    .0    .0   1.2   1.4   3.2   1.9   1.4    .8
  50.  *    .2    .3    .6   2.0   1.7   1.2   1.2    .1    .1    .3    .2    .0    .0    .0   1.2   1.5   3.2   1.9   1.4    .8
  55.  *    .1    .3    .6   1.8   1.6   1.4   1.3    .2    .2    .4    .4    .0    .0    .0   1.0   1.5   3.0   1.8   1.4    .9
  60.  *    .1    .2    .4   1.4   1.4   1.3   1.2    .4    .5    .9    .9    .0    .0    .0   1.1   1.7   3.1   1.8   1.5   1.2
  65.  *    .0    .1    .3   1.0   1.2   1.2   1.1    .5    .6   1.2   1.4    .0    .0    .0   1.2   2.0   3.3   2.1   1.7   1.5
  70.  *    .0    .1    .1    .8   1.0    .9    .9    .7   1.0   1.9   2.0    .2    .0    .0   1.2   2.1   3.5   2.2   2.0   2.1
  75.  *    .0    .0    .1    .6    .7    .7    .7   1.0   1.3   2.6   2.7    .4    .0    .0   1.2   2.4   3.8   2.5   1.9   2.5
  80.  *    .0    .0    .0    .3    .4    .5    .5   1.0   1.8   3.3   3.4    .6    .2    .0   1.2   2.8   4.0   2.6   1.9   2.7
  85.  *    .0    .0    .0    .2    .3    .3    .3   1.1   1.9   3.9   4.0    .7    .2    .2   1.3   2.9   4.2   2.6   2.2   3.1
  90.  *    .0    .0    .0    .1    .2    .2    .2   1.1   2.3   4.3   4.3   1.0    .2    .2   1.3   3.3   4.4   2.5   2.1   3.4
  95.  *    .0    .0    .0    .0    .1    .1    .1   1.0   2.5   4.5   4.4   1.4    .5    .2   1.5   3.7   4.6   2.4   2.1   3.7
 100.  *    .0    .0    .1    .0    .1    .1    .1   1.0   2.7   4.6   4.3   1.5    .6    .2   1.7   3.8   4.5   2.1   2.0   4.2
 105.  *    .1    .0    .1    .0    .0    .1    .1   1.0   2.8   4.6   4.3   1.7    .6    .3   1.7   4.0   4.5   1.8   2.2   4.4
 110.  *    .1    .1    .1    .0    .0    .0    .0    .9   3.0   4.7   4.1   1.9    .7    .3   2.0   4.2   4.3   1.8   2.3   4.3
 115.  *    .1    .1    .1    .0    .0    .0    .0    .9   3.3   4.7   4.0   2.0    .9    .4   2.0   4.3   4.0   1.6   2.6   4.6
 120.  *    .1    .1    .1    .0    .0    .0    .0    .9   3.5   4.6   3.8   2.0   1.0    .5   2.2   4.5   4.0   1.8   3.1   4.5
 125.  *    .1    .1    .1    .0    .0    .0    .0    .9   3.7   4.5   3.4   1.9   1.2    .6   2.4   4.7   3.6   1.9   3.4   4.5
 130.  *    .1    .1    .2    .0    .0    .0    .0    .8   3.7   4.3   3.2   1.9   1.3    .7   2.7   4.5   3.5   2.0   3.5   4.3
 135.  *    .1    .1    .3    .0    .0    .0    .0    .8   3.8   4.2   2.9   1.7   1.3    .8   2.8   4.2   3.5   2.4   3.6   3.9
 140.  *    .2    .3    .4    .2    .0    .0    .0    .8   3.9   4.1   2.8   1.8   1.3    .9   2.9   4.4   3.4   2.7   3.6   3.8
 145.  *    .5    .5    .8    .4    .0    .0    .0    .8   4.1   4.1   2.6   1.9   1.4   1.1   3.2   4.2   3.4   2.9   3.6   3.6
 150.  *    .7    .9   1.3    .8    .0    .0    .0    .8   4.2   4.1   2.7   2.0   1.6   1.4   3.1   3.9   3.4   2.9   3.3   3.4
 155.  *   1.1   1.4   1.9   1.3    .1    .0    .0    .8   4.2   4.5   2.9   2.4   1.9   1.6   3.2   3.4   2.8   2.8   2.8   3.4
 160.  *   1.6   2.0   2.7   1.9    .3    .1    .0    .9   4.5   4.8   2.9   2.5   1.9   2.1   2.5   3.0   2.5   2.4   2.7   3.3
 165.  *   2.0   2.6   3.4   2.6    .6    .2    .0    .9   4.5   5.0   3.1   2.6   2.1   2.4   2.1   2.3   2.2   2.3   2.5   3.2
 170.  *   2.5   3.1   4.0   3.1    .8    .2    .2   1.0   4.5   5.3   3.1   2.7   2.3   2.5   1.6   1.8   1.8   1.9   2.4   3.1
 175.  *   2.7   3.6   4.4   3.5   1.1    .5    .2   1.1   4.8   5.6   3.3   2.5   2.4   2.6   1.2   1.5   1.5   1.8   2.3   3.1
 180.  *   3.1   3.8   4.7   3.8   1.2    .5    .2   1.2   4.9   5.5   3.1   2.3   2.5   2.5    .8   1.0   1.3   1.7   2.3   3.1
 185.  *   3.2   3.9   4.6   3.8   1.7    .7    .4   1.5   5.2   5.6   2.6   2.1   2.3   2.6    .8   1.1   1.3   1.8   2.4   3.1
 190.  *   3.4   4.1   4.7   3.5   1.7    .9    .5   1.7   5.4   5.5   2.4   1.9   2.5   2.5    .8    .8   1.2   1.7   2.4   3.1
 195.  *   3.4   4.0   4.5   3.3   1.7    .9    .6   2.0   5.6   5.2   2.3   2.0   2.5   2.5    .7    .8   1.1   1.8   2.2   3.1
 200.  *   3.5   3.9   4.4   3.1   1.7   1.1    .6   2.2   5.7   4.9   2.0   2.0   2.8   2.3    .7    .8   1.2   1.8   2.3   3.1
 205.  *   3.5   3.7   4.4   2.9   1.8   1.2    .7   2.7   5.7   4.7   2.0   2.1   3.0   2.2    .7    .8   1.2   1.8   2.4   3.2
1
                                                                                                                 PAGE  4
      JOB: Site 5 Existing PM - 5EXPM.DAT                       RUN: Site 5 Existing PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *   3.3   3.5   4.1   2.7   1.7   1.1    .8   3.0   5.7   4.5   1.8   2.3   2.9   2.1    .6    .8   1.2   2.0   2.5   3.2
 215.  *   3.4   3.6   4.0   2.5   1.6   1.0   1.0   3.4   5.6   4.2   2.1   2.6   3.0   1.9    .5    .8   1.3   1.9   2.6   3.4
 220.  *   3.3   3.4   3.9   2.2   1.5   1.1   1.0   3.8   5.4   3.9   2.0   2.9   3.0   1.9    .4    .8   1.3   2.1   2.5   3.5
 225.  *   3.3   3.4   3.8   2.1   1.5   1.1   1.0   4.0   5.2   3.8   2.2   2.8   3.0   1.7    .3    .6   1.3   2.1   2.7   3.6
 230.  *   3.2   3.4   3.7   1.7   1.3   1.0   1.0   4.0   5.2   3.5   2.3   2.8   2.7   1.5    .2    .5   1.2   2.2   2.7   3.6
 235.  *   3.2   3.4   3.7   1.7   1.2   1.2   1.1   4.2   4.9   3.4   2.5   2.9   2.6   1.4    .1    .4   1.0   2.2   2.6   3.6
 240.  *   3.2   3.4   3.7   1.8   1.4   1.2   1.4   4.0   4.4   3.2   2.6   3.0   2.4   1.3    .1    .3    .8   1.8   2.5   3.6
 245.  *   3.3   3.5   3.8   1.7   1.5   1.4   1.5   4.0   4.0   3.0   2.7   2.8   2.1   1.4    .0    .2    .6   1.7   2.4   3.4
 250.  *   3.4   3.6   4.0   2.0   1.7   1.7   1.8   3.4   3.1   2.5   2.5   2.7   1.9   1.2    .0    .1    .4   1.5   2.0   3.0
 255.  *   3.4   3.6   4.0   2.4   2.1   2.1   2.2   2.9   2.5   1.7   2.2   2.5   1.7   1.1    .0    .0    .3   1.2   1.7   2.5
 260.  *   3.3   3.7   4.0   2.7   2.2   2.2   2.7   2.1   1.9   1.5   2.0   2.4   1.5   1.2    .0    .0    .1    .7   1.2   2.0
 265.  *   3.3   3.7   4.3   3.0   2.5   2.6   3.1   1.5   1.6   1.3   1.8   2.3   1.4   1.2    .0    .0    .1    .4    .7   1.4
 270.  *   3.4   3.9   4.3   3.1   2.4   2.9   3.3   1.0   1.1   1.5   1.8   2.2   1.3   1.1    .0    .0    .0    .2    .4   1.0
 275.  *   3.5   4.0   4.6   2.9   2.4   3.0   3.7    .8   1.1   1.3   1.8   2.2   1.3   1.2    .0    .0    .0    .1    .2    .6
 280.  *   3.7   4.2   4.8   2.7   2.3   3.4   3.6    .7   1.0   1.2   1.9   2.2   1.2   1.2    .0    .0    .0    .0    .1    .3
 285.  *   4.0   4.6   4.8   2.6   2.3   3.3   3.6    .5   1.0   1.1   1.9   2.1   1.2   1.2    .0    .0    .0    .0    .0    .2
 290.  *   4.1   4.8   4.6   2.4   2.6   3.5   3.4    .5    .7   1.1   2.0   2.0   1.4   1.3    .0    .0    .0    .0    .0    .1
 295.  *   4.5   4.9   4.4   2.3   2.6   3.6   3.1    .5    .7   1.2   2.1   1.9   1.4   1.3    .0    .0    .0    .0    .0    .0
 300.  *   4.7   4.9   4.2   2.3   2.8   3.8   3.0    .4    .7   1.1   2.0   1.8   1.3   1.5    .0    .0    .0    .0    .0    .0
 305.  *   4.9   4.8   4.1   2.2   2.9   3.8   2.7    .4    .5   1.0   2.0   2.0   1.5   1.5    .0    .0    .0    .0    .0    .0
 310.  *   4.8   4.7   3.9   2.3   3.3   3.7   2.2    .3    .5    .9   2.0   1.9   1.6   1.6    .0    .0    .1    .0    .0    .0
 315.  *   5.0   4.8   3.5   2.5   3.5   3.6   1.9    .3    .5    .9   2.0   1.8   1.6   1.6    .0    .1    .1    .0    .0    .0
 320.  *   5.1   4.7   3.8   2.7   3.7   3.5   1.7    .3    .5    .8   1.8   1.8   1.5   1.6    .1    .2    .2    .0    .0    .0
 325.  *   5.2   4.4   3.4   2.8   3.7   3.4   1.6    .3    .3    .8   1.7   1.7   1.5   1.6    .1    .2    .4    .1    .0    .0
 330.  *   4.6   4.0   3.3   2.7   3.5   3.2   1.3    .1    .3    .5   1.5   1.6   1.5   1.5    .3    .4    .6    .4    .0    .0
 335.  *   4.5   3.4   3.0   2.5   3.4   3.2   1.0    .0    .3    .5   1.4   1.3   1.3   1.3    .7    .8   1.1    .8    .1    .0
 340.  *   3.7   3.0   2.8   2.5   3.2   2.9   1.1    .0    .0    .3    .9   1.1   1.0   1.0    .8   1.0   1.5   1.2    .3    .0
 345.  *   3.0   2.6   2.5   2.3   3.2   2.6    .9    .0    .0    .2    .7    .8    .7    .7   1.2   1.3   2.1   1.7    .3    .2
 350.  *   2.2   2.0   2.2   2.3   3.0   2.5    .9    .0    .0    .0    .4    .5    .5    .5   1.3   1.4   2.7   2.0    .5    .3
 355.  *   1.7   1.7   1.9   2.2   3.0   2.3    .9    .0    .0    .0    .2    .3    .3    .3   1.6   1.6   3.0   2.7    .8    .3
 360.  *   1.1   1.3   1.7   2.3   3.0   2.0    .9    .0    .0    .0    .1    .1    .1    .1   1.5   1.5   3.2   2.8   1.0    .4
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   5.2   4.9   4.8   3.8   3.7   3.8   3.7   4.2   5.7   5.6   4.4   3.0   3.0   2.6   3.2   4.7   4.6   2.9   3.6   4.6
 DEGR. *  325   295   280   180   320   300   275   235   210   185    95   240   205   185   155   125    95    10   135   115

1
                                                                                                                 PAGE  5
      JOB: Site 5 Existing PM - 5EXPM.DAT                       RUN: Site 5 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .6   2.5   3.0   4.0   3.1   2.7   2.6   3.3
   5.  *    .6   2.6   3.1   4.1   2.7   2.2   2.9   3.6
  10.  *    .7   2.7   3.2   4.2   2.4   2.3   3.1   3.7
```

```
  15.  *    .9   2.8   3.3   4.1   2.4   2.5   3.4   3.8
  20.  *    .9   2.9   3.3   4.2   2.0   2.5   3.4   3.8
  25.  *   1.2   2.9   3.4   4.1   2.1   2.8   3.7   3.6
  30.  *   1.3   2.8   3.4   4.4   2.2   2.9   3.6   3.4
  35.  *   1.3   3.1   3.4   4.3   2.2   3.1   3.6   3.2
  40.  *   1.4   3.2   3.7   4.2   2.5   3.2   3.4   3.1
  45.  *   1.7   3.2   3.9   4.4   2.9   3.2   3.5   3.0
  50.  *   2.0   3.4   4.0   4.4   3.2   3.3   3.4   2.8
  55.  *   2.4   3.4   3.7   4.6   3.3   3.2   3.2   2.7
  60.  *   3.3   3.1   3.8   4.4   3.5   3.1   3.1   2.6
  65.  *   4.2   3.0   3.5   4.1   3.2   3.1   3.0   2.5
  70.  *   5.2   2.6   3.2   3.7   3.0   3.0   3.0   2.5
  75.  *   6.3   2.1   2.5   3.2   2.7   2.9   2.9   2.5
  80.  *   7.0   1.9   2.0   2.4   2.3   2.8   2.8   2.4
  85.  *   7.3   1.3   1.9   2.0   2.0   2.8   2.7   2.4
  90.  *   7.4   1.2   1.6   1.8   1.9   2.8   2.7   2.4
  95.  *   7.3    .9   1.1   1.3   1.9   2.8   2.7   2.4
 100.  *   7.4    .8   1.1   1.3   2.0   2.8   2.6   2.3
 105.  *   6.9    .8   1.0   1.3   2.1   2.9   2.7   2.3
 110.  *   6.5    .8   1.0   1.3   2.3   2.9   2.7   2.2
 115.  *   6.3    .8   1.0   1.4   2.4   3.1   2.7   2.3
 120.  *   5.9    .6    .9   1.4   2.7   3.1   2.7   2.0
 125.  *   5.3    .5    .8   1.4   2.7   3.1   2.7   2.1
 130.  *   4.9    .4    .7   1.4   2.9   3.1   2.6   2.0
 135.  *   4.6    .3    .6   1.2   2.9   3.0   2.6   2.0
 140.  *   4.4    .3    .6   1.1   2.8   2.9   2.4   2.1
 145.  *   4.3    .3    .3    .9   2.6   2.7   2.3   2.1
 150.  *   4.1    .2    .3    .7   2.3   2.5   2.2   2.0
 155.  *   3.9    .1    .2    .4   1.8   2.2   2.0   1.8
 160.  *   3.8    .0    .1    .3   1.5   1.8   1.7   1.5
 165.  *   3.8    .0    .0    .2    .9   1.3   1.3   1.2
 170.  *   3.8    .0    .0    .1    .6    .9    .9    .8
 175.  *   3.8    .0    .0    .0    .3    .6    .6    .6
 180.  *   3.8    .0    .0    .0    .2    .3    .4    .3
 185.  *   3.8    .0    .0    .0    .1    .2    .2    .2
 190.  *   3.8    .0    .0    .0    .0    .2    .2    .1
 195.  *   3.9    .0    .0    .0    .0    .1    .1    .1
 200.  *   4.0    .1    .0    .0    .0    .1    .1    .1
 205.  *   4.1    .1    .0    .0    .0    .1    .1    .1
1
                                                                                                                                PAGE  6
      JOB: Site 5 Existing PM - 5EXPM.DAT                        RUN: Site 5 Existing PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   4.2    .1    .0    .0    .0    .1    .1    .1
 215.  *   4.2    .1    .1    .0    .0    .1    .1    .1
 220.  *   4.5    .1    .1    .0    .0    .1    .1    .1
 225.  *   5.0    .1    .1    .0    .0    .0    .0    .0
 230.  *   5.4    .2    .1    .0    .0    .0    .0    .0
 235.  *   5.6    .2    .2    .2    .1    .0    .0    .0
 240.  *   5.8    .3    .4    .3    .2    .0    .0    .0
 245.  *   5.9    .3    .4    .6    .6    .0    .0    .0
 250.  *   5.9    .5    .7   1.0   1.0    .0    .0    .0
 255.  *   5.9    .5   1.0   1.6   1.5    .1    .0    .0
 260.  *   5.6    .7   1.4   2.2   2.3    .2    .0    .0
 265.  *   5.2   1.0   1.8   2.8   2.9    .5    .1    .0
 270.  *   4.6   1.2   2.1   3.3   3.4    .7    .2    .0
 275.  *   3.8   1.5   2.5   3.7   3.8    .9    .3    .1
 280.  *   3.0   1.8   2.8   4.0   4.0   1.1    .6    .2
 285.  *   2.3   2.1   2.9   4.0   4.0   1.4    .8    .4
 290.  *   1.8   2.2   3.0   4.0   3.9   1.7    .9    .5
 295.  *   1.4   2.3   3.0   3.8   3.6   1.6   1.0    .7
 300.  *   1.1   2.4   3.0   3.7   3.5   1.6   1.0    .8
 305.  *    .9   2.4   2.8   3.6   3.3   1.6   1.1    .8
 310.  *    .8   2.3   2.8   3.4   3.1   1.4   1.1    .9
 315.  *    .7   2.2   2.7   3.3   2.8   1.3   1.1    .8
 320.  *    .6   2.2   2.6   3.3   2.6   1.4   1.0    .8
 325.  *    .5   2.3   2.6   3.2   2.6   1.5   1.3   1.1
 330.  *    .5   2.3   2.7   3.1   2.8   2.0   1.7   1.4
 335.  *    .4   2.3   2.7   3.1   2.9   2.1   1.9   1.7
 340.  *    .3   2.3   2.7   3.3   3.1   2.3   2.1   2.3
 345.  *    .3   2.3   2.8   3.5   3.0   2.7   2.4   2.6
 350.  *    .5   2.3   2.9   3.7   3.2   2.7   2.7   2.9
 355.  *    .6   2.5   2.9   3.8   3.2   2.5   3.0   3.2
 360.  *    .6   2.5   3.0   4.0   3.1   2.7   2.6   3.3
 ------*------------------------------------------------
 MAX   *   7.4   3.4   4.0   4.6   4.0   3.3   3.7   3.8
 DEGR. *  100    50    50    55   280    50    25    15

 THE HIGHEST CONCENTRATION IS    7.40 PPM AT  100 DEGREES FROM REC21.
 THE 2ND HIGHEST CONCENTRATION IS    5.70 PPM AT  210 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    5.60 PPM AT  185 DEGREES FROM REC10.
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Site 5 NoBld AM 2014 - 5NBAM14.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 NoBld AM 2014                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    154411.4  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    122211.4  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       120        89       2.0 1222  102.2 1536 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     32211.4  0.  32   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  12   1
       120       105       2.0  322  102.2 1752 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.     75111.4  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    107511.4  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.     94011.4  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       120        91       2.0  940  102.2 1672 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     13511.4  0.  32   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  12   1
```

```
       120       107       2.0  135  102.2 1752 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    283811.4  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.     31111.4  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.     31111.4  0.  56   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  36   3
       120        97       2.0  311  102.2 1722 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.     95811.4  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    270811.4  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    270811.4  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       120        80       2.0 2708  102.2 1703 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.    109111.4  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.    109111.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 5 NoBld AM 2014 - 5NBAM14.DAT                   RUN: Site 5 NoBld AM 2014
      DATE: 05/06/2009   TIME: 03:44:54.53


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.   340. AG   1544.  11.4    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.   342. AG   1222.  11.4    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0     403.6    1835.5 *     915.   161. AG    610. 100.0    .0 36.0 1.18  46.5
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.   341. AG    322.  11.4    .0 32.0
       5. NB        Rt16 left *     88.0    2690.0     712.2     891.8 *    1903.   161. AG    240. 100.0    .0 12.0 2.01  96.7
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.   341. AG    751.  11.4    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.   160. AG   1210.  11.4    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.   161. AG    940.  11.4    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0     -58.9    3037.8 *     192.   341. AG    624. 100.0    .0 36.0  .90   9.7
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.   162. AG    135.  11.4    .0 32.0
      11. SB        Rt16 left *     25.0    2864.0     -30.6    3030.9 *     176.   342. AG    244. 100.0    .0 12.0 1.03   8.9
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.   161. AG   2838.  11.4    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.    66. AG    311.  11.4    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.    82. AG    311.  11.4    .0 56.0
      15. EB        Rt27 aprch*     -5.0    2754.0     -59.2    2747.0 *      55.   263. AG    665. 100.0    .0 36.0  .38   2.8
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.    71. AG    958.  11.4    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.   250. AG   2708.  11.4    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.   251. AG   2708.  11.4    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    2094.5    3501.3 *    2086.    71. AG    731. 100.0    .0 48.0 1.33 105.9
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.   257. AG   1091.  11.4    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.   247. AG   1091.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 5 NoBld AM 2014 - 5NBAM14.DAT                   RUN: Site 5 NoBld AM 2014
      DATE: 05/06/2009   TIME: 03:44:54.53

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     120       89       2.0      1222       1536     102.20      1        3
       5. NB        Rt16 left *     120      105       2.0       322       1752     102.20      1        3
       9. SB        Rt16 thru *     120       91       2.0       940       1672     102.20      1        3
      11. SB        Rt16 left *     120      107       2.0       135       1752     102.20      1        3
      15. EB        Rt27 aprch*     120       97       2.0       311       1722     102.20      1        3
      19. WB        Rt27 aprch*     120       80       2.0      2708       1703     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       207.0     2515.0        5.0   *
      2. SE 164 S             *       183.0     2590.0        5.0   *
      3. SE 82 S              *       154.0     2668.0        5.0   *
      4. SE CNR               *       140.0     2741.0        5.0   *
      5. SE 82 E              *       205.0     2774.0        5.0   *
      6. SE 164 E             *       283.0     2802.0        5.0   *
      7. SE MID E             *       356.0     2828.0        5.0   *
      8. NE MID E             *       323.0     2935.0        5.0   *
      9. NE 164 E             *       235.0     2907.0        5.0   *
     10. NE 82 E              *       157.0     2881.0        5.0   *
     11. NE CNR               *        95.0     2864.0        5.0   *
     12. NE 82 N              *        65.0     2927.0        5.0   *
     13. NE 164 N             *        40.0     3006.0        5.0   *
     14. NE MID N             *         8.0     3095.0        5.0   *
     15. NW MID N             *       -95.0     3048.0        5.0   *
     16. NW 164 N             *       -68.0     2971.0        5.0   *
     17. NW 82 N              *       -41.0     2894.0        5.0   *
     18. NW CNR               *       -31.0     2829.0        5.0   *
     19. NW 82 W              *       -91.0     2798.0        5.0   *
     20. NW 164 W             *      -165.0     2767.0        5.0   *
     21. NW MID W             *      -237.0     2736.0        5.0   *
     22. SW MID W             *      -218.0     2665.0        5.0   *
     23. SW 164 W             *      -153.0     2690.0        5.0   *
     24. SW 82 W              *       -77.0     2713.0        5.0   *
     25. SW CNR               *         6.0     2723.0        5.0   *
     26. SW 82 S              *        40.0     2651.0        5.0   *
     27. SW 164 S             *        68.0     2573.0        5.0   *
     28. SW MID S             *        91.0     2503.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 5 NoBld AM 2014 - 5NBAM14.DAT                   RUN: Site 5 NoBld AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------
```

```
  0.  *   1.0   1.0   1.1   1.6   2.1   2.1   2.2    .0    .0    .0    .0    .1    .0    .0    .7   1.7   2.8   2.3    .6    .2
  5.  *    .9   1.1   1.2   1.8   2.1   2.1   2.2    .1    .0    .0    .0    .0    .0    .0    .6   2.0   2.9   2.4    .8    .3
 10.  *   1.0   1.0   1.2   1.8   2.1   2.1   2.2    .1    .1    .1    .0    .0    .0    .0    .6   2.0   3.0   2.4   1.0    .3
 15.  *    .9   1.1   1.3   1.9   2.1   2.2   2.2    .1    .1    .1    .0    .0    .0    .0    .6   2.3   2.9   2.4   1.0    .5
 20.  *    .8   1.0   1.5   1.9   2.2   2.3   2.4    .1    .1    .1    .0    .0    .0    .0    .5   2.4   2.9   2.2   1.1    .6
 25.  *    .9    .9   1.5   2.1   2.3   2.4   2.5    .1    .1    .1    .1    .0    .0    .0    .5   2.4   2.9   2.1   1.3    .7
 30.  *    .8   1.0   1.3   2.2   2.4   2.5   2.5    .1    .1    .1    .1    .0    .0    .0    .6   2.5   2.8   2.0   1.3    .7
 35.  *    .8   1.0   1.5   2.2   2.4   2.5   2.5    .2    .1    .1    .1    .0    .0    .0    .5   2.4   2.7   1.9   1.2    .8
 40.  *    .9   1.0   1.5   2.5   2.6   2.6   2.6    .2    .2    .2    .1    .0    .0    .0    .5   2.4   2.6   1.7   1.2    .8
 45.  *    .8   1.1   1.4   2.4   2.6   2.7   2.8    .4    .4    .3    .2    .0    .0    .0    .5   2.5   2.5   1.6   1.2    .9
 50.  *    .7   1.1   1.5   2.4   2.8   2.8   2.7    .7    .6    .5    .4    .0    .0    .0    .4   2.4   2.5   1.7   1.2    .9
 55.  *    .7   1.0   1.4   2.5   2.7   2.7   2.9   1.2   1.0   1.0    .8    .1    .0    .0    .5   2.4   2.6   1.7   1.2   1.1
 60.  *    .5    .8   1.3   2.3   2.7   2.7   2.7   1.9   1.7   1.7   1.4    .2    .1    .0    .5   2.5   2.7   1.9   1.6   1.6
 65.  *    .3    .5    .9   2.0   2.4   2.4   2.4   2.8   2.6   2.6   2.3    .5    .2    .1    .5   2.7   3.1   2.4   2.1   2.0
 70.  *    .2    .3    .7   1.7   1.9   1.9   1.8   3.7   3.4   3.5   3.1    .9    .4    .2    .6   3.0   3.5   2.8   2.4   2.4
 75.  *    .1    .2    .4   1.1   1.4   1.4   1.3   4.4   4.2   4.2   3.7   1.4    .6    .3    .9   3.1   3.9   2.9   2.7   2.4
 80.  *    .0    .1    .2    .6    .8    .8    .8   4.9   4.7   4.7   4.2   1.7    .9    .5   1.2   3.4   4.2   3.0   2.7   2.5
 85.  *    .0    .0    .1    .3    .3    .4    .5   5.0   4.8   4.7   4.4   1.9   1.2    .6   1.4   3.6   4.3   2.8   2.6   2.4
 90.  *    .0    .0    .0    .1    .2    .2    .2   4.8   4.7   4.7   4.2   2.0   1.2    .7   1.8   3.7   4.2   2.7   2.3   2.2
 95.  *    .0    .0    .0    .0    .1    .1    .1   4.6   4.4   4.4   4.0   1.8   1.3    .9   2.0   3.7   4.1   2.2   2.0   2.1
100.  *    .0    .0    .0    .0    .0    .0    .0   4.3   4.2   4.1   3.6   1.9   1.2   1.0   2.1   3.8   4.0   1.9   1.8   1.9
105.  *    .0    .0    .0    .0    .0    .0    .0   4.1   3.9   4.0   3.4   1.8   1.3    .9   2.5   3.7   3.7   1.7   1.9   1.9
110.  *    .0    .0    .0    .0    .0    .0    .0   3.9   3.8   3.7   3.2   1.7   1.3    .9   2.7   3.8   3.6   1.6   2.1   1.7
115.  *    .0    .0    .1    .0    .0    .0    .0   3.7   3.7   3.6   3.1   1.7   1.1   1.0   2.7   3.8   3.3   1.4   2.2   1.6
120.  *    .0    .0    .1    .0    .0    .0    .0   3.5   3.5   3.4   2.9   1.6   1.1    .8   3.0   3.7   3.3   1.6   2.5   1.6
125.  *    .0    .0    .1    .0    .0    .0    .0   3.4   3.4   3.4   2.6   1.6   1.1    .8   3.0   3.8   3.0   1.9   2.5   1.7
130.  *    .0    .1    .2    .0    .0    .0    .0   3.3   3.2   3.2   2.5   1.5   1.1    .8   3.2   3.9   3.0   2.2   2.8   1.9
135.  *    .2    .2    .2    .1    .0    .0    .0   3.2   3.1   3.1   2.5   1.5   1.0    .8   3.5   3.8   3.2   2.3   2.9   1.8
140.  *    .4    .3    .4    .2    .0    .0    .0   3.1   3.1   3.1   2.2   1.4   1.1    .9   3.8   3.7   3.1   2.8   2.9   1.5
145.  *    .8    .7    .9    .4    .0    .0    .0   3.2   3.1   3.2   2.4   1.7   1.2   1.0   3.6   3.9   3.3   3.2   2.6   1.5
150.  *   1.3   1.3   1.5   1.0    .1    .0    .0   3.2   3.1   3.2   2.7   2.0   1.5   1.3   3.7   3.7   3.2   3.4   2.3   1.3
155.  *   2.1   2.0   2.3   1.6    .5    .1    .0   3.2   3.2   3.7   3.0   2.4   1.8   1.6   3.5   3.5   3.1   3.0   2.0   1.1
160.  *   2.8   2.8   3.1   2.3    .6    .2    .0   3.4   3.6   3.9   3.4   2.5   2.1   2.0   3.0   2.8   2.6   2.9   1.7    .8
165.  *   3.5   3.5   3.7   3.0   1.0    .5    .2   3.5   3.8   4.3   3.4   2.8   2.1   2.1   2.3   2.4   2.2   2.4   1.1    .7
170.  *   4.0   3.9   4.3   3.4   1.3    .6    .4   3.7   3.9   4.6   3.6   2.7   2.2   2.3   1.6   1.5   1.5   1.9    .8    .5
175.  *   4.3   4.2   4.7   3.6   1.5    .9    .5   3.8   4.1   4.7   3.5   2.6   2.3   2.0    .9   1.0   1.1   1.6    .6    .5
180.  *   4.5   4.3   4.6   3.7   1.7   1.0    .6   4.0   4.4   4.6   3.1   2.1   1.9   2.1    .5    .6    .7   1.3    .5    .5
185.  *   4.2   4.2   4.5   3.5   1.8   1.2    .8   4.0   4.4   4.6   2.6   1.7   1.9   1.9    .4    .5    .6   1.3    .4    .5
190.  *   4.1   4.0   4.2   3.2   1.8   1.3    .8   4.0   4.5   4.4   2.4   1.6   1.7   1.8    .1    .3    .4   1.1    .5    .5
195.  *   3.8   3.9   4.0   3.0   1.7   1.3    .9   4.3   4.3   4.0   2.3   1.6   1.8   1.9    .1    .2    .4   1.0    .4    .5
200.  *   3.7   3.7   3.9   2.8   1.6   1.3   1.0   4.3   4.4   4.0   2.0   1.3   1.8   1.8    .1    .1    .3    .9    .4    .5
205.  *   3.5   3.5   3.7   2.6   1.6   1.1    .9   4.5   4.3   3.8   1.9   1.3   1.9   1.7    .1    .1    .3    .8    .6    .5
1
                                                                                                                   PAGE  4
      JOB: Site 5 NoBld AM 2014 - 5NBAM14.DAT                 RUN: Site 5 NoBld AM 2014

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *   3.5   3.4   3.5   2.2   1.5   1.0    .8   4.6   4.4   3.5   1.8   1.4   2.0   1.7    .1    .1    .2    .8    .5    .6
215.  *   3.4   3.3   3.4   2.0   1.5   1.0    .8   4.6   4.3   3.4   1.6   1.5   1.9   1.5    .0    .1    .1    .5    .5    .6
220.  *   3.2   3.2   3.4   1.8   1.4   1.0    .8   4.6   4.2   3.0   1.6   1.7   1.7   1.3    .0    .1    .1    .4    .6    .6
225.  *   3.2   3.1   3.2   1.6   1.1    .9    .8   4.7   4.1   3.0   1.7   1.6   1.7   1.1    .0    .1    .1    .5    .6    .6
230.  *   3.1   3.1   3.2   1.5   1.0   1.0    .8   4.6   3.9   2.9   1.6   1.8   1.7    .8    .0    .0    .1    .4    .6    .6
235.  *   3.1   3.1   3.2   1.4   1.0    .8    .8   4.5   3.7   2.4   1.6   1.7   1.6    .7    .0    .0    .1    .3    .6    .5
240.  *   3.1   3.1   3.2   1.3    .9    .7    .8   3.9   3.2   2.2   1.3   1.7   1.6    .6    .0    .0    .1    .3    .5    .5
245.  *   3.1   3.0   3.2   1.2    .9    .8    .9   3.6   2.9   1.9   1.4   1.8   1.6    .5    .0    .0    .0    .3    .4    .3
250.  *   3.3   3.1   3.3   1.1    .9    .9   1.1   3.0   2.5   1.6   1.2   1.7   1.6    .5    .0    .0    .0    .2    .3    .2
255.  *   3.2   3.0   3.3   1.2   1.0   1.0   1.4   2.5   2.1   1.4   1.2   1.7   1.6    .4    .0    .0    .0    .1    .2    .2
260.  *   3.1   3.1   3.2   1.4   1.3   1.4   1.4   1.8   1.4   1.2   1.1   1.7   1.6    .4    .0    .0    .0    .1    .1    .1
265.  *   3.1   3.1   3.1   1.4   1.3   1.6   1.7   1.5   1.1   1.0   1.0   1.7   1.6    .5    .0    .0    .0    .0    .1    .1
270.  *   3.1   3.1   3.3   1.7   1.2   1.8   2.1   1.2    .9    .9   1.1   1.7   1.5    .4    .0    .0    .0    .0    .0    .0
275.  *   3.1   3.0   3.2   1.7   1.4   2.0   2.3   1.0   1.0    .9   1.3   1.7   1.3    .4    .0    .0    .0    .0    .0    .0
280.  *   3.2   3.0   3.2   1.8   1.6   2.3   2.6    .8    .8   1.0   1.3   1.7   1.3    .5    .0    .0    .0    .0    .0    .0
285.  *   3.3   3.3   3.3   1.4   1.8   2.6   2.7    .6    .7   1.1   1.4   1.7   1.3    .5    .0    .0    .0    .0    .0    .0
290.  *   3.4   3.5   3.4   1.6   2.1   2.7   2.8    .3    .7   1.0   1.5   1.7   1.2    .5    .0    .0    .0    .0    .0    .0
295.  *   3.5   3.6   3.3   1.5   2.0   2.8   2.7    .4    .6   1.0   1.7   1.7    .9    .6    .0    .0    .0    .0    .0    .0
300.  *   3.6   3.6   3.2   1.6   2.2   2.8   2.6    .3    .6   1.0   1.7   1.6    .8    .6    .0    .0    .0    .0    .0    .0
305.  *   3.8   3.7   3.1   1.8   2.3   2.6   2.5    .3    .4    .9   1.6   1.6    .8    .6    .0    .0    .0    .0    .0    .0
310.  *   4.0   3.7   3.1   1.8   2.5   2.6   2.5    .3    .4    .8   1.6   1.5    .7    .6    .0    .0    .0    .0    .0    .0
315.  *   4.0   3.6   3.2   2.0   2.6   2.4   2.4    .3    .2    .6   1.6   1.3    .7    .6    .0    .0    .2    .0    .0    .0
320.  *   3.9   3.7   2.8   2.0   2.7   2.4   2.4    .1    .2    .3   1.2   1.2    .5    .6    .1    .1    .2    .0    .0    .0
325.  *   3.9   3.5   2.8   2.1   2.5   2.3   2.3    .0    .2    .3   1.1   1.0    .6    .7    .1    .2    .4    .1    .0    .0
330.  *   4.0   3.2   2.4   2.1   2.4   2.3   2.2    .0    .2    .2    .9    .9    .5    .6    .2    .3    .7    .4    .0    .0
335.  *   3.3   2.8   2.4   2.0   2.3   2.1   2.2    .0    .0    .2    .7    .7    .5    .5    .3    .6    .9    .6    .0    .0
340.  *   2.9   2.4   1.9   2.0   2.3   2.1   2.1    .0    .0    .2    .5    .4    .4    .4    .5    .9   1.4   1.0    .1    .0
345.  *   2.1   1.8   1.6   1.9   2.1   2.1   2.1    .0    .0    .0    .3    .3    .3    .3    .6   1.1   1.9   1.4    .2    .1
350.  *   1.7   1.5   1.4   1.5   2.1   2.1   2.2    .0    .0    .0    .1    .3    .2    .2    .7   1.3   2.3   1.8    .3    .1
355.  *   1.3   1.1   1.3   1.7   2.1   2.2   2.2    .0    .0    .0    .1    .1    .1    .1    .7   1.6   2.6   2.0    .5    .1
360.  *   1.0   1.0   1.1   1.6   2.1   2.1   2.2    .0    .0    .0    .0    .1    .0    .0    .7   1.7   2.8   2.3    .6    .2
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   4.5   4.3   4.7   3.7   2.8   2.8   2.9   5.0   4.8   4.7   4.4   2.8   2.3   2.3   3.8   3.9   4.3   3.4   2.9   2.5
DEGR. *  180   180   175   180    50    50    55    85    85   175    85   165   175   170   140   145    85   150   135    80

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                                                                                                                   PAGE  5
      JOB: Site 5 NoBld AM 2014 - 5NBAM14.DAT                 RUN: Site 5 NoBld AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
------*------------------------------------------------
  0.  *    .1    .5    .6   1.3   2.3   2.1   2.7   2.9
  5.  *    .1    .5    .6   1.4   2.2   2.2   2.8   3.1
 10.  *    .1    .6    .8   1.6   2.0   2.0   2.9   3.2
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   15.  *    .3    .7   1.0   1.6   1.7   2.2   3.0   3.4
   20.  *    .3    .8    .9   1.8   1.7   2.3   3.2   3.4
   25.  *    .4    .9   1.1   1.8   1.7   2.4   3.4   3.6
   30.  *    .4   1.0   1.2   2.1   1.7   2.7   3.4   3.6
   35.  *    .6    .9   1.1   2.2   2.1   2.9   3.7   3.6
   40.  *    .6   1.1   1.3   2.5   2.5   3.0   3.5   3.4
   45.  *    .5   1.1   1.5   2.5   2.7   3.3   3.6   3.4
   50.  *    .7   1.4   1.9   2.9   3.0   3.3   3.5   3.3
   55.  *   1.0   1.6   2.2   3.2   3.4   3.6   3.5   3.3
   60.  *   1.4   1.8   2.3   3.5   3.7   3.7   3.4   3.2
   65.  *   2.0   1.9   2.3   3.6   3.7   3.2   3.2   3.0
   70.  *   2.0   2.0   2.4   3.2   3.5   3.3   3.1   2.8
   75.  *   2.2   1.8   2.2   2.9   3.0   3.0   2.8   2.6
   80.  *   1.9   1.4   1.7   2.4   2.4   2.6   2.6   2.5
   85.  *   2.2   1.2   1.3   1.7   1.9   2.6   2.5   2.5
   90.  *   1.8    .8   1.3   1.3   1.6   2.5   2.5   2.5
   95.  *   1.7    .8   1.0   1.1   1.7   2.5   2.5   2.5
  100.  *   1.4    .7    .9   1.0   1.7   2.5   2.5   2.5
  105.  *   1.4    .7    .9   1.0   1.8   2.5   2.6   2.6
  110.  *   1.5    .9    .9   1.1   2.0   2.6   2.6   2.7
  115.  *   1.4    .9    .9   1.4   2.2   2.7   2.8   2.8
  120.  *   1.4    .9   1.1   1.4   2.4   2.8   3.0   2.9
  125.  *   1.4    .9   1.2   1.4   2.6   3.0   3.1   3.0
  130.  *   1.4    .9   1.1   1.5   2.8   3.3   3.3   3.2
  135.  *   1.4    .7   1.1   1.5   2.9   3.3   3.5   3.3
  140.  *   1.2    .7   1.0   1.5   3.1   3.4   3.3   3.3
  145.  *   1.1    .6    .9   1.3   3.2   3.5   3.4   3.3
  150.  *    .9    .3    .6   1.1   2.8   3.3   3.4   3.2
  155.  *    .8    .3    .4    .9   2.5   3.1   3.0   2.9
  160.  *    .6    .0    .3    .6   2.0   2.5   2.5   2.4
  165.  *    .5    .0    .0    .3   1.4   1.8   1.9   1.8
  170.  *    .5    .0    .0    .1    .9   1.2   1.3   1.2
  175.  *    .5    .0    .0    .0    .5    .8    .8    .7
  180.  *    .5    .0    .0    .0    .2    .4    .4    .3
  185.  *    .5    .0    .0    .0    .1    .2    .3    .2
  190.  *    .5    .0    .0    .0    .1    .2    .2    .2
  195.  *    .5    .0    .0    .0    .0    .1    .1    .1
  200.  *    .5    .0    .0    .0    .0    .1    .1    .1
  205.  *    .5    .0    .0    .0    .0    .1    .1    .1
1
                                                                                                                PAGE  6
      JOB: Site 5 NoBld AM 2014 - 5NBAM14.DAT                  RUN: Site 5 NoBld AM 2014

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
  ------*------------------------------------------------
  210.  *    .6    .0    .0    .0    .0    .1    .1    .1
  215.  *    .6    .0    .0    .0    .0    .1    .1    .1
  220.  *    .6    .0    .0    .0    .0    .1    .1    .1
  225.  *    .6    .0    .0    .0    .0    .0    .1    .0
  230.  *    .5    .1    .0    .0    .0    .0    .0    .0
  235.  *    .4    .1    .1    .0    .0    .0    .0    .0
  240.  *    .3    .1    .1    .0    .0    .0    .0    .0
  245.  *    .3    .1    .1    .2    .0    .0    .0    .0
  250.  *    .2    .1    .2    .2    .1    .0    .0    .0
  255.  *    .1    .2    .2    .2    .2    .0    .0    .0
  260.  *    .1    .2    .2    .3    .4    .0    .0    .0
  265.  *    .1    .2    .3    .3    .6    .0    .0    .0
  270.  *    .0    .3    .3    .3    .8    .1    .0    .0
  275.  *    .0    .3    .3    .3   1.0    .1    .0    .0
  280.  *    .0    .3    .4    .3   1.2    .2    .1    .1
  285.  *    .0    .3    .4    .3   1.4    .2    .2    .1
  290.  *    .0    .3    .4    .4   1.5    .3    .2    .1
  295.  *    .0    .4    .4    .4   1.7    .3    .2    .1
  300.  *    .0    .3    .4    .4   1.8    .4    .2    .2
  305.  *    .0    .3    .3    .4   1.8    .5    .3    .2
  310.  *    .0    .3    .3    .3   1.9    .6    .3    .2
  315.  *    .0    .3    .3    .3   1.8    .8    .4    .4
  320.  *    .0    .4    .3    .3   1.9    .8    .5    .4
  325.  *    .0    .4    .3    .3   1.8    .9    .8    .6
  330.  *    .0    .3    .3    .3   2.0   1.2   1.0    .8
  335.  *    .0    .3    .3    .4   2.1   1.7   1.5   1.3
  340.  *    .0    .3    .3    .4   2.4   2.0   2.0   1.6
  345.  *    .0    .4    .3    .5   2.4   2.0   2.2   2.3
  350.  *    .0    .4    .4    .7   2.5   2.2   2.4   2.6
  355.  *    .1    .5    .4   1.0   2.4   2.2   2.5   2.8
  360.  *    .1    .5    .6   1.3   2.3   2.1   2.7   2.9
  ------*------------------------------------------------
  MAX   *   2.2   2.0   2.4   3.6   3.7   3.7   3.7   3.6
  DEGR. *   75    70    70    65    60    60    35    25

  THE HIGHEST CONCENTRATION IS    5.00 PPM AT   85 DEGREES FROM REC8 .
  THE 2ND HIGHEST CONCENTRATION IS    4.80 PPM AT   85 DEGREES FROM REC9 .
  THE 3RD HIGHEST CONCENTRATION IS    4.70 PPM AT  175 DEGREES FROM REC10.
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Site 5 NoBld AM 2030 - 5NBAM30.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 NoBld AM 2030                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    2005 9.2  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    1595 9.2  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       131       102       2.0 1595   84.1 1534 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     410 9.2  0.  32   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  12   1
       131       116       2.0  410   84.1 1752 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.     895 9.2  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    1455 9.2  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    1280 9.2  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       131        94       2.0 1280   84.1 1673 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     175 9.2  0.  32   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  12   1
```

```
       131       108       2.0  175   84.1 1752 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    3295 9.2  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.     355 9.2  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.     355 9.2  0.  56   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  36   3
       131       109       2.0  355   84.1 1722 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    1240 9.2  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    2775 9.2  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    2775 9.2  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       131        90       2.0 2775   84.1 1703 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.    1160 9.2  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.    1160 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 5 NoBld AM 2030 - 5NBAM30.DAT                   RUN: Site 5 NoBld AM 2030
      DATE: 05/06/2009   TIME: 04:27:19.67


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W   V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *    622.   340. AG  2005.   9.2    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *    366.   342. AG  1595.   9.2    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    1002.2      48.4 *   2800.   161. AG   527. 100.0    .0 36.0 1.82 142.2
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *    364.   341. AG   410.   9.2    .0 32.0
       5. NB        Rt16 left *     88.0    2690.0    1076.3    -156.8 *   3013.   161. AG   200. 100.0    .0 12.0 2.79 153.1
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *   1000.   341. AG   895.   9.2    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *    677.   160. AG  1455.   9.2    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *    290.   161. AG  1280.   9.2    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0    -115.3    3205.9 *    369.   341. AG   486. 100.0    .0 36.0 1.01  18.7
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *    279.   162. AG   175.   9.2    .0 32.0
      11. SB        Rt16 left *     25.0    2864.0      -8.5    2964.6 *    106.   342. AG   186. 100.0    .0 12.0  .69   5.4
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *   1029.   161. AG  3295.   9.2    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *    230.    66. AG   355.   9.2    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *    169.    82. AG   355.   9.2    .0 56.0
      15. EB        Rt27 aprch*     -5.0    2754.0     -74.8    2745.0 *     70.   263. AG   563. 100.0    .0 36.0  .50   3.6
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *    983.    71. AG  1240.   9.2    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *    560.   250. AG  2775.   9.2    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *    425.   251. AG  2775.   9.2    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    2563.7    3660.8 *   2581.    71. AG   620. 100.0    .0 48.0 1.44 131.1
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *    144.   257. AG  1160.   9.2    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *    268.   247. AG  1160.   9.2    .0 32.0
1
                                                                                                                     PAGE  2
      JOB: Site 5 NoBld AM 2030 - 5NBAM30.DAT                   RUN: Site 5 NoBld AM 2030
      DATE: 05/06/2009   TIME: 04:27:19.67

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*------------------------------------------------------------------------------
       3. NB        Rt16 thru *     131      102       2.0       1595       1534      84.10      1        3
       5. NB        Rt16 left *     131      116       2.0        410       1752      84.10      1        3
       9. SB        Rt16 thru *     131       94       2.0       1280       1673      84.10      1        3
      11. SB        Rt16 left *     131      108       2.0        175       1752      84.10      1        3
      15. EB        Rt27 aprch*     131      109       2.0        355       1722      84.10      1        3
      19. WB        Rt27 aprch*     131       90       2.0       2775       1703      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)         *
         RECEPTOR             *      X           Y          Z     *
     -------------------------*-----------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0   *
      2. SE 164 S             *       183.0     2590.0       5.0   *
      3. SE 82 S              *       154.0     2668.0       5.0   *
      4. SE CNR               *       140.0     2741.0       5.0   *
      5. SE 82 E              *       205.0     2774.0       5.0   *
      6. SE 164 E             *       283.0     2802.0       5.0   *
      7. SE MID E             *       356.0     2828.0       5.0   *
      8. NE MID E             *       323.0     2935.0       5.0   *
      9. NE 164 E             *       235.0     2907.0       5.0   *
     10. NE 82 E              *       157.0     2881.0       5.0   *
     11. NE CNR               *        95.0     2864.0       5.0   *
     12. NE 82 N              *        65.0     2927.0       5.0   *
     13. NE 164 N             *        40.0     3006.0       5.0   *
     14. NE MID N             *         8.0     3095.0       5.0   *
     15. NW MID N             *       -95.0     3048.0       5.0   *
     16. NW 164 N             *       -68.0     2971.0       5.0   *
     17. NW 82 N              *       -41.0     2894.0       5.0   *
     18. NW CNR               *       -31.0     2829.0       5.0   *
     19. NW 82 W              *       -91.0     2798.0       5.0   *
     20. NW 164 W             *      -165.0     2767.0       5.0   *
     21. NW MID W             *      -237.0     2736.0       5.0   *
     22. SW MID W             *      -218.0     2665.0       5.0   *
     23. SW 164 W             *      -153.0     2690.0       5.0   *
     24. SW 82 W              *       -77.0     2713.0       5.0   *
     25. SW CNR               *         6.0     2723.0       5.0   *
     26. SW 82 S              *        40.0     2651.0       5.0   *
     27. SW 164 S             *        68.0     2573.0       5.0   *
     28. SW MID S             *        91.0     2503.0       5.0   *
1
                                                                                                                     PAGE  3
      JOB: Site 5 NoBld AM 2030 - 5NBAM30.DAT                   RUN: Site 5 NoBld AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
```

```
    0.  *   1.0    .9   1.0   1.4   1.8   1.9   1.9    .0    .0    .0    .0    .1    .0    .0   2.2   2.4   2.6   2.1    .8    .4
    5.  *    .9    .8   1.2   1.5   1.8   1.9   1.9    .0    .0    .0    .0    .0    .0    .0   2.1   2.5   2.6   2.1    .9    .4
   10.  *    .8    .9   1.2   1.6   1.8   1.9   1.9    .1    .0    .0    .0    .0    .0    .0   2.2   2.3   2.6   2.0    .9    .5
   15.  *    .8    .9   1.2   1.6   1.9   2.0   2.0    .1    .1    .1    .0    .0    .0    .0   2.2   2.3   2.5   2.0   1.0    .7
   20.  *    .7    .8   1.3   1.7   2.0   2.0   2.1    .1    .1    .1    .0    .0    .0    .0   2.1   2.3   2.4   1.9   1.1    .7
   25.  *    .7    .8   1.3   1.8   2.0   2.0   2.2    .1    .1    .1    .0    .0    .0    .0   2.1   2.1   2.2   1.8   1.1    .6
   30.  *    .7    .9   1.3   1.9   2.1   2.1   2.1    .1    .1    .1    .1    .0    .0    .0   2.1   2.0   2.3   1.7   1.0    .6
   35.  *    .7    .8   1.3   2.0   2.1   2.2   2.2    .1    .1    .1    .1    .0    .0    .0   1.9   2.0   2.2   1.5   1.0    .6
   40.  *    .7    .9   1.3   2.0   2.2   2.4   2.4    .2    .2    .2    .1    .0    .0    .0   1.9   1.9   2.2   1.4    .9    .7
   45.  *    .7    .9   1.3   2.1   2.4   2.4   2.4    .3    .2    .2    .2    .0    .0    .0   1.9   1.9   2.1   1.3   1.0    .7
   50.  *    .7    .8   1.3   2.1   2.4   2.4   2.5    .6    .5    .5    .3    .0    .0    .0   1.8   1.8   2.1   1.3   1.0    .7
   55.  *    .7    .8   1.3   2.2   2.5   2.5   2.4    .9    .8    .9    .7    .1    .0    .0   1.8   1.8   2.2   1.4   1.1   1.0
   60.  *    .5    .7   1.2   2.1   2.4   2.4   2.4   1.5   1.5   1.4   1.2    .2    .1    .0   1.8   2.0   2.3   1.7   1.5   1.4
   65.  *    .3    .5    .9   1.9   2.1   2.1   2.2   2.3   2.2   2.2   2.0    .5    .2    .1   1.8   2.1   2.6   2.2   2.0   1.8
   70.  *    .2    .3    .7   1.4   1.7   1.7   1.7   3.2   3.0   2.9   2.6    .8    .4    .2   2.1   2.3   2.9   2.5   1.9   1.9
   75.  *    .1    .2    .3   1.0   1.2   1.2   1.2   3.8   3.7   3.6   3.3   1.3    .6    .3   2.2   2.5   3.2   2.5   2.4   2.3
   80.  *    .0    .1    .2    .6    .7    .7    .7   4.2   4.0   4.0   3.6   1.5    .7    .5   2.3   2.7   3.5   2.7   2.2   2.3
   85.  *    .0    .0    .1    .3    .3    .4    .4   4.2   4.0   4.1   3.7   1.6   1.1    .6   2.4   3.0   3.6   2.5   2.1   2.3
   90.  *    .0    .0    .0    .1    .2    .2    .2   4.2   4.0   4.0   3.6   1.6   1.1    .6   2.6   2.9   3.5   2.4   1.9   2.1
   95.  *    .0    .0    .0    .0    .1    .1    .1   3.8   3.7   3.7   3.4   1.7   1.0    .7   2.7   3.1   3.6   2.0   1.9   1.8
  100.  *    .0    .0    .0    .0    .0    .0    .0   3.7   3.6   3.5   3.1   1.6   1.1    .8   2.7   3.1   3.4   1.8   1.7   1.9
  105.  *    .0    .0    .0    .0    .0    .0    .0   3.5   3.3   3.4   2.9   1.5   1.1    .8   2.7   3.0   3.2   1.6   1.8   1.7
  110.  *    .0    .0    .0    .0    .0    .0    .0   3.4   3.2   3.2   2.8   1.4   1.0    .8   2.8   3.2   3.1   1.6   1.9   1.7
  115.  *    .0    .0    .1    .0    .0    .0    .0   3.2   3.1   3.1   2.6   1.4   1.0    .8   2.8   3.1   2.7   1.5   2.1   1.6
  120.  *    .0    .0    .1    .0    .0    .0    .0   3.0   2.9   2.9   2.5   1.4   1.0    .8   2.8   3.1   2.9   1.4   2.3   1.5
  125.  *    .0    .0    .1    .0    .0    .0    .0   2.9   2.8   2.8   2.3   1.3   1.0    .7   3.0   3.1   2.6   1.7   2.5   1.5
  130.  *    .1    .1    .2    .0    .0    .0    .0   2.8   2.8   2.8   2.1   1.3   1.0    .7   3.1   3.2   2.7   2.0   2.5   1.5
  135.  *    .2    .2    .2    .1    .0    .0    .0   2.7   2.6   2.6   2.1   1.3    .9    .7   3.2   3.3   2.9   2.0   2.8   1.5
  140.  *    .4    .3    .4    .3    .0    .0    .0   2.6   2.6   2.6   1.9   1.2   1.0    .8   3.2   3.3   2.7   2.6   2.8   1.5
  145.  *    .8    .7    .9    .4    .1    .0    .0   2.6   2.6   2.7   2.1   1.6   1.0    .9   3.3   3.4   3.1   3.0   2.8   1.5
  150.  *   1.3   1.3   1.5   1.0    .2    .1    .0   2.6   2.7   2.8   2.4   1.9   1.5   1.3   3.5   3.4   3.1   3.2   2.7   1.3
  155.  *   2.2   2.0   2.4   1.7    .5    .1    .1   2.9   2.9   3.4   2.9   2.3   1.7   1.6   3.3   3.3   2.8   2.8   2.4   1.2
  160.  *   2.9   2.8   3.1   2.4    .8    .4    .2   3.0   3.1   3.7   3.1   2.4   2.0   2.1   2.8   2.8   2.6   2.6   2.1    .9
  165.  *   3.6   3.4   3.7   3.0   1.2    .7    .4   3.2   3.4   4.0   3.3   2.5   2.1   2.0   2.0   2.4   2.2   2.2   1.5    .8
  170.  *   4.0   3.9   4.1   3.3   1.4    .8    .6   3.5   3.4   4.1   3.5   2.5   2.1   2.1   1.3   1.5   1.5   1.7   1.1    .5
  175.  *   4.1   4.1   4.4   3.3   1.7   1.1    .7   3.3   3.7   4.2   3.4   2.4   1.9   1.8   1.0   1.1   1.2   1.5    .9    .4
  180.  *   4.1   3.9   4.3   3.5   1.6   1.1    .7   3.3   3.8   4.2   2.9   2.0   1.8   2.0    .5    .7    .9   1.2    .6    .4
  185.  *   3.9   3.8   4.0   3.2   1.7   1.0    .8   3.4   3.9   4.0   2.4   1.7   1.7   1.6    .3    .4    .6   1.1    .5    .4
  190.  *   3.6   3.7   3.7   2.9   1.7   1.1    .8   3.7   3.7   3.8   2.3   1.4   1.6   1.5    .2    .3    .5   1.0    .5    .4
  195.  *   3.4   3.5   3.6   2.8   1.6   1.1    .8   3.8   3.8   3.7   2.1   1.1   1.7   1.5    .1    .2    .3   1.0    .4    .5
  200.  *   3.4   3.3   3.5   2.5   1.5   1.1    .9   3.7   3.7   3.5   1.7   1.3   1.6   1.5    .1    .1    .4    .9    .4    .5
  205.  *   3.3   3.2   3.3   2.3   1.5   1.0    .9   3.8   3.7   3.4   1.7   1.3   1.6   1.3    .1    .1    .3    .8    .4    .5
1
                                                                                                                       PAGE  4
      JOB: Site 5 NoBld AM 2030 - 5NBAM30.DAT                    RUN: Site 5 NoBld AM 2030

 WIND   * CONCENTRATION
 ANGLE  *      (PPM)
 (DEGR)*  REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9 REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
  210.  *   3.3   3.2   3.2   2.1   1.3   1.0    .8   3.9   3.8   3.1   1.5   1.2   1.6   1.3    .0    .1    .2    .8    .4    .5
  215.  *   3.1   3.0   3.1   1.9   1.2    .8    .8   4.1   3.7   2.8   1.5   1.3   1.5   1.2    .0    .1    .1    .6    .5    .5
  220.  *   2.9   2.9   3.0   1.7   1.1    .8    .7   4.0   3.5   2.7   1.4   1.6   1.4   1.1    .0    .1    .1    .5    .5    .5
  225.  *   2.8   2.8   3.0   1.5   1.0    .8    .7   4.0   3.6   2.6   1.5   1.4   1.3   1.1    .0    .0    .1    .6    .5    .5
  230.  *   2.8   2.8   2.8   1.4   1.0    .8    .8   4.0   3.3   2.4   1.4   1.4   1.2   1.1    .0    .0    .1    .4    .5    .5
  235.  *   2.8   2.8   2.8   1.3   1.0    .8    .8   4.0   3.1   2.2   1.5   1.4   1.2   1.1    .0    .0    .1    .3    .5    .5
  240.  *   2.8   2.8   2.9   1.2    .9    .7    .8   3.4   2.7   2.0   1.2   1.3   1.2   1.1    .0    .0    .1    .3    .5    .3
  245.  *   2.9   2.9   3.0   1.2    .8    .8   1.0   3.1   2.5   1.8   1.3   1.4   1.1   1.1    .0    .0    .0    .3    .3    .3
  250.  *   2.9   2.9   3.0   1.1    .9    .9   1.0   2.6   2.1   1.4   1.0   1.3   1.1   1.1    .0    .0    .0    .1    .2    .2
  255.  *   2.9   2.9   3.0   1.2    .8   1.0   1.3   1.9   1.5   1.2   1.1   1.3   1.1   1.1    .0    .0    .0    .1    .2    .1
  260.  *   2.9   2.8   2.8   1.4   1.3   1.2   1.4   1.4   1.2   1.0   1.0   1.3   1.1   1.1    .0    .0    .0    .1    .1    .1
  265.  *   2.8   2.7   2.7   1.5   1.3   1.2   1.6   1.2   1.0    .8    .9   1.3   1.1   1.2    .0    .0    .0    .0    .1    .1
  270.  *   2.8   2.7   2.9   1.7   1.3   1.5   1.9    .9    .9    .8   1.0   1.3   1.1   1.1    .0    .0    .0    .0    .0    .0
  275.  *   2.8   2.8   2.9   1.6   1.4   1.7   2.1    .8    .8    .8   1.0   1.3   1.1   1.1    .0    .0    .0    .0    .0    .0
  280.  *   2.9   2.9   3.1   1.7   1.5   2.0   2.3    .7    .7    .8   1.2   1.4   1.1   1.1    .0    .0    .0    .0    .0    .0
  285.  *   3.0   3.0   3.1   1.4   1.6   2.1   2.4    .7    .7    .9   1.2   1.4   1.1   1.1    .0    .0    .0    .0    .0    .0
  290.  *   3.0   3.2   3.0   1.5   1.7   2.3   2.4    .4    .7    .9   1.3   1.5   1.2   1.2    .0    .0    .0    .0    .0    .0
  295.  *   3.2   3.1   2.9   1.4   1.8   2.4   2.5    .5    .6    .9   1.3   1.4   1.4   1.3    .0    .0    .0    .0    .0    .0
  300.  *   3.5   3.1   3.0   1.7   2.0   2.4   2.3    .5    .7    .9   1.3   1.4   1.3   1.3    .0    .0    .0    .0    .0    .0
  305.  *   3.5   3.3   3.0   1.7   2.2   2.4   2.4    .4    .6    .9   1.5   1.4   1.2   1.2    .0    .0    .0    .0    .0    .0
  310.  *   3.7   3.3   3.0   1.9   2.2   2.3   2.3    .4    .5    .7   1.5   1.5   1.3   1.1    .0    .0    .1    .0    .0    .0
  315.  *   3.6   3.4   2.8   1.8   2.4   2.2   2.2    .3    .4    .7   1.4   1.3   1.2   1.0    .0    .2    .2    .0    .0    .0
  320.  *   3.5   3.3   2.6   2.0   2.3   2.2   2.2    .1    .3    .5   1.3   1.3   1.0    .9    .2    .2    .3    .1    .0    .0
  325.  *   3.7   3.2   2.7   2.0   2.3   2.2   2.0    .0    .3    .4   1.2   1.3    .9    .8    .2    .4    .5    .1    .0    .0
  330.  *   3.6   3.0   2.4   2.0   2.2   2.2   1.9    .0    .2    .3   1.0   1.1    .8    .6    .4    .6    .8    .5    .0    .0
  335.  *   3.0   2.6   2.1   2.0   2.1   1.8   2.0    .0    .0    .3    .8    .8    .7    .6    .7   1.0   1.1    .7    .0    .0
  340.  *   2.5   2.3   1.8   1.8   2.1   1.9   2.0    .0    .0    .2    .5    .6    .5    .3   1.1   1.3   1.6   1.1    .2    .0
  345.  *   1.9   1.8   1.7   1.6   1.8   1.9   2.0    .0    .0    .0    .4    .4    .4    .3   1.4   1.8   2.0   1.3    .3    .1
  350.  *   1.6   1.4   1.4   1.4   1.8   1.9   1.9    .0    .0    .0    .2    .3    .2    .2   1.8   2.1   2.3   1.7    .5    .2
  355.  *   1.1   1.0   1.4   1.4   1.8   1.9   1.9    .0    .0    .0    .1    .1    .1    .1   2.0   2.4   2.6   2.0    .7    .2
  360.  *   1.0    .9   1.0   1.4   1.8   1.9   1.9    .0    .0    .0    .0    .1    .0    .0   2.2   2.4   2.6   2.1    .8    .4
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX    *   4.1   4.1   4.4   3.5   2.5   2.5   2.5   4.2   4.0   4.2   3.7   2.5   2.1   2.1   3.5   3.4   3.6   3.2   2.8   2.3
 DEGR.  *  175   175   175   180    55    55    50    80    80   175    85   165   165   160   150   145    95   150   135    80

1
                                                                                                                       PAGE  5
      JOB: Site 5 NoBld AM 2030 - 5NBAM30.DAT                    RUN: Site 5 NoBld AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND   * CONCENTRATION
 ANGLE  *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
    0.  *    .2    .5    .6   1.6   2.1   1.9   2.4   2.7
    5.  *    .2    .5    .8   1.9   2.0   2.0   2.6   2.9
   10.  *    .2    .6    .9   2.0   1.8   1.9   2.7   3.0
```

```
  15.  *    .4    .7   1.0   2.3   1.5   2.0   2.7   3.2
  20.  *    .4    .9    .9   2.3   1.5   2.2   2.9   3.2
  25.  *    .5    .8    .9   2.4   1.6   2.2   3.1   3.3
  30.  *    .5    .7   1.0   2.5   1.7   2.4   3.1   3.2
  35.  *    .4    .7   1.0   2.5   2.0   2.5   3.2   3.3
  40.  *    .4    .8   1.2   2.4   2.1   2.7   3.4   3.2
  45.  *    .4   1.0   1.4   2.7   2.5   2.9   3.3   3.2
  50.  *    .6   1.3   1.6   2.9   2.7   3.1   3.3   3.1
  55.  *    .7   1.5   1.9   3.1   3.1   3.1   3.2   3.0
  60.  *   1.0   1.7   2.2   3.4   3.3   3.3   3.1   2.9
  65.  *   1.6   1.8   2.3   3.3   3.4   3.3   3.1   2.7
  70.  *   1.9   1.8   2.2   3.0   3.1   3.0   2.7   2.5
  75.  *   1.9   1.7   2.1   2.7   2.6   2.8   2.6   2.4
  80.  *   1.8   1.4   1.6   2.2   2.2   2.3   2.3   2.3
  85.  *   2.1   1.1   1.3   1.5   1.8   2.2   2.3   2.2
  90.  *   1.7    .8   1.0   1.3   1.5   2.2   2.4   2.2
  95.  *   1.5    .7   1.0   1.2   1.5   2.3   2.4   2.3
 100.  *   1.4    .7    .8    .9   1.6   2.3   2.3   2.3
 105.  *   1.2    .7    .8   1.1   1.7   2.4   2.4   2.5
 110.  *   1.3    .7    .9   1.1   1.8   2.4   2.4   2.5
 115.  *   1.2    .8    .9   1.1   2.1   2.6   2.6   2.6
 120.  *   1.3    .7   1.0   1.2   2.2   2.7   2.8   2.7
 125.  *   1.4    .9   1.0   1.3   2.3   2.8   2.8   2.7
 130.  *   1.3    .8    .9   1.5   2.5   2.9   2.9   2.9
 135.  *   1.2    .8   1.0   1.5   2.8   3.0   3.2   3.0
 140.  *   1.2    .8   1.0   1.5   2.8   3.2   3.2   3.1
 145.  *   1.2    .8   1.1   1.3   3.0   3.3   3.4   3.3
 150.  *   1.0    .5    .8   1.3   2.8   3.2   3.4   3.2
 155.  *    .9    .5    .5   1.1   2.5   3.1   3.1   2.9
 160.  *    .7    .3    .4    .8   2.1   2.6   2.6   2.6
 165.  *    .5    .1    .2    .4   1.5   1.9   2.0   1.9
 170.  *    .4    .0    .1    .2   1.0   1.3   1.3   1.2
 175.  *    .4    .0    .0    .1    .5    .8    .9    .8
 180.  *    .4    .0    .0    .0    .3    .4    .5    .4
 185.  *    .4    .0    .0    .0    .1    .2    .2    .2
 190.  *    .4    .0    .0    .0    .0    .2    .2    .2
 195.  *    .5    .0    .0    .0    .0    .1    .1    .1
 200.  *    .5    .0    .0    .0    .0    .1    .1    .1
 205.  *    .5    .0    .0    .0    .0    .1    .1    .1
1
                                                                                                                      PAGE  6
      JOB: Site 5 NoBld AM 2030 - 5NBAM30.DAT                    RUN: Site 5 NoBld AM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .5    .0    .0    .0    .0    .1    .1    .1
 215.  *    .5    .0    .0    .0    .0    .1    .1    .1
 220.  *    .5    .0    .0    .0    .0    .1    .1    .1
 225.  *    .5    .0    .0    .0    .0    .0    .0    .0
 230.  *    .4    .0    .0    .0    .0    .0    .0    .0
 235.  *    .3    .1    .1    .0    .0    .0    .0    .0
 240.  *    .3    .1    .1    .0    .0    .0    .0    .0
 245.  *    .2    .1    .1    .1    .0    .0    .0    .0
 250.  *    .2    .1    .2    .2    .2    .0    .0    .0
 255.  *    .1    .1    .2    .2    .2    .0    .0    .0
 260.  *    .1    .2    .2    .2    .4    .0    .0    .0
 265.  *    .0    .2    .3    .3    .6    .0    .0    .0
 270.  *    .0    .2    .3    .3    .8    .1    .0    .0
 275.  *    .0    .3    .3    .3   1.0    .1    .0    .0
 280.  *    .0    .3    .3    .3   1.2    .1    .1    .0
 285.  *    .0    .3    .3    .3   1.4    .2    .1    .1
 290.  *    .0    .3    .3    .3   1.5    .3    .2    .1
 295.  *    .0    .3    .3    .4   1.6    .3    .2    .1
 300.  *    .0    .3    .3    .4   1.7    .4    .2    .1
 305.  *    .0    .3    .3    .4   1.7    .5    .3    .2
 310.  *    .0    .3    .3    .3   1.6    .6    .3    .2
 315.  *    .0    .3    .3    .3   1.6    .6    .4    .3
 320.  *    .0    .3    .3    .3   1.7    .8    .6    .3
 325.  *    .0    .3    .3    .3   1.6    .9    .7    .6
 330.  *    .0    .3    .3    .4   1.9   1.2   1.1    .7
 335.  *    .0    .3    .3    .3   1.9   1.4   1.5   1.1
 340.  *    .0    .3    .3    .7   2.2   1.8   1.8   1.6
 345.  *    .0    .3    .3    .9   2.3   2.1   1.9   2.2
 350.  *    .0    .3    .5   1.2   2.3   2.2   2.1   2.4
 355.  *    .1    .4    .5   1.5   2.4   2.2   2.4   2.4
 360.  *    .2    .5    .6   1.6   2.1   1.9   2.4   2.7
 ------*------------------------------------------------
 MAX   *   2.1   1.8   2.3   3.4   3.4   3.3   3.4   3.3
 DEGR. *   85    65    65    60    65   145    40   145

 THE HIGHEST CONCENTRATION IS    4.40 PPM AT  175 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    4.20 PPM AT  175 DEGREES FROM REC10.
 THE 3RD HIGHEST CONCENTRATION IS    4.20 PPM AT   80 DEGREES FROM REC8 .
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Site 5 NoBld PM 2014 - 5NBPM14.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 NoBld PM 2014                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    288811.4  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    258911.4  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       120        82       2.0 2589  102.2 1528 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     29911.4  0.  32   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  12   1
       120       106       2.0  299  102.2 1752 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    125911.4  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    100411.4  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.     73911.4  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       120        83       2.0  739  102.2 1676 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     26511.4  0.  32   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  12   1
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       120       107       2.0  265  102.2 1752 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    210111.4  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.     77411.4  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.     77411.4  0.  56   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  36   3
       120        93       2.0  774  102.2 1722 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    223311.4  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    138111.4  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    138111.4  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       120        90       2.0 1381  102.2 1703 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.     45411.4  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.     45411.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 5 NoBld PM 2014 - 5NBPM14.DAT                  RUN: Site 5 NoBld PM 2014
      DATE: 05/06/2009   TIME: 03:59:45.97


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.    340. AG  2888.  11.4    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.    342. AG  2589.  11.4    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    1647.5   -1877.8 *    4831.    161. AG   562. 100.0    .0 36.0 2.00 245.4
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.    341. AG   299.  11.4    .0 32.0
       5. NB        Rt16 left *     88.0    2690.0     678.3     989.6 *    1800.    161. AG   242. 100.0    .0 12.0 2.05  91.4
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.    341. AG  1259.  11.4    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.    160. AG  1004.  11.4    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.    161. AG   739.  11.4    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0     -33.5    2961.9 *     112.    341. AG   569. 100.0    .0 36.0  .53   5.7
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.    162. AG   265.  11.4    .0 32.0
      11. SB        Rt16 left *     25.0    2864.0    -476.8    4369.5 *    1587.    342. AG   244. 100.0    .0 12.0 2.02  80.6
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.    161. AG  2101.  11.4    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.     66. AG   774.  11.4    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.     82. AG   774.  11.4    .0 56.0
      15. EB        Rt27 aprch*     -5.0    2754.0    -144.8    2736.0 *     141.    263. AG   637. 100.0    .0 36.0  .78   7.2
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.     71. AG  2233.  11.4    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.    250. AG  1381.  11.4    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.    251. AG  1381.  11.4    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0     330.7    2901.6 *     223.     71. AG   822. 100.0    .0 48.0  .94  11.3
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.    257. AG   454.  11.4    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.    247. AG   454.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 5 NoBld PM 2014 - 5NBPM14.DAT                  RUN: Site 5 NoBld PM 2014
      DATE: 05/06/2009   TIME: 03:59:45.97

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     120       82       2.0      2589       1528     102.20      1        3
       5. NB        Rt16 left *     120      106       2.0       299       1752     102.20      1        3
       9. SB        Rt16 thru *     120       83       2.0       739       1676     102.20      1        3
      11. SB        Rt16 left *     120      107       2.0       265       1752     102.20      1        3
      15. EB        Rt27 aprch*     120       93       2.0       774       1722     102.20      1        3
      19. WB        Rt27 aprch*     120       90       2.0      1381       1703     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       207.0     2515.0        5.0   *
      2. SE 164 S             *       183.0     2590.0        5.0   *
      3. SE 82 S              *       154.0     2668.0        5.0   *
      4. SE CNR               *       140.0     2741.0        5.0   *
      5. SE 82 E              *       205.0     2774.0        5.0   *
      6. SE 164 E             *       283.0     2802.0        5.0   *
      7. SE MID E             *       356.0     2828.0        5.0   *
      8. NE MID E             *       323.0     2935.0        5.0   *
      9. NE 164 E             *       235.0     2907.0        5.0   *
     10. NE 82 E              *       157.0     2881.0        5.0   *
     11. NE CNR               *        95.0     2864.0        5.0   *
     12. NE 82 N              *        65.0     2927.0        5.0   *
     13. NE 164 N             *        40.0     3006.0        5.0   *
     14. NE MID N             *         8.0     3095.0        5.0   *
     15. NW MID N             *       -95.0     3048.0        5.0   *
     16. NW 164 N             *       -68.0     2971.0        5.0   *
     17. NW 82 N              *       -41.0     2894.0        5.0   *
     18. NW CNR               *       -31.0     2829.0        5.0   *
     19. NW 82 W              *       -91.0     2798.0        5.0   *
     20. NW 164 W             *      -165.0     2767.0        5.0   *
     21. NW MID W             *      -237.0     2736.0        5.0   *
     22. SW MID W             *      -218.0     2665.0        5.0   *
     23. SW 164 W             *      -153.0     2690.0        5.0   *
     24. SW 82 W              *       -77.0     2713.0        5.0   *
     25. SW CNR               *         6.0     2723.0        5.0   *
     26. SW 82 S              *        40.0     2651.0        5.0   *
     27. SW 164 S             *        68.0     2573.0        5.0   *
     28. SW MID S             *        91.0     2503.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 5 NoBld PM 2014 - 5NBPM14.DAT                  RUN: Site 5 NoBld PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
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```
   0.  *   1.2   1.2   1.5   2.0   2.4   2.3   1.2    .0    .0    .0    .1    .1    .1    .1   1.1   1.2   2.2   2.0    .7    .4
   5.  *   1.0   1.2   1.4   2.0   2.4   2.3   1.1    .0    .0    .0    .0    .0    .0    .0   1.1   1.1   2.4   2.2    .8    .4
  10.  *    .9    .9   1.5   2.1   2.4   2.3   1.2    .0    .0    .0    .0    .0    .0    .0   1.0   1.0   2.4   2.3    .8    .4
  15.  *    .7    .9   1.4   2.2   2.5   2.2   1.1    .0    .0    .0    .0    .0    .0    .0   1.0   1.0   2.5   2.3    .8    .4
  20.  *    .6    .8   1.5   2.2   2.4   2.1   1.1    .0    .0    .0    .0    .0    .0    .0   1.0    .9   2.6   2.2    .8    .5
  25.  *    .6    .9   1.4   2.3   2.6   2.0   1.3    .1    .0    .0    .0    .0    .0    .0    .9   1.0   2.7   2.1    .9    .5
  30.  *    .6    .8   1.4   2.4   2.5   1.9   1.3    .1    .0    .0    .0    .0    .0    .0    .8   1.0   2.7   2.1   1.0    .6
  35.  *    .5    .8   1.3   2.3   2.4   1.8   1.3    .1    .1    .1    .0    .0    .0    .0    .8    .9   2.6   1.8   1.0    .6
  40.  *    .4    .7   1.2   2.3   2.4   1.7   1.4    .1    .1    .1    .0    .0    .0    .0    .9    .9   2.6   1.7   1.0    .6
  45.  *    .3    .5   1.0   2.2   2.3   1.6   1.5    .1    .1    .2    .2    .0    .0    .0    .8    .9   2.5   1.5    .9    .6
  50.  *    .3    .3    .8   2.1   2.2   1.5   1.4    .1    .2    .2    .2    .0    .0    .0    .8    .8   2.5   1.5    .9    .7
  55.  *    .2    .3    .7   1.8   2.0   1.7   1.5    .2    .4    .4    .3    .0    .0    .0    .8    .8   2.5   1.5   1.0    .8
  60.  *    .1    .3    .4   1.6   1.8   1.5   1.5    .4    .6    .8    .8    .0    .0    .0    .7    .9   2.5   1.5   1.1   1.0
  65.  *    .0    .1    .4   1.3   1.5   1.4   1.3    .6    .9   1.3   1.3    .0    .0    .0    .8    .9   2.7   1.7   1.4   1.2
  70.  *    .0    .1    .3   1.0   1.2   1.0   1.2    .8   1.4   1.8   1.8    .3    .0    .0    .8    .9   3.0   1.8   1.7   1.9
  75.  *    .0    .0    .1    .7    .8    .8    .8   1.0   1.9   2.5   2.4    .4    .2    .0    .8   1.2   3.2   2.0   1.8   2.2
  80.  *    .0    .0    .1    .3    .5    .6    .6   1.2   2.3   3.0   2.9    .6    .2    .0   1.0   1.4   3.3   2.2   2.0   2.3
  85.  *    .0    .0    .0    .2    .3    .3    .4   1.3   2.8   3.4   3.3    .9    .2    .2   1.1   1.7   3.6   2.3   1.7   2.3
  90.  *    .0    .0    .0    .1    .2    .2    .2   1.2   3.0   3.7   3.6   1.1    .5    .2   1.1   1.8   3.7   2.3   2.0   2.7
  95.  *    .0    .0    .1    .0    .1    .1    .1   1.3   3.2   3.7   3.5   1.3    .5    .2   1.3   2.2   3.8   2.0   1.7   3.0
 100.  *    .1    .0    .1    .0    .1    .1    .1   1.2   3.3   3.8   3.5   1.4    .6    .3   1.5   2.3   3.8   1.8   1.7   2.9
 105.  *    .1    .1    .1    .0    .1    .1    .1   1.2   3.4   3.8   3.4   1.5    .6    .5   1.5   2.6   3.6   1.7   1.9   3.0
 110.  *    .1    .1    .1    .0    .0    .1    .1   1.1   3.5   3.7   3.2   1.7    .7    .5   1.5   2.9   3.6   1.6   2.0   3.1
 115.  *    .1    .1    .1    .0    .0    .0    .1   1.1   3.4   3.6   3.1   1.7    .9    .5   1.7   2.9   3.5   1.7   2.2   3.1
 120.  *    .1    .1    .1    .0    .0    .0    .0   1.1   3.4   3.5   2.9   1.7   1.0    .6   1.8   3.0   3.3   1.6   2.5   3.1
 125.  *    .1    .1    .1    .0    .0    .0    .0   1.1   3.4   3.4   2.6   1.6   1.1    .7   1.9   3.2   2.9   1.8   2.7   3.1
 130.  *    .1    .1    .3    .0    .0    .0    .0   1.1   3.2   3.2   2.5   1.5   1.1    .7   2.0   3.2   2.9   1.8   3.0   3.2
 135.  *    .3    .2    .3    .2    .0    .0    .0   1.2   3.2   3.1   2.3   1.5   1.1    .8   2.1   3.4   2.9   2.6   3.2   3.0
 140.  *    .5    .6    .7    .3    .0    .0    .0   1.1   3.0   3.0   2.2   1.5   1.1    .9   2.5   3.4   3.0   2.7   3.3   2.8
 145.  *   1.0    .9   1.2    .7    .1    .0    .0   1.2   3.0   3.1   2.5   1.9   1.3   1.1   2.7   3.6   3.4   3.2   3.2   2.4
 150.  *   1.8   1.8   2.0   1.3    .2    .1    .1   1.6   3.2   3.3   2.8   2.2   1.9   1.6   2.9   3.6   3.3   3.1   3.1   2.2
 155.  *   2.5   2.6   2.8   2.0    .6    .2    .1   1.8   3.4   4.0   3.3   2.7   2.1   1.7   2.7   3.5   3.3   3.0   3.1   1.8
 160.  *   3.6   3.5   3.9   2.9   1.0    .6    .2   2.0   3.8   4.3   3.6   3.0   2.4   2.3   2.5   3.0   2.8   3.0   2.6   1.6
 165.  *   4.4   4.2   4.6   3.6   1.4    .8    .5   2.7   4.0   4.9   3.9   3.2   2.6   2.5   2.0   2.5   2.4   2.4   2.2    .9
 170.  *   4.8   4.7   5.0   4.0   1.7   1.0    .7   3.1   4.3   5.0   3.8   3.1   2.5   2.8   1.5   1.8   1.8   2.0   2.0    .7
 175.  *   5.0   4.8   5.3   4.0   1.9   1.1    .8   3.3   4.4   4.9   3.7   2.8   2.5   2.3   1.0   1.3   1.4   1.6   1.7    .5
 180.  *   5.0   4.8   5.1   4.2   1.9   1.3    .9   3.5   4.4   4.8   3.3   2.2   2.2   2.1    .7    .9   1.0   1.4   1.6    .5
 185.  *   4.7   4.5   4.9   3.9   1.9   1.3    .9   3.8   4.5   4.6   2.8   1.8   1.9   1.9    .3    .6    .9   1.3   1.7    .4
 190.  *   4.5   4.4   4.7   3.7   1.9   1.3   1.0   4.1   4.5   4.7   2.5   1.7   2.0   1.7    .2    .3    .7   1.2   1.5    .4
 195.  *   4.2   4.2   4.3   3.1   1.8   1.4   1.0   4.0   4.6   4.3   1.9   1.7   2.0   1.7    .1    .3    .7   1.3   1.5    .4
 200.  *   4.1   4.1   4.2   3.0   1.7   1.2    .9   4.3   4.4   4.0   1.9   1.6   2.1   1.6    .1    .3    .6   1.3   1.5    .4
 205.  *   3.9   3.6   4.0   2.8   1.6   1.2   1.0   4.4   4.5   3.8   1.8   1.5   2.0   1.6    .0    .3    .7   1.2   1.5    .4
1
                                                                                                                          PAGE  4
      JOB: Site 5 NoBld PM 2014 - 5NBPM14.DAT                  RUN: Site 5 NoBld PM 2014

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
  210.  *   3.6   3.6   3.8   2.6   1.6   1.2   1.1   4.5   4.5   3.6   1.6   1.7   1.9   1.4    .0    .2    .6   1.2   1.5    .5
  215.  *   3.5   3.5   3.6   2.3   1.5   1.2   1.0   4.6   4.4   3.4   1.7   1.8   1.8   1.1    .0    .2    .5   1.2   1.4    .5
  220.  *   3.5   3.3   3.5   2.2   1.6   1.1   1.0   4.6   4.2   3.0   1.6   1.7   1.8   1.0    .0    .0    .4   1.3   1.2    .4
  225.  *   3.3   3.3   3.4   1.9   1.4   1.1    .9   4.7   4.1   2.8   1.6   1.9   1.6    .9    .0    .0    .4   1.2   1.0    .4
  230.  *   3.3   3.3   3.3   1.7   1.3   1.1   1.0   4.5   4.0   2.5   1.7   1.9   1.6    .9    .0    .0    .3   1.0    .9    .4
  235.  *   3.3   3.3   3.3   1.6   1.1   1.1   1.0   4.2   3.6   2.4   1.6   1.9   1.4    .8    .0    .0    .2    .7    .7    .4
  240.  *   3.3   3.3   3.3   1.7   1.3   1.2   1.2   3.9   3.2   2.0   1.6   1.7   1.3    .8    .0    .0    .0    .6    .6    .3
  245.  *   3.3   3.3   3.5   1.5   1.2   1.2   1.2   3.6   2.6   1.8   1.6   1.8   1.2    .8    .0    .0    .0    .4    .3    .2
  250.  *   3.4   3.4   3.5   1.6   1.4   1.4   1.5   2.8   2.1   1.4   1.2   1.7   1.1    .9    .0    .0    .0    .3    .3    .2
  255.  *   3.4   3.4   3.5   1.9   1.5   1.6   1.9   2.0   1.7   1.3   1.1   1.7   1.0    .9    .0    .0    .0    .1    .2    .1
  260.  *   3.3   3.3   3.4   2.0   1.7   1.8   2.1   1.6   1.4   1.1   1.1   1.7   1.0    .9    .0    .0    .0    .0    .1    .0
  265.  *   3.3   3.3   3.4   2.2   1.7   2.0   2.5   1.1   1.1   1.0   1.1   1.7    .9    .8    .0    .0    .0    .0    .0    .0
  270.  *   3.3   3.3   3.5   2.3   1.9   2.3   2.8    .9    .8    .9   1.1   1.7    .9    .9    .0    .0    .0    .0    .0    .0
  275.  *   3.3   3.4   3.6   2.2   1.9   2.4   2.8    .6    .7    .9   1.4   1.6    .9    .9    .0    .0    .0    .0    .0    .0
  280.  *   3.3   3.4   3.6   2.1   2.0   2.9   2.9    .5    .7   1.0   1.4   1.5    .9    .9    .0    .0    .0    .0    .0    .0
  285.  *   3.5   3.5   3.8   2.1   1.9   2.8   3.0    .4    .6    .9   1.5   1.5    .9    .9    .0    .0    .0    .0    .0    .0
  290.  *   3.6   3.7   3.8   2.3   2.3   2.9   3.0    .3    .5    .8   1.6   1.4    .9    .9    .0    .0    .0    .0    .0    .0
  295.  *   3.8   3.9   3.7   2.3   2.3   3.0   3.0    .4    .4    .8   1.6   1.4   1.0   1.0    .0    .0    .0    .0    .0    .0
  300.  *   4.0   4.1   3.8   2.3   2.5   2.9   2.9    .4    .4    .7   1.5   1.4   1.1   1.1    .0    .0    .0    .0    .0    .0
  305.  *   4.1   4.1   3.7   2.0   2.6   2.7   2.8    .3    .4    .6   1.5   1.3   1.1   1.1    .0    .0    .0    .0    .0    .0
  310.  *   4.2   4.2   3.6   2.3   2.8   3.0   2.8    .3    .4    .7   1.5   1.4   1.1   1.1    .0    .0    .0    .0    .0    .0
  315.  *   4.4   4.3   3.6   2.3   2.9   2.8   2.6    .3    .4    .5   1.5   1.4   1.2   1.3    .0    .0    .0    .0    .0    .0
  320.  *   4.5   4.0   3.3   2.3   2.8   2.8   2.6    .3    .4    .5   1.3   1.2   1.2   1.3    .0    .0    .1    .0    .0    .0
  325.  *   4.3   3.7   3.1   2.6   2.9   2.8   2.4    .2    .4    .6   1.2   1.2   1.2   1.2    .2    .3    .3    .0    .0    .0
  330.  *   4.3   3.9   3.1   2.5   2.8   2.7   2.3    .1    .3    .5   1.2   1.2   1.2   1.2    .2    .3    .4    .4    .0    .0
  335.  *   3.7   3.4   3.2   2.6   2.8   2.7   2.1    .1    .2    .5    .9   1.1   1.1   1.1    .5    .6    .8    .7    .1    .0
  340.  *   3.2   2.8   2.7   2.4   2.7   2.6   1.8    .0    .1    .3    .8    .9    .8    .8    .7    .8   1.1    .9    .2    .1
  345.  *   2.7   2.3   2.3   2.3   2.7   2.5   1.7    .0    .0    .2    .6    .7    .6    .6    .9   1.0   1.6   1.2    .4    .1
  350.  *   1.9   1.7   1.9   2.0   2.4   2.5   1.5    .0    .0    .1    .3    .6    .4    .4   1.1   1.0   1.8   1.6    .4    .2
  355.  *   1.7   1.6   1.7   2.1   2.4   2.4   1.3    .0    .0    .0    .2    .3    .2    .2   1.1   1.2   2.0   1.9    .4    .4
  360.  *   1.2   1.2   1.5   2.0   2.4   2.3   1.2    .0    .0    .0    .1    .1    .1    .1   1.1   1.2   2.2   2.0    .7    .4
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   5.0   4.8   5.3   4.2   2.9   3.0   3.0   4.7   4.6   5.0   3.9   3.2   2.6   2.8   2.9   3.6   3.8   3.2   3.3   3.2
 DEGR. *   175   175   175   180   315   295   285   225   195   170   165   165   165   170   150   145    95   145   140   130

1
                                                                                                                          PAGE  5
      JOB: Site 5 NoBld PM 2014 - 5NBPM14.DAT                  RUN: Site 5 NoBld PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .3    .7   1.2   2.8   2.2   2.0   2.3   2.9
   5.  *    .3    .7   1.4   2.9   2.0   1.9   2.7   3.1
  10.  *    .3    .7   1.6   2.8   1.7   2.1   2.7   3.1
```

```
  15.  *    .3    .7   1.8   2.9   1.6   1.9   3.0   3.3
  20.  *    .3    .8   2.0   3.0   1.6   2.2   3.0   3.3
  25.  *    .2    .9   2.1   2.8   1.6   2.4   3.3   3.3
  30.  *    .3   1.1   2.2   2.8   1.6   2.6   3.3   3.1
  35.  *    .4   1.3   2.3   3.1   1.9   2.9   3.2   3.0
  40.  *    .5   1.4   2.4   3.0   2.1   2.9   3.3   3.1
  45.  *    .5   1.7   2.5   3.1   2.5   2.9   3.2   2.8
  50.  *    .7   2.0   2.8   3.3   2.7   3.0   3.1   2.7
  55.  *    .7   1.9   2.8   3.4   3.1   3.0   2.9   2.7
  60.  *   1.2   2.1   3.0   3.4   3.0   2.9   2.7   2.5
  65.  *   1.4   2.1   2.9   3.5   3.3   2.9   2.6   2.6
  70.  *   1.8   2.1   2.6   3.0   3.0   2.9   2.6   2.5
  75.  *   2.2   1.9   2.2   2.8   2.6   2.6   2.6   2.5
  80.  *   2.1   1.6   1.8   2.2   2.3   2.5   2.4   2.4
  85.  *   2.1   1.3   1.5   1.9   1.9   2.4   2.4   2.4
  90.  *   2.1   1.1   1.2   1.5   1.7   2.4   2.4   2.4
  95.  *   2.1   1.0   1.0   1.3   1.6   2.4   2.4   2.4
 100.  *   1.9    .9    .8   1.2   1.9   2.4   2.4   2.5
 105.  *   1.8    .8    .9   1.1   1.9   2.5   2.6   2.6
 110.  *   1.5    .9    .9   1.2   2.0   2.6   2.6   2.7
 115.  *   1.5    .9   1.0   1.3   2.3   2.6   2.8   2.6
 120.  *   1.4    .9   1.0   1.4   2.3   2.8   2.9   2.8
 125.  *   1.4   1.0   1.1   1.6   2.5   3.0   3.1   2.9
 130.  *   1.4    .9   1.3   1.5   2.8   3.1   3.1   3.1
 135.  *   1.3    .9   1.2   1.6   2.8   3.2   3.2   3.1
 140.  *   1.3    .9   1.1   1.6   3.1   3.3   3.3   3.3
 145.  *   1.1    .7   1.1   1.6   3.1   3.4   3.5   3.3
 150.  *   1.1    .7    .9   1.4   3.0   3.2   3.4   3.4
 155.  *   1.1    .6    .7   1.2   2.8   3.1   3.2   3.1
 160.  *    .7    .3    .5    .9   2.1   2.6   2.6   2.6
 165.  *    .6    .2    .2    .6   1.7   1.9   2.0   1.9
 170.  *    .5    .1    .1    .3   1.0   1.2   1.2   1.2
 175.  *    .4    .0    .0    .1    .5    .8    .8    .8
 180.  *    .4    .0    .0    .0    .2    .4    .4    .4
 185.  *    .4    .0    .0    .0    .1    .2    .2    .2
 190.  *    .4    .0    .0    .0    .0    .1    .1    .1
 195.  *    .4    .0    .0    .0    .0    .1    .1    .1
 200.  *    .4    .0    .0    .0    .0    .1    .1    .1
 205.  *    .4    .0    .0    .0    .0    .1    .1    .1
1
                                                                                                                              PAGE  6
      JOB: Site 5 NoBld PM 2014 - 5NBPM14.DAT                  RUN: Site 5 NoBld PM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .4    .1    .0    .0    .0    .1    .1    .1
 215.  *    .4    .1    .0    .0    .0    .1    .1    .1
 220.  *    .4    .1    .1    .0    .0    .0    .0    .0
 225.  *    .4    .1    .1    .0    .0    .0    .0    .0
 230.  *    .3    .1    .1    .0    .0    .0    .0    .0
 235.  *    .3    .2    .2    .1    .0    .0    .0    .0
 240.  *    .2    .2    .2    .1    .1    .0    .0    .0
 245.  *    .1    .3    .3    .2    .2    .0    .0    .0
 250.  *    .1    .3    .3    .3    .4    .0    .0    .0
 255.  *    .1    .3    .3    .4    .6    .0    .0    .0
 260.  *    .0    .3    .5    .7    .9    .0    .0    .0
 265.  *    .0    .3    .5    .8   1.3    .1    .0    .0
 270.  *    .0    .5    .5   1.0   1.6    .1    .0    .0
 275.  *    .0    .5    .5   1.3   1.9    .2    .0    .0
 280.  *    .0    .5    .5   1.4   2.2    .3    .0    .0
 285.  *    .0    .4    .4   1.6   2.3    .4    .2    .0
 290.  *    .0    .4    .4   1.8   2.3    .6    .3    .1
 295.  *    .0    .4    .4   1.9   2.2    .8    .3    .1
 300.  *    .0    .4    .4   2.2   2.3    .9    .4    .2
 305.  *    .0    .4    .4   2.1   2.2    .9    .5    .2
 310.  *    .0    .4    .4   2.2   2.1    .9    .4    .3
 315.  *    .0    .4    .4   2.2   1.9    .9    .6    .3
 320.  *    .0    .4    .4   2.2   1.8   1.0    .7    .5
 325.  *    .0    .4    .4   2.1   1.8   1.1    .9    .6
 330.  *    .0    .4    .4   2.0   1.9   1.2   1.1    .9
 335.  *    .0    .4    .4   2.1   2.2   1.6   1.4   1.2
 340.  *    .0    .4    .6   2.3   2.3   1.7   1.7   1.7
 345.  *    .1    .5    .6   2.5   2.5   2.0   2.1   1.9
 350.  *    .1    .5    .8   2.7   2.4   2.1   2.2   2.2
 355.  *    .2    .6   1.1   2.8   2.3   2.1   2.4   2.7
 360.  *    .3    .7   1.2   2.8   2.2   2.0   2.3   2.9
 ------*------------------------------------------------
 MAX   *   2.2   2.1   3.0   3.5   3.3   3.4   3.5   3.4
 DEGR. *   75    60    60    65    65   145   145   150

 THE HIGHEST CONCENTRATION IS    5.30 PPM AT  175 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    5.00 PPM AT  175 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    5.00 PPM AT  170 DEGREES FROM REC10.
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Site 5 NoBld PM 2030 - 5NBPM30.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 NoBld PM 2030                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    3095 9.2  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    2770 9.2  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       131       102       2.0 2770   84.1 1550 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     325 9.2  0.  32   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  12   1
       131       116       2.0  325   84.1 1752 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    1675 9.2  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    1320 9.2  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.     995 9.2  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       131        94       2.0  995   84.1 1675 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     325 9.2  0.  32   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  12   1
```

```
       131       108       2.0  325   84.1 1752 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    2570 9.2  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.     895 9.2  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.     895 9.2  0.  56   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  36   3
       131       109       2.0  895   84.1 1722 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    2205 9.2  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    1660 9.2  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    1660 9.2  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       131        90       2.0 1660   84.1 1703 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.     520 9.2  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.     520 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 5 NoBld PM 2030 - 5NBPM30.DAT                  RUN: Site 5 NoBld PM 2030
      DATE: 05/06/2009   TIME: 04:39:59.29


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.   340. AG   3095.   9.2    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.   342. AG   2770.   9.2    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    2322.8   -3893.9 *    6957.   161. AG    527. 100.0    .0 36.0 3.13 353.4
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.   341. AG    325.   9.2    .0 32.0
       5. NB        Rt16 left *     88.0    2690.0     773.0     716.8 *    2089.   161. AG    200. 100.0    .0 12.0 2.21 106.1
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.   341. AG   1675.   9.2    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.   160. AG   1320.   9.2    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.   161. AG    995.   9.2    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0     -54.6    3024.7 *     178.   341. AG    486. 100.0    .0 36.0  .79   9.0
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.   162. AG    325.   9.2    .0 32.0
      11. SB        Rt16 left *     25.0    2864.0    -288.0    3803.1 *     990.   342. AG    186. 100.0    .0 12.0 1.28  50.3
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.   161. AG   2570.   9.2    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.    66. AG    895.   9.2    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.    82. AG    895.   9.2    .0 56.0
      15. EB        Rt27 aprch*     -5.0    2754.0    -880.0    2641.1 *     882.   263. AG    563. 100.0    .0 36.0 1.26  44.8
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.    71. AG   2205.   9.2    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.   250. AG   1660.   9.2    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.   251. AG   1660.   9.2    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0     335.6    2903.3 *     228.    71. AG    620. 100.0    .0 48.0  .86  11.6
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.   257. AG    520.   9.2    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.   247. AG    520.   9.2    .0 32.0
1
                                                                                                                       PAGE  2
      JOB: Site 5 NoBld PM 2030 - 5NBPM30.DAT                  RUN: Site 5 NoBld PM 2030
      DATE: 05/06/2009   TIME: 04:39:59.29

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     131      102       2.0       2770       1550      84.10      1        3
       5. NB        Rt16 left *     131      116       2.0        325       1752      84.10      1        3
       9. SB        Rt16 thru *     131       94       2.0        995       1675      84.10      1        3
      11. SB        Rt16 left *     131      108       2.0        325       1752      84.10      1        3
      15. EB        Rt27 aprch*     131      109       2.0        895       1722      84.10      1        3
      19. WB        Rt27 aprch*     131       90       2.0       1660       1703      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *         COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z      *
     -------------------------*-------------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0   *
      2. SE 164 S             *       183.0     2590.0       5.0   *
      3. SE 82 S              *       154.0     2668.0       5.0   *
      4. SE CNR               *       140.0     2741.0       5.0   *
      5. SE 82 E              *       205.0     2774.0       5.0   *
      6. SE 164 E             *       283.0     2802.0       5.0   *
      7. SE MID E             *       356.0     2828.0       5.0   *
      8. NE MID E             *       323.0     2935.0       5.0   *
      9. NE 164 E             *       235.0     2907.0       5.0   *
     10. NE 82 E              *       157.0     2881.0       5.0   *
     11. NE CNR               *        95.0     2864.0       5.0   *
     12. NE 82 N              *        65.0     2927.0       5.0   *
     13. NE 164 N             *        40.0     3006.0       5.0   *
     14. NE MID N             *         8.0     3095.0       5.0   *
     15. NW MID N             *       -95.0     3048.0       5.0   *
     16. NW 164 N             *       -68.0     2971.0       5.0   *
     17. NW 82 N              *       -41.0     2894.0       5.0   *
     18. NW CNR               *       -31.0     2829.0       5.0   *
     19. NW 82 W              *       -91.0     2798.0       5.0   *
     20. NW 164 W             *      -165.0     2767.0       5.0   *
     21. NW MID W             *      -237.0     2736.0       5.0   *
     22. SW MID W             *      -218.0     2665.0       5.0   *
     23. SW 164 W             *      -153.0     2690.0       5.0   *
     24. SW 82 W              *       -77.0     2713.0       5.0   *
     25. SW CNR               *         6.0     2723.0       5.0   *
     26. SW 82 S              *        40.0     2651.0       5.0   *
     27. SW 164 S             *        68.0     2573.0       5.0   *
     28. SW MID S             *        91.0     2503.0       5.0   *
1
                                                                                                                       PAGE  3
      JOB: Site 5 NoBld PM 2030 - 5NBPM30.DAT                  RUN: Site 5 NoBld PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
```

```
   0.  *   1.0   1.0   1.4   1.6   1.9   1.9   1.1    .0    .0    .0    .1    .1    .1    .1   1.1   1.7   2.6   2.0    .8    .3
   5.  *    .8    .9   1.2   1.6   1.9   1.9   1.0    .0    .0    .0    .0    .1    .0    .0   1.1   1.9   2.8   2.1    .9    .3
  10.  *    .7    .8   1.2   1.7   1.9   1.8   1.0    .0    .0    .0    .0    .0    .0    .0   1.1   1.9   2.7   2.1   1.0    .4
  15.  *    .6    .8   1.2   1.7   1.9   1.8    .9    .0    .0    .0    .0    .0    .0    .0   1.0   2.0   2.7   2.1   1.0    .4
  20.  *    .6    .7   1.2   1.8   1.9   1.8   1.0    .0    .0    .0    .0    .0    .0    .0    .9   2.0   2.6   2.1   1.0    .6
  25.  *    .5    .7   1.2   1.9   2.0   1.7   1.1    .1    .0    .0    .0    .0    .0    .0    .9   2.1   2.5   1.9   1.1    .6
  30.  *    .6    .6   1.1   1.9   2.0   1.5   1.1    .1    .0    .0    .0    .0    .0    .0    .8   2.2   2.5   1.8   1.0    .6
  35.  *    .4    .6   1.0   1.8   1.9   1.5   1.1    .1    .1    .1    .0    .0    .0    .0    .8   2.2   2.4   1.7    .9    .6
  40.  *    .4    .5    .9   1.9   1.9   1.5   1.2    .1    .1    .1    .0    .0    .0    .0    .8   2.2   2.4   1.6    .8    .7
  45.  *    .2    .3    .8   1.8   1.9   1.3   1.3    .1    .1    .2    .1    .0    .0    .0    .7   2.1   2.3   1.4    .8    .6
  50.  *    .2    .3    .7   1.7   1.8   1.3   1.2    .1    .2    .2    .2    .0    .0    .0    .7   2.1   2.2   1.4    .8    .7
  55.  *    .1    .3    .6   1.5   1.6   1.4   1.3    .2    .3    .4    .3    .0    .0    .0    .7   2.1   2.2   1.3    .8    .8
  60.  *    .1    .2    .4   1.3   1.5   1.2   1.2    .4    .6    .7    .7    .0    .0    .0    .7   2.1   2.2   1.4   1.0   1.0
  65.  *    .0    .1    .3   1.0   1.3   1.2   1.1    .6    .8   1.0   1.0    .0    .0    .0    .7   2.2   2.2   1.6   1.2    .9
  70.  *    .0    .0    .1    .8   1.0    .8   1.0    .7   1.3   1.5   1.5    .2    .0    .0    .7   2.2   2.6   1.8   1.2   1.7
  75.  *    .0    .0    .1    .6    .7    .7    .7   1.0   1.7   2.0   2.0    .4    .1    .0    .7   2.4   2.7   1.9   1.6   2.0
  80.  *    .0    .0    .0    .3    .4    .5    .5   1.0   1.9   2.5   2.3    .6    .2    .0    .8   2.4   2.9   1.9   1.6   2.0
  85.  *    .0    .0    .0    .1    .3    .3    .3   1.2   2.3   2.8   2.7    .7    .2    .2   1.1   2.6   3.1   2.0   1.4   2.0
  90.  *    .0    .0    .0    .1    .2    .2    .2   1.1   2.5   3.0   2.9    .9    .4    .2   1.1   2.8   3.2   1.8   1.7   2.3
  95.  *    .0    .0    .0    .0    .1    .1    .1   1.0   2.7   3.0   2.8   1.1    .5    .2   1.3   2.9   3.3   1.8   1.6   2.7
 100.  *    .0    .0    .1    .0    .1    .1    .1   1.0   2.7   3.0   2.8   1.2    .6    .2   1.4   2.8   3.3   1.6   1.5   2.8
 105.  *    .1    .0    .1    .0    .0    .1    .1   1.0   2.8   3.0   2.6   1.3    .6    .4   1.5   2.9   3.2   1.6   1.7   2.9
 110.  *    .1    .1    .1    .0    .0    .0    .0   1.0   2.7   2.9   2.6   1.3    .6    .4   1.8   3.2   3.1   1.6   1.7   2.9
 115.  *    .1    .1    .1    .0    .0    .0    .0   1.0   2.8   2.8   2.5   1.2    .8    .4   2.0   3.2   2.8   1.5   2.1   2.9
 120.  *    .1    .1    .1    .0    .0    .0    .0   1.0   2.8   2.8   2.3   1.2    .9    .4   2.1   3.2   3.0   1.5   2.2   3.1
 125.  *    .1    .1    .1    .0    .0    .0    .0   1.1   2.7   2.7   2.1   1.2    .9    .5   2.3   3.3   2.7   1.8   2.5   3.2
 130.  *    .1    .1    .2    .0    .0    .0    .0   1.1   2.7   2.7   1.9   1.1    .9    .5   2.7   3.2   2.6   1.8   2.7   3.1
 135.  *    .2    .2    .3    .2    .0    .0    .0   1.1   2.5   2.5   1.9   1.2    .9    .6   2.7   3.4   2.6   2.2   2.8   3.0
 140.  *    .5    .5    .5    .3    .0    .0    .0   1.2   2.5   2.5   1.8   1.2   1.0    .8   3.0   3.4   2.7   2.6   2.9   3.1
 145.  *   1.0    .9   1.0    .5    .1    .0    .0   1.3   2.5   2.6   1.9   1.4   1.1    .9   3.3   3.5   3.1   2.7   3.0   2.8
 150.  *   1.6   1.6   1.9   1.2    .2    .1    .1   1.5   2.6   2.7   2.3   1.9   1.6   1.4   3.4   3.4   3.0   3.0   3.0   2.7
 155.  *   2.5   2.3   2.6   2.0    .6    .2    .1   1.8   2.8   3.3   2.8   2.3   1.9   1.5   3.0   3.0   3.1   2.8   2.8   2.6
 160.  *   3.3   3.3   3.5   2.6    .9    .6    .3   2.2   3.2   3.6   3.2   2.7   2.2   2.2   2.6   2.9   2.6   2.5   2.3   2.5
 165.  *   4.0   3.9   4.2   3.4   1.4    .8    .5   2.5   3.4   4.2   3.6   3.0   2.4   2.4   2.1   2.2   2.3   2.2   2.1   2.0
 170.  *   4.5   4.4   4.7   3.7   1.6    .9    .7   2.9   3.4   4.1   3.5   2.8   2.3   2.5   1.6   1.8   1.8   1.7   1.8   1.9
 175.  *   4.5   4.4   4.8   3.7   1.7   1.0    .8   3.0   3.7   4.2   3.2   2.4   2.3   2.2    .9   1.2   1.2   1.4   1.6   1.8
 180.  *   4.5   4.5   4.7   3.8   1.8   1.2    .9   3.1   3.8   4.2   3.0   2.1   2.2   2.2    .7    .9   1.0   1.2   1.5   1.8
 185.  *   4.3   4.1   4.4   3.5   1.8   1.2    .9   3.2   3.7   4.1   2.6   1.7   1.7   2.1    .5    .6    .8   1.1   1.5   1.8
 190.  *   4.0   4.0   4.2   3.2   1.7   1.1    .9   3.5   3.6   3.8   2.2   1.5   2.0   2.1    .3    .4    .6   1.0   1.4   1.9
 195.  *   3.9   3.9   4.0   3.0   1.8   1.1   1.0   3.6   3.8   3.6   1.8   1.5   1.9   2.1    .3    .4    .7   1.1   1.4   1.9
 200.  *   3.7   3.7   3.8   2.8   1.6   1.1    .9   3.6   3.7   3.4   1.9   1.4   1.9   2.1    .4    .5    .7   1.1   1.4   1.9
 205.  *   3.5   3.4   3.6   2.5   1.6   1.1    .9   3.6   3.7   3.2   1.7   1.4   2.0   2.0    .4    .5    .7   1.1   1.4   2.0
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                                                                                                                     PAGE  4
      JOB: Site 5 NoBld PM 2030 - 5NBPM30.DAT                   RUN: Site 5 NoBld PM 2030

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *   3.3   3.4   3.4   2.3   1.5   1.0   1.0   3.8   3.6   3.1   1.6   1.6   2.1   2.0    .4    .5    .7   1.2   1.6   2.0
 215.  *   3.2   3.2   3.4   2.2   1.4    .9   1.0   3.9   3.5   2.7   1.6   1.8   2.1   1.8    .4    .6    .8   1.3   1.6   2.1
 220.  *   3.3   3.1   3.2   1.9   1.3   1.0    .9   3.9   3.4   2.6   1.6   2.0   2.0   1.7    .4    .5    .8   1.4   1.6   2.1
 225.  *   3.1   3.1   3.2   1.6   1.3   1.0    .9   3.8   3.4   2.4   1.7   2.0   2.0   1.5    .4    .5    .9   1.4   1.7   2.2
 230.  *   3.0   3.0   3.1   1.5   1.3    .9    .9   3.5   3.2   2.4   1.8   2.2   2.1   1.4    .4    .5    .8   1.4   1.7   2.3
 235.  *   3.0   3.0   3.1   1.4   1.2   1.1   1.1   3.7   3.0   2.3   1.8   2.2   2.0   1.2    .3    .5    .7   1.3   1.8   2.4
 240.  *   3.1   3.1   3.1   1.4   1.3   1.0   1.0   3.4   2.8   2.0   1.9   2.2   2.0   1.1    .3    .4    .7   1.3   1.7   2.3
 245.  *   3.1   3.1   3.2   1.4   1.2   1.2   1.2   3.3   2.5   2.1   2.1   2.3   1.9   1.0    .2    .3    .6   1.3   1.6   2.3
 250.  *   3.1   3.1   3.4   1.5   1.4   1.4   1.5   2.6   2.2   1.7   1.5   2.2   1.9    .9    .1    .3    .5   1.2   1.5   2.2
 255.  *   3.1   3.2   3.4   1.9   1.6   1.8   1.7   2.0   1.6   1.4   1.5   2.1   1.8    .9    .1    .2    .4    .9   1.4   1.9
 260.  *   3.1   3.1   3.3   2.2   1.8   2.0   2.1   1.5   1.4   1.4   1.5   1.9   1.6    .8    .0    .1    .3    .7   1.0   1.6
 265.  *   3.2   3.2   3.5   2.5   2.0   1.9   2.3   1.3   1.2   1.1   1.3   1.8   1.5    .8    .0    .0    .2    .5    .7   1.2
 270.  *   3.3   3.2   3.6   2.4   2.0   2.3   2.5   1.0   1.0   1.0   1.2   1.8   1.4    .8    .0    .0    .1    .3    .5    .9
 275.  *   3.3   3.5   3.7   2.4   2.0   2.2   2.4    .8    .9   1.0   1.2   1.7   1.4    .8    .0    .0    .0    .1    .3    .5
 280.  *   3.4   3.6   3.9   2.1   2.1   2.4   2.6    .6    .7    .9   1.3   1.7   1.3    .9    .0    .0    .0    .1    .1    .3
 285.  *   3.6   3.6   3.8   2.1   1.8   2.4   2.7    .5    .7    .8   1.4   1.7   1.2    .9    .0    .0    .0    .0    .1    .2
 290.  *   3.7   3.8   3.7   2.2   1.9   2.4   2.5    .4    .6    .8   1.5   1.8   1.0   1.0    .0    .0    .0    .0    .0    .1
 295.  *   3.8   3.8   3.5   2.0   2.1   2.5   2.4    .5    .5    .9   1.7   1.8   1.2   1.0    .0    .0    .0    .0    .0    .0
 300.  *   4.0   3.7   3.6   2.0   2.1   2.5   2.4    .4    .4    .8   1.7   1.7   1.1   1.0    .0    .0    .0    .0    .0    .0
 305.  *   4.0   3.9   3.4   1.8   2.2   2.3   2.4    .3    .5    .8   1.7   1.6   1.1   1.1    .0    .0    .0    .0    .0    .0
 310.  *   4.1   3.9   3.2   2.1   2.3   2.3   2.2    .3    .4    .8   1.6   1.6   1.2   1.2    .0    .0    .0    .0    .0    .0
 315.  *   4.1   3.8   3.2   2.1   2.5   2.3   2.2    .3    .4    .6   1.5   1.4   1.1   1.2    .0    .0    .1    .0    .0    .0
 320.  *   4.1   3.8   3.0   2.3   2.6   2.2   2.2    .3    .3    .6   1.4   1.4   1.1   1.2    .0    .1    .2    .0    .0    .0
 325.  *   4.1   3.5   3.0   2.3   2.5   2.3   2.0    .2    .3    .5   1.4   1.4   1.1   1.2    .1    .2    .3    .1    .0    .0
 330.  *   3.8   3.5   3.0   2.2   2.4   2.3   1.9    .0    .3    .5   1.2   1.3   1.1   1.1    .3    .3    .6    .5    .0    .0
 335.  *   3.3   3.0   2.7   2.3   2.3   2.1   1.7    .0    .2    .4    .9   1.1   1.0   1.0    .4    .6    .9    .7    .0    .0
 340.  *   2.9   2.6   2.6   2.0   2.1   1.9   1.5    .0    .0    .3    .8    .8    .7    .7    .6    .8   1.4    .9    .2    .0
 345.  *   2.3   2.0   2.1   1.9   2.0   1.9   1.4    .0    .0    .2    .5    .7    .5    .5    .8   1.1   1.8   1.3    .3    .0
 350.  *   1.7   1.7   1.8   1.7   1.9   1.9   1.3    .0    .0    .0    .3    .5    .4    .3   1.0   1.3   2.1   1.6    .4    .3
 355.  *   1.3   1.2   1.4   1.5   1.9   1.9   1.2    .0    .0    .0    .1    .3    .1    .1   1.0   1.5   2.4   1.9    .5    .3
 360.  *   1.0   1.0   1.4   1.6   1.9   1.9   1.1    .0    .0    .0    .1    .1    .1    .1   1.1   1.7   2.6   2.0    .8    .3
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   4.5   4.5   4.8   3.8   2.6   2.5   2.7   3.9   3.8   4.2   3.6   3.0   2.4   2.5   3.4   3.5   3.3   3.0   3.0   3.2
 DEGR. *  170   180   175   180   320   295   285   215   180   175   165   165   165   170   150   145    95   150   145   125

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                                                                                                                     PAGE  5
      JOB: Site 5 NoBld PM 2030 - 5NBPM30.DAT                   RUN: Site 5 NoBld PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .5   1.7   2.0   2.7   2.1   1.9   2.1   2.6
   5.  *    .5   1.7   2.0   2.7   1.9   1.9   2.4   2.8
  10.  *    .5   1.8   2.2   2.7   1.6   1.9   2.6   2.8
```

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  15.  *     .6   1.8   2.3   2.6   1.5   1.7   2.7   3.0
  20.  *     .7   1.7   2.3   2.7   1.6   2.0   2.7   3.1
  25.  *     .8   1.9   2.3   2.6   1.5   2.1   2.9   3.2
  30.  *     .8   2.0   2.3   2.6   1.6   2.4   2.9   3.0
  35.  *    1.0   2.0   2.4   2.8   1.7   2.4   2.9   2.9
  40.  *    1.0   2.0   2.4   2.6   1.9   2.5   2.9   2.8
  45.  *    1.1   2.1   2.5   2.8   2.2   2.6   2.8   2.7
  50.  *    1.3   2.2   2.5   2.9   2.4   2.7   2.8   2.6
  55.  *    1.6   2.2   2.5   3.0   2.8   2.6   2.6   2.4
  60.  *    2.2   2.2   2.4   2.9   2.7   2.6   2.5   2.3
  65.  *    2.6   2.0   2.5   2.9   2.7   2.6   2.4   2.3
  70.  *    3.4   1.8   2.2   2.7   2.5   2.5   2.5   2.3
  75.  *    4.1   1.6   1.8   2.4   2.2   2.3   2.4   2.3
  80.  *    4.2   1.3   1.6   1.8   1.9   2.2   2.2   2.2
  85.  *    4.6   1.0   1.5   1.5   1.6   2.1   2.2   2.2
  90.  *    4.7   1.0   1.1   1.3   1.4   2.2   2.3   2.2
  95.  *    4.7    .9   1.0   1.3   1.4   2.3   2.3   2.3
 100.  *    4.7    .9    .8   1.1   1.8   2.3   2.3   2.4
 105.  *    4.4    .7    .8   1.1   1.7   2.4   2.4   2.5
 110.  *    4.3    .7    .9   1.1   1.8   2.4   2.4   2.3
 115.  *    4.0    .8   1.0   1.2   2.0   2.5   2.5   2.4
 120.  *    3.9    .8    .9   1.2   2.2   2.7   2.7   2.6
 125.  *    3.7    .9    .9   1.4   2.3   2.7   2.8   2.6
 130.  *    3.5    .9   1.0   1.5   2.6   2.8   2.8   2.7
 135.  *    3.3    .9   1.1   1.6   2.7   3.1   3.0   2.9
 140.  *    3.2    .8   1.0   1.5   2.7   3.0   3.0   3.0
 145.  *    3.0    .7   1.0   1.5   2.8   3.3   3.3   3.2
 150.  *    3.0    .7    .9   1.4   2.7   3.2   3.2   3.2
 155.  *    2.9    .6    .8   1.1   2.5   2.8   3.1   2.9
 160.  *    2.6    .3    .6    .9   2.1   2.5   2.5   2.5
 165.  *    2.4    .2    .2    .6   1.4   1.9   1.9   1.9
 170.  *    2.3    .1    .1    .3   1.0   1.2   1.2   1.2
 175.  *    2.2    .0    .0    .1    .5    .8    .8    .8
 180.  *    2.2    .0    .0    .0    .2    .4    .4    .4
 185.  *    2.3    .0    .0    .0    .1    .2    .2    .2
 190.  *    2.3    .0    .0    .0    .0    .1    .1    .1
 195.  *    2.4    .0    .0    .0    .0    .1    .1    .1
 200.  *    2.4    .0    .0    .0    .0    .1    .1    .1
 205.  *    2.5    .0    .0    .0    .0    .1    .1    .1
1
                                                                                                                 PAGE  6
      JOB: Site 5 NoBld PM 2030 - 5NBPM30.DAT                    RUN: Site 5 NoBld PM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    2.6    .0    .0    .0    .0    .1    .1    .1
 215.  *    2.6    .1    .0    .0    .0    .1    .1    .1
 220.  *    2.8    .1    .1    .0    .0    .0    .0    .0
 225.  *    3.0    .1    .1    .0    .0    .0    .0    .0
 230.  *    3.3    .1    .1    .0    .0    .0    .0    .0
 235.  *    3.4    .2    .1    .2    .1    .0    .0    .0
 240.  *    3.6    .2    .3    .3    .2    .0    .0    .0
 245.  *    3.8    .3    .4    .4    .4    .0    .0    .0
 250.  *    4.0    .5    .6    .8    .8    .1    .0    .0
 255.  *    4.1    .6    .9   1.1   1.1    .2    .0    .0
 260.  *    3.9    .8   1.3   1.6   1.5    .3    .1    .0
 265.  *    3.6   1.1   1.6   2.1   2.1    .4    .2    .1
 270.  *    3.2   1.4   1.8   2.4   2.4    .7    .3    .1
 275.  *    2.6   1.6   2.0   2.6   2.5    .8    .4    .2
 280.  *    2.0   1.7   2.0   2.6   2.6    .9    .5    .3
 285.  *    1.5   1.7   2.0   2.6   2.6    .9    .6    .4
 290.  *    1.1   1.7   2.0   2.5   2.3   1.0    .7    .5
 295.  *     .8   1.6   1.9   2.4   2.1   1.1    .8    .5
 300.  *     .6   1.6   1.9   2.2   2.0   1.1    .7    .5
 305.  *     .5   1.6   1.8   2.2   2.0   1.0    .6    .5
 310.  *     .5   1.5   1.8   2.1   1.9    .9    .6    .5
 315.  *     .4   1.5   1.6   2.1   1.8    .9    .6    .5
 320.  *     .4   1.4   1.6   2.0   1.7    .9    .7    .6
 325.  *     .3   1.4   1.7   1.9   1.6    .9    .9    .6
 330.  *     .3   1.4   1.7   1.9   1.8   1.3   1.0    .9
 335.  *     .2   1.4   1.7   1.9   2.0   1.4   1.6   1.1
 340.  *     .2   1.4   1.7   2.0   2.1   1.8   1.6   1.5
 345.  *     .2   1.4   1.7   2.2   2.3   1.9   2.0   1.9
 350.  *     .2   1.4   1.9   2.3   2.4   1.9   2.0   2.3
 355.  *     .4   1.6   1.9   2.6   2.3   2.1   2.4   2.2
 360.  *     .5   1.7   2.0   2.7   2.1   1.9   2.1   2.6
 ------*------------------------------------------------
 MAX   *    4.7   2.2   2.5   3.0   2.8   3.3   3.3   3.2
 DEGR. *    95    55    65    55    55   145   145   145

 THE HIGHEST CONCENTRATION IS    4.80 PPM AT  175 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    4.70 PPM AT   95 DEGREES FROM REC21.
 THE 3RD HIGHEST CONCENTRATION IS    4.50 PPM AT  170 DEGREES FROM REC1 .
```

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Site 5 BD1/2 AM 2014 - 5B1AM14.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 BD1/2 AM 2014                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    259311.4  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    208611.4  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       120        79       2.0 2086  102.2 1551 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     50711.4  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       120       105       2.0  507  102.2 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    138811.4  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    201211.4  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    178611.4  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       120        83       2.0 1786  102.2 1673 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     22611.4  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
```

```
       120       109       2.0  226  102.2 1700 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    459211.4  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.     43411.4  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.     43411.4  0.  68   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       120       102       2.0  434  102.2 1706 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    145511.4  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    394211.4  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    394211.4  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       120        82       2.0 3942  102.2 1694 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.    154611.4  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.    154611.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                 PAGE  1

      JOB: Site 5 BD1/2 AM 2014 - 5B1AM14.DAT                   RUN: Site 5 BD1/2 AM 2014
      DATE: 05/06/2009   TIME: 05:30:08.60


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*---------------------------------------*---------------------------------------------------------------
       1. NB        Rt16 aprch*   404.0    1854.0     192.0    2439.0 *    622.   340. AG  2593.  11.4    .0 56.0
       2. NB        Rt16 thru *   200.0    2443.0      84.0    2790.0 *    366.   342. AG  2086.  11.4    .0 56.0
       3. NB        Rt16 thru *   113.0    2703.0     935.9     246.5 *   2591.   161. AG   541. 100.0    .0 36.0 1.45 131.6
       4. NB        Rt16 left *   176.0    2437.0      56.0    2781.0 *    364.   341. AG   507.  11.4    .0 44.0
       5. NB        Rt16 left *    88.0    2690.0     484.5    1547.9 *   1209.   161. AG   480. 100.0    .0 24.0 1.63  61.4
       6. NB        Rt16 depar*    85.0    2793.0    -247.0    3736.0 *   1000.   341. AG  1388.  11.4    .0 32.0
       7. SB        Rt16 aprch*  -294.0    3720.0     -67.0    3082.0 *    677.   160. AG  2012.  11.4    .0 56.0
       8. SB        Rt16 thru *   -72.0    3076.0      21.0    2801.0 *    290.   161. AG  1786.  11.4    .0 56.0
       9. SB        Rt16 thru *     2.0    2856.0    -548.9    4499.8 *   1734.   341. AG   569. 100.0    .0 36.0 1.29  88.1
      10. SB        Rt16 left *   -47.0    3080.0      41.0    2815.0 *    279.   162. AG   226.  11.4    .0 44.0
      11. SB        Rt16 left *    25.0    2864.0     -57.4    3111.2 *    261.   342. AG   498. 100.0    .0 24.0 1.14  13.2
      12. SB        Rt16 depar*    21.0    2799.0     357.0    1826.0 *   1029.   161. AG  4592.  11.4    .0 56.0
      13. EB        Rt27 aprch*  -320.0    2645.0    -111.0    2740.0 *    230.    66. AG   434.  11.4    .0 56.0
      14. EB        Rt27 aprch*  -111.0    2740.0      56.0    2763.0 *    169.    82. AG   434.  11.4    .0 68.0
      15. EB        Rt27 aprch*    -5.0    2754.0     -64.7    2746.3 *     60.   263. AG   932. 100.0    .0 48.0  .54   3.1
      16. EB        Rt27 depar*    67.0    2763.0     996.0    3083.0 *    983.    71. AG  1455.  11.4    .0 56.0
      17. WB        Rt27 aprch*   981.0    3134.0     454.0    2944.0 *    560.   250. AG  3942.  11.4    .0 56.0
      18. WB        Rt27 aprch*   454.0    2944.0      52.0    2807.0 *    425.   251. AG  3942.  11.4    .0 68.0
      19. WB        Rt27 aprch*   120.0    2830.0    5460.5    4645.8 *   5641.    71. AG   749. 100.0    .0 48.0 2.06 286.5
      20. WB        Rt27 depar*    50.0    2805.0     -90.0    2772.0 *    144.   257. AG  1546.  11.4    .0 32.0
      21. WB        Rt27 depar*   -90.0    2772.0    -337.0    2669.0 *    268.   247. AG  1546.  11.4    .0 32.0
1
                                                                                                                     PAGE  2
      JOB: Site 5 BD1/2 AM 2014 - 5B1AM14.DAT                   RUN: Site 5 BD1/2 AM 2014
      DATE: 05/06/2009   TIME: 05:30:08.60

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*----------------------------------------------------------------------------------

       3. NB        Rt16 thru *     120       79       2.0      2086       1551     102.20      1        3
       5. NB        Rt16 left *     120      105       2.0       507       1700     102.20      1        3
       9. SB        Rt16 thru *     120       83       2.0      1786       1673     102.20      1        3
      11. SB        Rt16 left *     120      109       2.0       226       1700     102.20      1        3
      15. EB        Rt27 aprch*     120      102       2.0       434       1706     102.20      1        3
      19. WB        Rt27 aprch*     120       82       2.0      3942       1694     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z      *
     -------------------------*------------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0   *
      2. SE 164 S             *       183.0     2590.0       5.0   *
      3. SE 82 S              *       154.0     2668.0       5.0   *
      4. SE CNR               *       140.0     2741.0       5.0   *
      5. SE 82 E              *       205.0     2774.0       5.0   *
      6. SE 164 E             *       283.0     2802.0       5.0   *
      7. SE MID E             *       356.0     2828.0       5.0   *
      8. NE MID E             *       323.0     2935.0       5.0   *
      9. NE 164 E             *       235.0     2907.0       5.0   *
     10. NE 82 E              *       157.0     2881.0       5.0   *
     11. NE CNR               *        95.0     2864.0       5.0   *
     12. NE 82 N              *        65.0     2927.0       5.0   *
     13. NE 164 N             *        40.0     3006.0       5.0   *
     14. NE MID N             *         8.0     3095.0       5.0   *
     15. NW MID N             *       -95.0     3048.0       5.0   *
     16. NW 164 N             *       -68.0     2971.0       5.0   *
     17. NW 82 N              *       -41.0     2894.0       5.0   *
     18. NW CNR               *       -31.0     2829.0       5.0   *
     19. NW 82 W              *       -91.0     2798.0       5.0   *
     20. NW 164 W             *      -165.0     2767.0       5.0   *
     21. NW MID W             *      -237.0     2736.0       5.0   *
     22. SW MID W             *      -218.0     2665.0       5.0   *
     23. SW 164 W             *      -153.0     2690.0       5.0   *
     24. SW 82 W              *       -77.0     2713.0       5.0   *
     25. SW CNR               *         6.0     2723.0       5.0   *
     26. SW 82 S              *        40.0     2651.0       5.0   *
     27. SW 164 S             *        68.0     2573.0       5.0   *
     28. SW MID S             *        91.0     2503.0       5.0   *
1
                                                                                                                     PAGE  3
      JOB: Site 5 BD1/2 AM 2014 - 5B1AM14.DAT                   RUN: Site 5 BD1/2 AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
  ------*-------------------------------------------------------------------------------------------------------------------------
```

```
   0.  *   1.3   1.4   1.7   2.3   2.6   2.6   2.6    .1    .0    .0    .2    .2    .2    .2   3.7   4.2   4.5   3.7   1.7    .9
   5.  *   1.1   1.2   1.6   2.2   2.6   2.7   2.7    .1    .1    .1    .0    .1    .0    .0   3.5   4.2   4.4   3.6   1.8   1.1
  10.  *   1.0   1.3   1.5   2.2   2.6   2.7   2.7    .1    .1    .1    .0    .0    .0    .0   3.4   4.1   4.4   3.6   1.8   1.1
  15.  *   1.0   1.3   1.6   2.3   2.7   2.7   2.8    .1    .1    .1    .1    .0    .0    .0   3.3   4.1   4.2   3.4   1.8   1.1
  20.  *   1.1   1.3   1.6   2.5   2.7   2.7   2.7    .1    .1    .1    .1    .0    .0    .0   3.3   3.9   4.1   3.2   1.8   1.1
  25.  *   1.0   1.3   1.6   2.5   2.9   2.9   3.0    .2    .1    .1    .1    .0    .0    .0   3.1   3.9   3.8   3.0   1.8   1.2
  30.  *   1.1   1.3   1.8   2.6   2.9   3.0   2.9    .2    .1    .1    .1    .0    .0    .0   3.1   3.7   3.7   2.9   1.7   1.1
  35.  *   1.0   1.5   1.9   2.6   3.0   3.0   3.1    .3    .2    .2    .1    .0    .0    .0   3.1   3.6   3.7   2.7   1.6   1.1
  40.  *   1.0   1.3   1.9   2.8   3.1   3.2   3.2    .3    .3    .3    .1    .0    .0    .0   3.1   3.5   3.6   2.5   1.4   1.1
  45.  *    .9   1.2   1.8   2.9   3.3   3.3   3.4    .5    .4    .4    .3    .0    .0    .0   3.2   3.3   3.5   2.3   1.5   1.1
  50.  *    .9   1.3   1.9   3.0   3.3   3.4   3.3    .8    .8    .7    .5    .0    .0    .0   3.1   3.3   3.4   2.2   1.6   1.3
  55.  *    .8   1.1   1.7   3.1   3.5   3.5   3.5   1.3   1.3   1.3   1.0    .1    .0    .0   3.3   3.3   3.4   2.4   1.8   1.6
  60.  *    .8   1.1   1.6   3.0   3.3   3.4   3.5   2.3   2.2   2.2   1.9    .4    .1    .1   3.4   3.4   3.8   2.6   2.2   2.1
  65.  *    .5    .9   1.4   2.6   3.1   3.1   3.1   3.5   3.3   3.2   2.7    .8    .3    .2   3.5   3.6   4.3   3.4   2.8   2.8
  70.  *    .4    .6   1.0   2.2   2.5   2.5   2.4   4.6   4.4   4.4   3.8   1.3    .6    .3   3.6   4.0   5.0   3.8   3.4   3.1
  75.  *    .2    .3    .7   1.5   1.8   1.9   1.8   5.4   5.1   5.1   4.6   1.8    .9    .6   3.8   4.2   5.3   4.0   3.5   3.7
  80.  *    .1    .2    .3    .9   1.1   1.1   1.2   5.9   5.7   5.6   5.1   2.1   1.2    .7   4.0   4.6   5.3   4.1   3.7   3.6
  85.  *    .0    .1    .1    .5    .6    .6    .6   5.9   5.7   5.7   5.1   2.3   1.4    .9   4.3   4.7   5.5   3.9   3.5   3.5
  90.  *    .0    .0    .0    .2    .2    .2    .2   5.8   5.5   5.6   5.1   2.4   1.5   1.0   4.4   4.7   5.5   3.5   3.2   3.2
  95.  *    .0    .0    .0    .0    .1    .1    .1   5.5   5.2   5.1   4.7   2.3   1.4   1.1   4.4   4.8   5.4   3.2   2.8   2.8
 100.  *    .0    .0    .1    .0    .1    .1    .1   5.1   4.9   4.9   4.4   2.2   1.4   1.0   4.4   4.9   5.1   2.8   2.9   2.9
 105.  *    .1    .0    .1    .0    .0    .0    .0   4.8   4.7   4.6   4.1   2.2   1.5   1.1   4.7   5.0   4.9   2.6   2.8   2.9
 110.  *    .1    .1    .1    .0    .0    .0    .0   4.6   4.4   4.4   3.8   2.0   1.4   1.1   4.7   4.9   4.7   2.5   3.2   2.7
 115.  *    .1    .1    .1    .0    .0    .0    .0   4.4   4.2   4.2   3.7   2.0   1.3   1.1   4.6   4.9   4.5   2.3   3.6   2.6
 120.  *    .1    .1    .1    .0    .0    .0    .0   4.2   4.1   4.1   3.5   2.0   1.3   1.1   4.6   4.8   4.2   2.7   3.7   2.6
 125.  *    .1    .1    .1    .0    .0    .0    .0   4.0   3.9   3.9   3.2   1.9   1.3    .9   4.7   5.0   4.2   2.9   4.1   2.7
 130.  *    .1    .1    .2    .0    .0    .0    .0   3.8   3.8   3.7   3.1   1.8   1.3    .9   4.9   4.9   4.0   3.3   4.3   2.4
 135.  *    .2    .2    .3    .2    .0    .0    .0   3.7   3.7   3.7   2.9   1.8   1.2    .9   5.0   4.8   4.0   3.8   4.4   2.4
 140.  *    .6    .5    .7    .3    .0    .0    .0   3.7   3.6   3.5   2.8   1.9   1.2   1.1   5.1   4.9   4.3   4.2   4.4   2.4
 145.  *   1.1   1.0   1.1    .7    .1    .0    .0   3.7   3.7   3.7   3.2   2.2   1.6   1.4   5.3   5.2   4.7   4.6   4.3   2.2
 150.  *   1.8   1.8   2.0   1.2    .3    .1    .0   3.7   3.8   3.9   3.4   2.7   2.0   1.9   5.2   5.1   4.7   4.9   3.9   1.9
 155.  *   2.8   2.6   3.1   2.2    .6    .1    .1   3.9   4.1   4.5   4.0   3.4   2.4   2.3   4.8   4.7   4.7   4.7   3.3   1.6
 160.  *   3.7   3.7   4.2   3.1   1.0    .6    .2   4.1   4.4   5.1   4.6   3.8   3.1   3.0   4.1   3.9   4.3   4.4   2.6   1.3
 165.  *   4.6   4.7   5.2   3.9   1.6    .8    .4   4.5   4.6   5.6   5.2   4.3   3.3   3.3   3.3   3.3   3.5   3.6   2.0   1.0
 170.  *   5.4   5.3   5.8   4.8   1.9   1.0    .7   4.5   4.8   5.9   5.3   4.1   3.5   3.6   2.4   2.4   2.8   3.1   1.3    .7
 175.  *   5.9   5.7   6.0   4.8   2.3   1.4    .9   4.6   5.1   6.1   5.1   3.8   3.7   3.4   1.4   1.5   2.1   2.4   1.1    .6
 180.  *   5.9   5.9   6.1   5.0   2.5   1.6   1.2   4.9   5.2   5.9   4.5   3.6   3.3   3.4    .9   1.1   1.6   2.1    .7    .6
 185.  *   5.6   5.5   5.6   4.6   2.6   1.7   1.3   5.0   5.5   5.9   4.1   3.0   3.0   3.5    .5    .7   1.0   1.8    .7    .6
 190.  *   5.4   5.3   5.5   4.5   2.4   1.8   1.2   5.1   5.4   5.7   3.8   2.4   3.0   3.3    .3    .5   1.1   1.8    .7    .7
 195.  *   5.2   4.9   5.1   4.0   2.4   1.7   1.4   5.2   5.6   5.5   3.3   2.5   2.7   3.1    .2    .3    .7   1.6    .7    .7
 200.  *   4.9   4.8   4.9   3.7   2.4   1.7   1.3   5.4   5.3   5.2   3.2   2.3   2.8   3.1    .2    .3    .6   1.4    .8    .7
 205.  *   4.8   4.6   4.8   3.5   2.3   1.7   1.3   5.5   5.4   4.9   3.1   2.2   3.0   3.0    .2    .2    .5   1.4    .8    .7
1
                                                                                                                      PAGE  4
      JOB: Site 5 BD1/2 AM 2014 - 5B1AM14.DAT                  RUN: Site 5 BD1/2 AM 2014

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
 210.  *   4.6   4.5   4.6   3.1   2.3   1.4   1.3   5.5   5.4   4.7   2.7   2.3   3.0   2.9    .2    .2    .5   1.2    .8    .8
 215.  *   4.3   4.2   4.3   2.8   2.0   1.4   1.3   5.6   5.3   4.5   2.8   2.5   2.8   2.9    .1    .1    .3   1.0    .7    .8
 220.  *   4.2   4.1   4.3   2.7   1.9   1.3   1.3   5.7   5.2   4.2   2.7   2.5   2.7   2.8    .0    .1    .2   1.0    .7    .8
 225.  *   4.1   4.0   4.1   2.4   1.8   1.4   1.1   5.7   5.1   3.8   2.6   2.4   2.6   2.6    .0    .1    .2   1.0    .8    .8
 230.  *   4.0   4.0   4.1   2.1   1.8   1.2   1.1   5.6   4.9   3.8   2.8   2.5   2.5   2.4    .0    .1    .2    .7    .8    .8
 235.  *   4.0   4.0   4.1   2.0   1.5   1.2   1.2   5.4   4.7   3.4   2.5   2.7   2.5   2.4    .0    .0    .1    .7    .8    .7
 240.  *   4.0   4.0   4.1   1.8   1.5   1.3   1.3   5.1   4.3   3.1   2.3   2.6   2.4   2.4    .0    .0    .1    .5    .7    .7
 245.  *   4.1   4.0   4.2   1.9   1.4   1.4   1.4   4.8   3.8   2.8   2.0   2.7   2.4   2.6    .0    .0    .1    .5    .6    .5
 250.  *   4.2   4.1   4.2   2.0   1.7   1.5   1.6   4.0   3.0   2.3   1.9   2.7   2.4   2.5    .0    .0    .0    .3    .4    .3
 255.  *   4.2   4.1   4.2   2.0   1.8   1.9   1.9   3.2   2.5   2.0   1.6   2.6   2.4   2.6    .0    .0    .0    .2    .3    .2
 260.  *   4.0   4.0   4.2   2.2   1.9   2.0   2.2   2.4   1.9   1.8   1.7   2.6   2.4   2.5    .0    .0    .0    .1    .2    .2
 265.  *   4.0   4.0   4.1   2.3   1.9   2.4   3.0   1.8   1.5   1.4   1.5   2.6   2.4   2.4    .0    .0    .0    .1    .1    .1
 270.  *   4.0   4.0   4.1   2.4   2.1   2.7   3.1   1.5   1.4   1.4   1.6   2.6   2.4   2.4    .0    .0    .0    .0    .1    .1
 275.  *   4.0   4.1   4.1   2.5   2.2   2.8   3.2   1.2   1.4   1.5   1.9   2.7   2.4   2.4    .0    .0    .0    .0    .0    .0
 280.  *   4.1   4.1   4.1   2.7   2.4   3.0   3.4   1.1   1.2   1.5   2.0   2.7   2.6   2.3    .0    .0    .0    .0    .0    .0
 285.  *   4.2   4.4   4.3   2.6   2.4   3.2   3.5   1.1   1.2   1.5   2.1   2.7   2.7   2.2    .0    .0    .0    .0    .0    .0
 290.  *   4.4   4.4   4.3   2.6   2.8   3.3   3.5   1.0   1.0   1.6   2.3   2.7   2.6   2.1    .0    .1    .1    .0    .0    .0
 295.  *   4.8   4.6   4.3   2.6   3.0   3.6   3.7    .9   1.2   1.6   2.6   2.8   2.6   2.0    .0    .1    .1    .0    .0    .0
 300.  *   4.9   4.8   4.2   2.7   3.0   3.6   3.8    .8   1.3   1.7   2.7   3.0   2.6   2.2    .0    .1    .1    .0    .0    .0
 305.  *   5.0   4.9   4.3   2.8   3.2   3.6   3.5    .8   1.2   1.7   2.7   3.0   2.7   2.2    .0    .1    .1    .0    .0    .0
 310.  *   5.2   4.8   4.0   3.0   3.7   3.7   3.4    .7   1.1   1.6   2.8   3.0   2.7   2.2    .0    .1    .2    .0    .0    .0
 315.  *   5.3   4.9   4.1   3.2   3.7   3.8   3.4    .7   1.1   1.6   2.7   3.1   2.7   2.2    .1    .2    .2    .1    .0    .0
 320.  *   5.5   5.0   4.0   3.5   3.8   3.4   3.3    .7    .9   1.5   2.7   2.9   2.7   2.2    .3    .5    .5    .1    .0    .0
 325.  *   5.4   4.8   4.2   3.6   3.8   3.4   3.2    .5    .7   1.3   2.6   2.9   2.4   2.3    .6    .8    .8    .5    .1    .0
 330.  *   5.3   4.6   4.1   3.7   3.8   3.2   3.1    .4    .6   1.1   2.3   2.7   2.3   2.1   1.1   1.2   1.5    .8    .1    .0
 335.  *   4.8   4.0   3.7   3.6   3.4   3.1   2.8    .2    .5   1.0   2.1   2.4   1.9   1.8   1.8   2.0   2.1   1.5    .4    .1
 340.  *   4.2   3.5   3.4   3.4   3.2   2.8   2.7    .1    .2    .6   1.6   1.7   1.6   1.5   2.4   2.7   3.0   2.1    .6    .2
 345.  *   3.1   2.9   2.9   3.0   3.0   2.7   2.7    .0    .1    .4   1.0   1.2   1.1   1.1   3.0   3.4   3.7   2.8   1.0    .5
 350.  *   2.5   2.1   2.3   2.7   2.7   2.6   2.6    .0    .0    .1    .7    .8    .6    .6   3.3   3.8   4.2   3.2   1.3    .7
 355.  *   1.7   1.7   2.0   2.3   2.6   2.6   2.6    .0    .0    .1    .2    .5    .3    .4   3.6   4.1   4.5   3.5   1.4    .9
 360.  *   1.3   1.4   1.7   2.3   2.6   2.6   2.6    .1    .0    .0    .2    .2    .2    .2   3.7   4.2   4.5   3.7   1.7    .9
 ------*-----------------------------------------------------------------------------------------------------------------------
 MAX   *   5.9   5.9   6.1   5.0   3.8   3.8   3.8   5.9   5.7   6.1   5.3   4.3   3.7   3.6   5.3   5.2   5.5   4.9   4.4   3.7
 DEGR. *  175   180   180   180   320   315   300    80    80   175   170   165   175   170   145   145    85   150   135    75

1
                                                                                                                      PAGE  5
      JOB: Site 5 BD1/2 AM 2014 - 5B1AM14.DAT                  RUN: Site 5 BD1/2 AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .6   1.2   1.4   2.4   4.1   4.1   4.4   4.7
   5.  *    .8   1.3   1.4   2.7   3.7   3.6   4.3   4.8
  10.  *    .8   1.4   1.6   2.9   3.1   3.6   4.4   4.9
```

```
  15.  *    .7   1.4   1.5   3.1   2.9   3.4   4.6   4.9
  20.  *    .8   1.5   1.7   3.3   2.8   3.4   4.8   5.0
  25.  *    .9   1.5   1.8   3.3   2.7   3.6   4.8   4.9
  30.  *    .9   1.4   1.6   3.4   3.0   3.9   5.0   4.9
  35.  *    .8   1.4   1.7   3.6   3.1   4.1   5.1   4.8
  40.  *    .8   1.6   2.0   3.8   3.4   4.4   5.0   4.8
  45.  *   1.0   1.8   2.2   4.2   3.9   4.5   5.2   4.7
  50.  *   1.0   1.9   2.4   4.6   4.3   4.7   5.1   4.6
  55.  *   1.2   2.3   3.0   5.0   4.8   4.9   5.0   4.6
  60.  *   2.0   2.7   3.5   5.3   5.1   5.0   4.9   4.5
  65.  *   2.4   3.1   3.6   5.3   4.9   5.0   4.7   4.5
  70.  *   2.8   2.8   3.4   5.1   4.8   4.9   4.6   4.2
  75.  *   3.5   2.6   3.1   4.4   4.3   4.4   4.2   4.0
  80.  *   3.1   2.0   2.5   3.8   3.6   4.0   3.9   3.8
  85.  *   3.1   1.7   2.2   3.0   3.0   3.8   3.8   3.7
  90.  *   2.6   1.5   1.7   2.3   2.8   3.7   3.7   3.6
  95.  *   2.5   1.2   1.4   2.1   2.5   3.7   3.7   3.7
 100.  *   2.1   1.0   1.3   1.7   2.6   3.7   3.7   3.8
 105.  *   1.9   1.1   1.3   1.8   2.8   3.8   3.8   3.8
 110.  *   1.8   1.2   1.4   1.8   2.9   3.9   3.9   3.9
 115.  *   1.9   1.2   1.5   2.0   3.1   4.2   4.2   4.3
 120.  *   1.9   1.3   1.5   2.0   3.5   4.3   4.4   4.4
 125.  *   2.0   1.3   1.5   2.3   3.8   4.5   4.5   4.5
 130.  *   2.0   1.3   1.7   2.3   4.2   4.8   4.8   4.8
 135.  *   1.8   1.3   1.6   2.2   4.3   5.0   5.1   5.0
 140.  *   1.8   1.2   1.6   2.2   4.6   5.1   5.2   5.0
 145.  *   1.6   1.0   1.4   2.2   4.7   5.3   5.4   5.3
 150.  *   1.4    .8   1.1   1.9   4.5   5.2   5.4   5.2
 155.  *   1.2    .5    .8   1.5   4.0   4.9   5.0   4.7
 160.  *   1.1    .4    .4   1.1   3.2   4.1   4.1   4.0
 165.  *    .7    .1    .3    .6   2.2   3.1   3.2   3.0
 170.  *    .6    .0    .1    .3   1.5   2.0   2.1   2.0
 175.  *    .6    .0    .0    .1    .7   1.4   1.5   1.4
 180.  *    .6    .0    .0    .0    .5    .8    .8    .8
 185.  *    .7    .0    .0    .0    .2    .4    .4    .4
 190.  *    .7    .0    .0    .0    .1    .3    .3    .3
 195.  *    .7    .0    .0    .0    .0    .2    .2    .2
 200.  *    .7    .0    .0    .0    .0    .2    .2    .2
 205.  *    .7    .0    .0    .0    .0    .2    .2    .2
1
                                                                                                                 PAGE  6
      JOB: Site 5 BD1/2 AM 2014 - 5B1AM14.DAT                   RUN: Site 5 BD1/2 AM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .8    .0    .0    .0    .0    .1    .2    .1
 215.  *    .8    .0    .0    .0    .0    .1    .1    .1
 220.  *    .8    .0    .0    .0    .0    .1    .1    .1
 225.  *    .7    .1    .0    .0    .0    .1    .1    .1
 230.  *    .7    .1    .1    .0    .0    .0    .1    .0
 235.  *    .7    .1    .1    .0    .0    .0    .0    .0
 240.  *    .5    .1    .1    .1    .1    .0    .0    .0
 245.  *    .4    .1    .2    .2    .2    .0    .0    .0
 250.  *    .3    .2    .3    .2    .4    .0    .0    .0
 255.  *    .2    .3    .4    .3    .7    .0    .0    .0
 260.  *    .1    .3    .4    .4   1.0    .0    .0    .0
 265.  *    .1    .4    .5    .5   1.3    .1    .0    .0
 270.  *    .0    .4    .5    .5   1.6    .1    .0    .0
 275.  *    .0    .5    .5    .5   1.9    .2    .1    .1
 280.  *    .0    .5    .6    .5   2.2    .2    .2    .1
 285.  *    .0    .5    .6    .5   2.4    .3    .2    .1
 290.  *    .0    .5    .6    .5   2.6    .4    .2    .2
 295.  *    .0    .6    .6    .5   2.7    .4    .3    .2
 300.  *    .0    .5    .6    .5   2.8    .6    .4    .3
 305.  *    .0    .6    .5    .5   2.8    .9    .4    .3
 310.  *    .0    .6    .5    .5   2.8   1.0    .5    .4
 315.  *    .0    .6    .4    .5   2.8   1.3    .6    .5
 320.  *    .0    .6    .4    .4   2.7   1.4   1.0    .8
 325.  *    .0    .6    .5    .4   2.9   1.9   1.3   1.1
 330.  *    .0    .6    .5    .6   3.1   2.4   2.1   1.8
 335.  *    .1    .7    .6    .8   3.6   3.1   2.5   2.6
 340.  *    .1    .7    .7    .9   3.9   3.5   3.4   3.3
 345.  *    .2    .8    .9   1.5   4.4   4.2   3.9   4.0
 350.  *    .4   1.0   1.0   1.8   4.5   3.9   4.1   4.5
 355.  *    .5   1.1   1.1   2.2   4.1   3.8   4.5   4.6
 360.  *    .6   1.2   1.4   2.4   4.1   4.1   4.4   4.7
 ------*------------------------------------------------
 MAX   *   3.5   3.1   3.6   5.3   5.1   5.3   5.4   5.3
 DEGR. *   75    65    65    60    60   145   145   145

 THE HIGHEST CONCENTRATION IS    6.10 PPM AT  180 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    6.10 PPM AT  175 DEGREES FROM REC10.
 THE 3RD HIGHEST CONCENTRATION IS    5.90 PPM AT  175 DEGREES FROM REC1 .
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Site 5 BD1/2 AM 2030 - 5B1AM30.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 BD1/2 AM 2030                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    2360 9.2  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    1885 9.2  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       115        84       2.0 1885   84.1 1548 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     475 9.2  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       115       104       2.0  475   84.1 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    1195 9.2  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    1785 9.2  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    1575 9.2  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       115        85       2.0 1575   84.1 1672 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     210 9.2  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
```

```
       115       110       2.0  210   84.1 1700 1 3
  1
SB         Rt16 deparAG    21.  2799.   357.  1826.    3780 9.2  0.  56   30.
  1
EB         Rt27 aprchAG  -320.  2645.  -111.  2740.     395 9.2  0.  56   30.
  1
EB         Rt27 aprchAG  -111.  2740.    56.  2763.     395 9.2  0.  68   30.
  2
EB         Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       115        92       2.0  395   84.1 1706 1 3
  1
EB         Rt27 deparAG    67.  2763.   996.  3083.    1345 9.2  0.  56   30.
  1
WB         Rt27 aprchAG   981.  3134.   454.  2944.    3125 9.2  0.  56   30.
  1
WB         Rt27 aprchAG   454.  2944.    52.  2807.    3125 9.2  0.  68   30.
  2
WB         Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       115        80       2.0 3125   84.1 1696 1 3
  1
WB         Rt27 deparAG    50.  2805.   -90.  2772.    1345 9.2  0.  32   30.
  1
WB         Rt27 deparAG   -90.  2772.  -337.  2669.    1345 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
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1                       CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 5 BD1/2 AM 2030 - 5B1AM30.DAT                   RUN: Site 5 BD1/2 AM 2030
      DATE: 05/06/2009   TIME: 08:36:47.85


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2    *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*---------------------------------------*-----------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.   340. AG   2360.   9.2    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.   342. AG   1885.   9.2    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    1084.0    -195.8 *    3057.   161. AG    494. 100.0    .0 36.0 1.73 155.3
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.   341. AG    475.   9.2    .0 44.0
       5. NB        Rt16 left *     88.0    2690.0     602.1    1209.0 *    1568.   161. AG    408. 100.0    .0 24.0 2.30  79.6
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.   341. AG   1195.   9.2    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.   160. AG   1785.   9.2    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.   161. AG   1575.   9.2    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0    -577.0    4583.8 *    1822.   341. AG    500. 100.0    .0 36.0 1.39  92.6
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.   162. AG    210.   9.2    .0 44.0
      11. SB        Rt16 left *     25.0    2864.0    -321.7    3904.2 *    1096.   342. AG    432. 100.0    .0 24.0 7.50  55.7
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.   161. AG   3780.   9.2    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.    66. AG    395.   9.2    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.    82. AG    395.   9.2    .0 68.0
      15. EB        Rt27 aprch*     -5.0    2754.0     -53.9    2747.7 *      49.   263. AG    722. 100.0    .0 48.0  .35   2.5
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.    71. AG   1345.   9.2    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.   250. AG   3125.   9.2    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.   251. AG   3125.   9.2    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    3630.9    4023.7 *    3708.    71. AG    628. 100.0    .0 48.0 1.71 188.4
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.   257. AG   1345.   9.2    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.   247. AG   1345.   9.2    .0 32.0
1
                                                                                                                        PAGE  2
      JOB: Site 5 BD1/2 AM 2030 - 5B1AM30.DAT                   RUN: Site 5 BD1/2 AM 2030
      DATE: 05/06/2009   TIME: 08:36:47.85

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     115       84        2.0       1885       1548      84.10      1        3
       5. NB        Rt16 left *     115      104        2.0        475       1700      84.10      1        3
       9. SB        Rt16 thru *     115       85        2.0       1575       1672      84.10      1        3
      11. SB        Rt16 left *     115      110        2.0        210       1700      84.10      1        3
      15. EB        Rt27 aprch*     115       92        2.0        395       1706      84.10      1        3
      19. WB        Rt27 aprch*     115       80        2.0       3125       1696      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z       *
     -------------------------*-------------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0    *
      2. SE 164 S             *       183.0     2590.0       5.0    *
      3. SE 82 S              *       154.0     2668.0       5.0    *
      4. SE CNR               *       140.0     2741.0       5.0    *
      5. SE 82 E              *       205.0     2774.0       5.0    *
      6. SE 164 E             *       283.0     2802.0       5.0    *
      7. SE MID E             *       356.0     2828.0       5.0    *
      8. NE MID E             *       323.0     2935.0       5.0    *
      9. NE 164 E             *       235.0     2907.0       5.0    *
     10. NE 82 E              *       157.0     2881.0       5.0    *
     11. NE CNR               *        95.0     2864.0       5.0    *
     12. NE 82 N              *        65.0     2927.0       5.0    *
     13. NE 164 N             *        40.0     3006.0       5.0    *
     14. NE MID N             *         8.0     3095.0       5.0    *
     15. NW MID N             *       -95.0     3048.0       5.0    *
     16. NW 164 N             *       -68.0     2971.0       5.0    *
     17. NW 82 N              *       -41.0     2894.0       5.0    *
     18. NW CNR               *       -31.0     2829.0       5.0    *
     19. NW 82 W              *       -91.0     2798.0       5.0    *
     20. NW 164 W             *      -165.0     2767.0       5.0    *
     21. NW MID W             *      -237.0     2736.0       5.0    *
     22. SW MID W             *      -218.0     2665.0       5.0    *
     23. SW 164 W             *      -153.0     2690.0       5.0    *
     24. SW 82 W              *       -77.0     2713.0       5.0    *
     25. SW CNR               *         6.0     2723.0       5.0    *
     26. SW 82 S              *        40.0     2651.0       5.0    *
     27. SW 164 S             *        68.0     2573.0       5.0    *
     28. SW MID S             *        91.0     2503.0       5.0    *
1
                                                                                                                        PAGE  3
      JOB: Site 5 BD1/2 AM 2030 - 5B1AM30.DAT                   RUN: Site 5 BD1/2 AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
  ------*-------------------------------------------------------------------------------------------------------------------------
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```
   0.  *   1.1   1.0   1.4   1.6   1.9   2.0   2.0    .0    .0    .0    .1    .3    .3    .3   3.9   4.1   4.2   3.4   1.7   1.0
   5.  *    .9    .8   1.2   1.6   2.0   2.0   2.0    .1    .0    .0    .0    .0    .0    .0   3.6   3.8   4.0   3.3   1.6   1.0
  10.  *    .8    .9   1.2   1.7   2.0   2.0   2.1    .1    .1    .0    .0    .0    .0    .0   3.6   3.7   3.8   3.0   1.7   1.2
  15.  *    .8    .9   1.2   1.7   2.0   2.1   2.1    .1    .1    .1    .0    .0    .0    .0   3.5   3.5   3.6   2.9   1.6   1.2
  20.  *    .8    .9   1.3   1.8   2.0   2.0   2.1    .1    .1    .1    .0    .0    .0    .0   3.3   3.4   3.5   2.8   1.5   1.1
  25.  *    .8    .9   1.3   1.9   2.1   2.2   2.2    .1    .1    .1    .1    .0    .0    .0   3.2   3.2   3.2   2.5   1.5   1.0
  30.  *    .8    .9   1.3   2.0   2.2   2.3   2.2    .1    .1    .1    .1    .0    .0    .0   3.1   3.1   3.1   2.4   1.4   1.0
  35.  *    .8   1.0   1.4   2.0   2.3   2.3   2.3    .1    .1    .1    .1    .0    .0    .0   3.0   3.0   3.1   2.0   1.3    .9
  40.  *    .7    .9   1.4   2.2   2.5   2.4   2.5    .2    .2    .2    .1    .0    .0    .0   2.8   3.0   3.0   1.9   1.3    .9
  45.  *    .7   1.0   1.3   2.2   2.4   2.5   2.5    .4    .2    .2    .2    .0    .0    .0   2.8   2.7   2.9   1.8   1.3    .9
  50.  *    .7   1.0   1.4   2.3   2.6   2.6   2.5    .6    .6    .5    .4    .0    .0    .0   2.7   2.7   2.7   1.7   1.2    .9
  55.  *    .7    .8   1.3   2.4   2.6   2.6   2.8   1.1    .9    .9    .7    .1    .0    .0   2.8   2.7   2.8   1.8   1.3   1.2
  60.  *    .6    .8   1.3   2.2   2.6   2.5   2.6   1.8   1.6   1.5   1.3    .2    .1    .0   2.9   2.8   2.9   2.1   1.7   1.6
  65.  *    .4    .7    .9   2.0   2.2   2.2   2.3   2.6   2.4   2.4   2.1    .6    .2    .1   2.8   3.0   3.3   2.4   2.2   1.9
  70.  *    .3    .4    .8   1.6   1.8   1.9   1.9   3.4   3.1   3.1   2.8    .9    .5    .2   3.0   3.3   3.8   2.7   2.4   2.4
  75.  *    .1    .2    .6   1.1   1.3   1.4   1.4   4.0   3.9   3.9   3.5   1.3    .7    .4   3.2   3.5   4.2   3.1   2.7   2.7
  80.  *    .1    .1    .2    .7    .8    .9    .9   4.3   4.2   4.2   3.8   1.6    .8    .6   3.3   3.7   4.4   3.0   2.5   2.6
  85.  *    .0    .0    .1    .3    .4    .5    .5   4.5   4.4   4.3   3.9   1.7   1.1    .6   3.4   3.7   4.3   2.7   2.5   2.5
  90.  *    .0    .0    .0    .1    .2    .2    .2   4.5   4.3   4.3   3.8   1.7   1.2    .7   3.5   3.7   4.2   2.6   2.4   2.2
  95.  *    .0    .0    .0    .0    .1    .1    .1   4.2   4.0   4.0   3.6   1.8   1.1    .8   3.6   3.8   4.3   2.3   2.2   2.0
 100.  *    .0    .0    .0    .0    .0    .0    .0   3.9   3.8   3.7   3.3   1.7   1.1    .8   3.6   3.8   4.0   2.0   2.1   2.0
 105.  *    .0    .0    .0    .0    .0    .0    .0   3.7   3.6   3.5   3.0   1.7   1.1    .8   3.8   3.9   3.9   1.8   2.0   1.7
 110.  *    .0    .0    .1    .0    .0    .0    .0   3.5   3.3   3.3   2.9   1.7   1.1    .8   3.9   4.0   3.5   1.8   2.3   1.8
 115.  *    .1    .0    .1    .0    .0    .0    .0   3.3   3.2   3.2   2.7   1.5   1.0    .9   3.9   4.0   3.4   1.6   2.3   1.8
 120.  *    .1    .1    .1    .0    .0    .0    .0   3.1   3.0   3.0   2.6   1.5   1.0    .8   3.8   3.8   3.2   1.7   2.6   2.0
 125.  *    .1    .1    .1    .0    .0    .0    .0   3.0   3.0   3.0   2.4   1.3   1.0    .7   4.0   3.9   2.9   2.0   3.0   1.9
 130.  *    .1    .1    .2    .0    .0    .0    .0   3.0   2.9   2.9   2.2   1.3   1.0    .7   4.0   3.8   3.1   2.4   3.1   1.9
 135.  *    .2    .2    .2    .1    .0    .0    .0   2.8   2.7   2.7   2.1   1.2    .9    .7   4.1   4.0   3.2   2.8   3.2   1.8
 140.  *    .5    .5    .6    .2    .0    .0    .0   2.7   2.7   2.7   2.1   1.2   1.0    .8   4.2   4.0   3.3   3.2   3.2   1.8
 145.  *    .7    .7    .9    .6    .1    .0    .0   2.8   2.7   2.8   2.3   1.5   1.4   1.1   4.3   4.4   3.6   3.5   3.0   1.7
 150.  *   1.5   1.5   1.7   1.2    .3    .1    .0   2.8   2.8   3.0   2.7   1.9   1.7   1.4   4.2   4.3   3.7   3.7   2.8   1.6
 155.  *   2.3   2.3   2.5   1.8    .6    .2    .1   3.0   3.1   3.6   3.0   2.3   2.0   1.8   3.7   3.8   3.5   3.8   2.2   1.4
 160.  *   3.3   3.2   3.4   2.6    .9    .4    .3   3.2   3.5   3.9   3.4   2.8   2.4   2.3   3.2   3.3   3.2   3.3   1.9   1.0
 165.  *   3.9   3.9   4.4   3.4   1.3    .8    .4   3.3   3.7   4.3   3.9   3.1   2.6   2.5   2.7   2.5   2.6   2.9   1.5    .9
 170.  *   4.5   4.6   4.8   3.9   1.8    .9    .7   3.7   3.8   4.5   4.0   3.2   2.9   2.8   1.8   1.8   2.0   2.3    .8    .6
 175.  *   4.7   4.5   5.0   4.0   1.9   1.1    .8   3.6   4.0   4.7   3.9   2.8   2.5   2.7   1.0   1.1   1.3   1.8    .6    .5
 180.  *   4.7   4.7   5.0   4.1   2.1   1.2    .9   3.8   4.2   4.5   3.5   2.4   2.3   2.7    .5    .8   1.0   1.7    .5    .5
 185.  *   4.5   4.5   4.7   3.8   2.0   1.3   1.0   3.8   4.1   4.4   3.1   2.1   2.2   2.4    .4    .5    .6   1.3    .4    .5
 190.  *   4.3   4.3   4.5   3.5   2.0   1.3   1.0   4.0   4.1   4.4   2.6   1.8   2.3   2.4    .2    .3    .5   1.1    .5    .5
 195.  *   4.1   4.1   4.2   3.2   1.8   1.3   1.0   4.1   4.1   4.2   2.2   1.6   2.2   2.4    .2    .3    .5   1.0    .5    .5
 200.  *   4.0   3.9   4.1   3.0   1.8   1.3   1.1   4.0   4.2   3.8   2.3   1.6   2.2   2.4    .1    .1    .4    .9    .4    .5
 205.  *   3.8   3.7   3.9   2.8   1.8   1.2   1.1   4.0   4.1   3.6   1.9   1.6   2.3   2.4    .1    .1    .3    .8    .6    .5
1
                                                                                                                          PAGE  4
      JOB: Site 5 BD1/2 AM 2030 - 5B1AM30.DAT                  RUN: Site 5 BD1/2 AM 2030

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*----------------------------------------------------------------------------------------------------------------------
 210.  *   3.6   3.5   3.6   2.5   1.8   1.2    .9   4.1   4.1   3.4   2.0   1.6   2.3   2.3    .1    .1    .2    .8    .5    .6
 215.  *   3.5   3.5   3.6   2.3   1.6   1.2    .8   4.2   4.0   3.4   1.7   1.6   2.1   2.2    .0    .1    .1    .6    .5    .6
 220.  *   3.4   3.3   3.5   2.1   1.4   1.2    .8   4.1   3.9   2.8   1.8   1.9   2.0   2.1    .0    .1    .1    .4    .5    .6
 225.  *   3.3   3.3   3.4   1.9   1.3   1.1    .9   4.2   3.9   2.9   1.8   1.9   2.0   2.0    .0    .1    .1    .5    .6    .6
 230.  *   3.3   3.3   3.3   1.7   1.1   1.1    .9   4.2   3.4   2.7   1.8   1.9   2.0   2.0    .0    .0    .1    .5    .6    .6
 235.  *   3.3   3.3   3.3   1.6   1.1   1.1    .8   4.1   3.4   2.4   1.6   1.9   1.9   1.9    .0    .0    .1    .4    .6    .5
 240.  *   3.3   3.3   3.3   1.4   1.0    .9    .8   3.6   3.0   2.1   1.5   1.9   1.9   1.9    .0    .0    .1    .3    .5    .5
 245.  *   3.4   3.3   3.5   1.5   1.0   1.0   1.1   3.2   2.8   2.0   1.5   2.0   1.9   2.0    .0    .0    .0    .3    .5    .3
 250.  *   3.4   3.4   3.5   1.2   1.1   1.1   1.1   3.0   2.4   1.6   1.4   1.9   1.9   2.0    .0    .0    .0    .2    .3    .2
 255.  *   3.4   3.4   3.5   1.4   1.1   1.1   1.3   2.3   1.9   1.5   1.3   2.0   1.9   1.9    .0    .0    .0    .1    .2    .2
 260.  *   3.3   3.3   3.3   1.5   1.3   1.4   1.5   1.7   1.4   1.1   1.3   2.0   1.9   2.0    .0    .0    .0    .1    .1    .1
 265.  *   3.3   3.3   3.2   1.7   1.4   1.6   1.8   1.4   1.2   1.0   1.1   2.0   1.9   2.0    .0    .0    .0    .0    .1    .1
 270.  *   3.3   3.2   3.4   1.8   1.5   2.0   2.3   1.1   1.0   1.1   1.3   2.0   1.9   2.0    .0    .0    .0    .0    .0    .0
 275.  *   3.3   3.3   3.3   1.9   1.5   2.1   2.5   1.0   1.1   1.1   1.5   2.1   1.9   2.0    .0    .0    .0    .0    .0    .0
 280.  *   3.3   3.3   3.4   1.9   1.7   2.3   2.6   1.0   1.0   1.2   1.6   2.1   2.0   2.1    .0    .0    .0    .0    .0    .0
 285.  *   3.5   3.5   3.4   1.8   1.9   2.4   2.8    .9   1.0   1.3   1.6   2.1   2.0   2.1    .0    .0    .0    .0    .0    .0
 290.  *   3.5   3.7   3.4   1.8   1.9   2.6   2.9    .8   1.0   1.3   1.8   2.1   2.1   2.2    .0    .0    .0    .0    .0    .0
 295.  *   3.6   3.7   3.3   1.8   2.0   2.8   2.8    .9   1.1   1.4   1.9   2.3   2.3   2.3    .0    .0    .0    .0    .0    .0
 300.  *   4.1   3.7   3.2   1.9   2.3   2.9   3.0    .9   1.1   1.4   2.0   2.3   2.3   2.3    .0    .0    .1    .0    .0    .0
 305.  *   4.0   3.9   3.2   2.1   2.4   3.0   2.9    .9   1.0   1.6   2.0   2.4   2.4   2.4    .0    .0    .1    .0    .0    .0
 310.  *   4.1   4.0   3.3   2.2   2.9   3.0   2.9    .9   1.1   1.6   2.3   2.5   2.4   2.6    .0    .1    .1    .0    .0    .0
 315.  *   4.2   4.0   3.3   2.5   3.0   2.9   2.9    .9   1.0   1.5   2.4   2.6   2.5   2.6    .1    .2    .2    .1    .0    .0
 320.  *   4.4   4.1   3.2   2.7   3.2   2.9   2.7    .7    .9   1.5   2.4   2.7   2.6   2.7    .3    .4    .3    .1    .0    .0
 325.  *   4.5   4.1   3.3   3.1   3.3   2.9   2.7    .6    .9   1.5   2.4   2.7   2.6   2.7    .6    .7    .9    .5    .1    .0
 330.  *   4.5   3.9   3.3   3.0   3.0   2.8   2.4    .3    .8   1.2   2.4   2.7   2.5   2.5   1.1   1.3   1.3    .9    .1    .0
 335.  *   4.1   3.5   3.1   3.0   2.8   2.7   2.3    .3    .6   1.1   2.1   2.3   2.2   2.2   1.7   2.0   2.2   1.4    .5    .1
 340.  *   3.3   3.1   3.0   2.7   2.6   2.3   2.2    .1    .3    .8   1.6   1.9   1.8   1.8   2.5   2.7   2.9   2.2    .7    .3
 345.  *   2.8   2.3   2.6   2.4   2.4   2.2   2.1    .0    .2    .5   1.1   1.4   1.2   1.2   3.2   3.2   3.5   2.6   1.1    .5
 350.  *   2.1   1.7   1.8   2.1   2.2   2.0   2.0    .0    .0    .2    .7    .9    .9    .9   3.6   4.0   4.0   3.1   1.4    .7
 355.  *   1.4   1.4   1.4   1.8   2.0   2.0   2.0    .0    .0    .0    .3    .4    .3    .3   3.9   4.0   4.2   3.3   1.7   1.0
 360.  *   1.1   1.0   1.4   1.6   1.9   2.0   2.0    .0    .0    .0    .1    .3    .3    .3   3.9   4.1   4.2   3.4   1.7   1.0
 ------*----------------------------------------------------------------------------------------------------------------------
 MAX   *   4.7   4.7   5.0   4.1   3.3   3.0   3.0   4.5   4.4   4.7   4.0   3.2   2.9   2.8   4.3   4.4   4.4   3.8   3.2   2.7
 DEGR. *  175   180   175   180   325   305   300    85    85   175   170   170   170   170   145   145    80   155   135    75

1
                                                                                                                          PAGE  5
      JOB: Site 5 BD1/2 AM 2030 - 5B1AM30.DAT                  RUN: Site 5 BD1/2 AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .7   1.0   1.3   2.0   3.2   2.8   3.2   3.6
   5.  *    .9   1.2   1.4   2.0   2.7   2.8   3.3   3.7
  10.  *    .9   1.3   1.4   2.1   2.4   2.4   3.2   3.7
```

```
  15.  *    .9   1.3   1.4   2.0   2.2   2.5   3.3   3.7
  20.  *    .9   1.4   1.2   2.1   2.1   2.4   3.4   3.8
  25.  *   1.0   1.3   1.2   2.1   2.0   2.6   3.7   3.8
  30.  *    .9   1.1   1.4   2.3   2.0   2.9   3.8   3.8
  35.  *    .8   1.2   1.2   2.4   2.1   2.9   3.8   3.8
  40.  *    .7   1.3   1.3   2.4   2.4   3.1   3.9   3.7
  45.  *    .7   1.4   1.6   2.6   2.6   3.3   3.9   3.6
  50.  *    .9   1.4   1.7   3.1   3.1   3.5   3.8   3.6
  55.  *   1.0   1.8   2.2   3.2   3.4   3.6   3.8   3.4
  60.  *   1.5   1.9   2.3   3.6   3.7   3.7   3.7   3.6
  65.  *   2.1   1.9   2.5   3.5   3.8   3.7   3.6   3.3
  70.  *   2.1   1.9   2.6   3.3   3.5   3.7   3.5   3.2
  75.  *   2.3   1.9   2.3   2.9   3.1   3.3   3.1   3.1
  80.  *   2.1   1.5   1.9   2.5   2.8   3.0   3.0   3.0
  85.  *   2.2   1.2   1.4   2.1   2.1   2.8   2.8   2.7
  90.  *   1.9    .9   1.1   1.7   1.8   2.7   2.7   2.7
  95.  *   1.6    .8   1.0   1.6   1.9   2.8   2.8   2.8
 100.  *   1.5    .9    .9   1.3   1.9   2.9   2.9   2.9
 105.  *   1.5    .9    .9   1.4   2.0   2.9   3.0   3.0
 110.  *   1.6    .9   1.0   1.4   2.2   3.1   3.1   3.1
 115.  *   1.4   1.0   1.1   1.4   2.5   3.1   3.1   3.1
 120.  *   1.5   1.1   1.3   1.6   2.7   3.3   3.4   3.4
 125.  *   1.6   1.0   1.3   1.7   2.9   3.4   3.5   3.5
 130.  *   1.5   1.0   1.3   1.6   3.1   3.7   3.7   3.7
 135.  *   1.6   1.1   1.2   1.7   3.3   3.8   3.9   3.7
 140.  *   1.6   1.0   1.1   1.8   3.5   3.9   4.1   3.9
 145.  *   1.4    .9   1.1   1.8   3.7   4.1   4.2   4.0
 150.  *   1.2    .7   1.0   1.5   3.5   4.1   4.1   4.0
 155.  *   1.0    .5    .8   1.3   3.1   3.7   3.7   3.6
 160.  *    .8    .3    .4    .9   2.6   3.1   3.1   2.9
 165.  *    .6    .1    .2    .4   1.8   2.3   2.4   2.3
 170.  *    .5    .0    .1    .3   1.2   1.6   1.6   1.6
 175.  *    .5    .0    .0    .1    .5   1.0   1.0    .9
 180.  *    .5    .0    .0    .0    .4    .6    .6    .6
 185.  *    .5    .0    .0    .0    .1    .3    .3    .3
 190.  *    .5    .0    .0    .0    .1    .2    .2    .2
 195.  *    .5    .0    .0    .0    .0    .1    .1    .1
 200.  *    .5    .0    .0    .0    .0    .1    .1    .1
 205.  *    .5    .0    .0    .0    .0    .1    .1    .1
1
                                                                                                                              PAGE  6
      JOB: Site 5 BD1/2 AM 2030 - 5B1AM30.DAT                 RUN: Site 5 BD1/2 AM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .6    .0    .0    .0    .0    .1    .1    .1
 215.  *    .6    .0    .0    .0    .0    .1    .1    .1
 220.  *    .6    .0    .0    .0    .0    .1    .1    .1
 225.  *    .6    .0    .0    .0    .0    .0    .1    .0
 230.  *    .5    .1    .0    .0    .0    .0    .0    .0
 235.  *    .4    .1    .1    .0    .0    .0    .0    .0
 240.  *    .3    .1    .1    .0    .0    .0    .0    .0
 245.  *    .3    .1    .1    .2    .1    .0    .0    .0
 250.  *    .2    .1    .2    .2    .2    .0    .0    .0
 255.  *    .1    .2    .2    .2    .4    .0    .0    .0
 260.  *    .1    .2    .2    .3    .6    .0    .0    .0
 265.  *    .1    .2    .4    .4    .9    .0    .0    .0
 270.  *    .0    .3    .4    .4   1.1    .1    .0    .0
 275.  *    .0    .3    .3    .4   1.2    .1    .0    .0
 280.  *    .0    .3    .4    .4   1.4    .2    .1    .1
 285.  *    .0    .3    .4    .4   1.5    .2    .2    .1
 290.  *    .0    .3    .4    .4   1.7    .3    .2    .1
 295.  *    .0    .4    .4    .4   1.8    .3    .2    .1
 300.  *    .0    .3    .3    .4   1.9    .4    .2    .2
 305.  *    .0    .3    .3    .4   1.9    .5    .3    .2
 310.  *    .0    .3    .3    .3   1.9    .6    .4    .2
 315.  *    .0    .3    .3    .3   1.9    .8    .4    .4
 320.  *    .0    .3    .3    .3   2.0   1.0    .6    .5
 325.  *    .0    .3    .3    .3   2.2   1.4   1.0    .8
 330.  *    .0    .3    .3    .4   2.6   1.9   1.5   1.1
 335.  *    .1    .4    .4    .7   3.0   2.4   2.2   1.9
 340.  *    .1    .4    .6   1.0   3.3   3.0   2.7   2.4
 345.  *    .3    .7    .8   1.2   3.6   3.2   3.1   3.0
 350.  *    .4    .9   1.0   1.7   3.6   3.2   3.2   3.4
 355.  *    .7   1.0   1.3   1.7   3.5   3.1   3.3   3.5
 360.  *    .7   1.0   1.3   2.0   3.2   2.8   3.2   3.6
 ------*------------------------------------------------
 MAX   *   2.3   1.9   2.6   3.6   3.8   4.1   4.2   4.0
 DEGR. *   75    70    70    60    65   145   145   145

 THE HIGHEST CONCENTRATION IS    5.00 PPM AT  175 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    4.70 PPM AT  175 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    4.70 PPM AT  180 DEGREES FROM REC2 .
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Site 5 BD1/2 PM 2014 - 5B1PM14.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 BD1/2 PM 2014                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    429111.4  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    382111.4  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       120        82       2.0 3821  102.2 1545 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     47011.4  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       120       106       2.0  470  102.2 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    218511.4  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    188211.4  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    141411.4  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       120        82       2.0 1414  102.2 1675 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     46811.4  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
```

```
       120       106       2.0  468  102.2 1700 1 3
  1
SB         Rt16 deparAG    21.  2799.   357.  1826.    321411.4  0.  56   30.
  1
EB         Rt27 aprchAG  -320.  2645.  -111.  2740.    119311.4  0.  56   30.
  1
EB         Rt27 aprchAG  -111.  2740.    56.  2763.    119311.4  0.  68   30.
  2
EB         Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       120        94       2.0 1193  102.2 1706 1 3
  1
EB         Rt27 deparAG    67.  2763.   996.  3083.    313411.4  0.  56   30.
  1
WB         Rt27 aprchAG   981.  3134.   454.  2944.    199211.4  0.  56   30.
  1
WB         Rt27 aprchAG   454.  2944.    52.  2807.    199211.4  0.  68   30.
  2
WB         Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       120        90       2.0 1992  102.2 1650 1 3
  1
WB         Rt27 deparAG    50.  2805.   -90.  2772.     72511.4  0.  32   30.
  1
WB         Rt27 deparAG   -90.  2772.  -337.  2669.     72511.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 5 BD1/2 PM 2014 - 5B1PM14.DAT                  RUN: Site 5 BD1/2 PM 2014
      DATE: 05/06/2009   TIME: 08:17:49.41


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. NB        Rt16 aprch*   404.0    1854.0     192.0    2439.0 *     622.   340. AG   4291.  11.4    .0 56.0
       2. NB        Rt16 thru *   200.0    2443.0      84.0    2790.0 *     366.   342. AG   3821.  11.4    .0 56.0
       3. NB        Rt16 thru *   113.0    2703.0    3001.9   -5921.3 *    9095.   161. AG    562. 100.0    .0 36.0 2.91 462.0
       4. NB        Rt16 left *   176.0    2437.0      56.0    2781.0 *     364.   341. AG    470.  11.4    .0 44.0
       5. NB        Rt16 left *    88.0    2690.0     467.7    1596.1 *    1158.   161. AG    484. 100.0    .0 24.0 1.67  58.8
       6. NB        Rt16 depar*    85.0    2793.0    -247.0    3736.0 *    1000.   341. AG   2185.  11.4    .0 32.0
       7. SB        Rt16 aprch*  -294.0    3720.0     -67.0    3082.0 *     677.   160. AG   1882.  11.4    .0 56.0
       8. SB        Rt16 thru *   -72.0    3076.0      21.0    2801.0 *     290.   161. AG   1414.  11.4    .0 56.0
       9. SB        Rt16 thru *     2.0    2856.0     -96.8    3150.7 *     311.   341. AG    562. 100.0    .0 36.0  .99  15.8
      10. SB        Rt16 left *   -47.0    3080.0      41.0    2815.0 *     279.   162. AG    468.  11.4    .0 44.0
      11. SB        Rt16 left *    25.0    2864.0    -337.7    3952.2 *    1147.   342. AG    484. 100.0    .0 24.0 1.66  58.3
      12. SB        Rt16 depar*    21.0    2799.0     357.0    1826.0 *    1029.   161. AG   3214.  11.4    .0 56.0
      13. EB        Rt27 aprch*  -320.0    2645.0    -111.0    2740.0 *     230.    66. AG   1193.  11.4    .0 56.0
      14. EB        Rt27 aprch*  -111.0    2740.0      56.0    2763.0 *     169.    82. AG   1193.  11.4    .0 68.0
      15. EB        Rt27 aprch*    -5.0    2754.0    -215.1    2726.9 *     212.   263. AG    859. 100.0    .0 48.0  .96  10.8
      16. EB        Rt27 depar*    67.0    2763.0     996.0    3083.0 *     983.    71. AG   3134.  11.4    .0 56.0
      17. WB        Rt27 aprch*   981.0    3134.0     454.0    2944.0 *     560.   250. AG   1992.  11.4    .0 56.0
      18. WB        Rt27 aprch*   454.0    2944.0      52.0    2807.0 *     425.   251. AG   1992.  11.4    .0 68.0
      19. WB        Rt27 aprch*   120.0    2830.0    1787.3    3396.9 *    1761.    71. AG    822. 100.0    .0 48.0 1.39  89.5
      20. WB        Rt27 depar*    50.0    2805.0     -90.0    2772.0 *     144.   257. AG    725.  11.4    .0 32.0
      21. WB        Rt27 depar*   -90.0    2772.0    -337.0    2669.0 *     268.   247. AG    725.  11.4    .0 32.0
1
                                                                                                                PAGE  2
      JOB: Site 5 BD1/2 PM 2014 - 5B1PM14.DAT                  RUN: Site 5 BD1/2 PM 2014
      DATE: 05/06/2009   TIME: 08:17:49.41

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE    SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC    TYPE      RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     120       82       2.0       3821       1545     102.20      1        3
       5. NB        Rt16 left *     120      106       2.0        470       1700     102.20      1        3
       9. SB        Rt16 thru *     120       82       2.0       1414       1675     102.20      1        3
      11. SB        Rt16 left *     120      106       2.0        468       1700     102.20      1        3
      15. EB        Rt27 aprch*     120       94       2.0       1193       1706     102.20      1        3
      19. WB        Rt27 aprch*     120       90       2.0       1992       1650     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z       *
     -------------------------*------------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0   *
      2. SE 164 S             *       183.0     2590.0       5.0   *
      3. SE 82 S              *       154.0     2668.0       5.0   *
      4. SE CNR               *       140.0     2741.0       5.0   *
      5. SE 82 E              *       205.0     2774.0       5.0   *
      6. SE 164 E             *       283.0     2802.0       5.0   *
      7. SE MID E             *       356.0     2828.0       5.0   *
      8. NE MID E             *       323.0     2935.0       5.0   *
      9. NE 164 E             *       235.0     2907.0       5.0   *
     10. NE 82 E              *       157.0     2881.0       5.0   *
     11. NE CNR               *        95.0     2864.0       5.0   *
     12. NE 82 N              *        65.0     2927.0       5.0   *
     13. NE 164 N             *        40.0     3006.0       5.0   *
     14. NE MID N             *         8.0     3095.0       5.0   *
     15. NW MID N             *       -95.0     3048.0       5.0   *
     16. NW 164 N             *       -68.0     2971.0       5.0   *
     17. NW 82 N              *       -41.0     2894.0       5.0   *
     18. NW CNR               *       -31.0     2829.0       5.0   *
     19. NW 82 W              *       -91.0     2798.0       5.0   *
     20. NW 164 W             *      -165.0     2767.0       5.0   *
     21. NW MID W             *      -237.0     2736.0       5.0   *
     22. SW MID W             *      -218.0     2665.0       5.0   *
     23. SW 164 W             *      -153.0     2690.0       5.0   *
     24. SW 82 W              *       -77.0     2713.0       5.0   *
     25. SW CNR               *         6.0     2723.0       5.0   *
     26. SW 82 S              *        40.0     2651.0       5.0   *
     27. SW 164 S             *        68.0     2573.0       5.0   *
     28. SW MID S             *        91.0     2503.0       5.0   *
1
                                                                                                                PAGE  3
      JOB: Site 5 BD1/2 PM 2014 - 5B1PM14.DAT                  RUN: Site 5 BD1/2 PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
```

```
   0.  *   1.8   1.7   1.9   2.6   2.8   2.8   2.8    .0    .0    .0    .2    .3    .2    .2   3.7   4.3   4.6   3.8   1.6    .9
   5.  *   1.4   1.5   1.8   2.4   2.8   2.8   2.8    .0    .0    .0    .0    .1    .1    .1   3.7   4.3   4.5   3.7   1.9   1.0
  10.  *   1.2   1.3   1.9   2.4   2.9   2.9   2.9    .1    .0    .0    .0    .0    .0    .0   3.8   4.2   4.4   3.6   1.9   1.2
  15.  *   1.1   1.3   1.8   2.6   2.9   2.9   2.9    .1    .1    .0    .0    .0    .0    .0   3.9   4.1   4.1   3.4   1.9   1.2
  20.  *   1.1   1.3   1.9   2.7   2.9   3.0   3.1    .1    .1    .1    .0    .0    .0    .0   3.7   4.1   4.1   3.3   1.9   1.2
  25.  *   1.2   1.4   1.9   2.8   3.2   3.1   3.2    .1    .1    .1    .0    .0    .0    .0   3.7   3.9   3.9   3.1   1.8   1.3
  30.  *   1.2   1.5   1.9   2.9   3.3   3.3   3.4    .1    .1    .1    .0    .0    .0    .0   3.6   3.7   3.8   2.9   1.7   1.2
  35.  *   1.2   1.4   1.8   3.0   3.4   3.4   3.5    .2    .1    .1    .0    .0    .0    .0   3.6   3.6   3.6   2.6   1.7   1.3
  40.  *   1.1   1.4   2.0   3.1   3.5   3.6   3.6    .2    .2    .2    .1    .0    .0    .0   3.4   3.5   3.6   2.4   1.5   1.3
  45.  *   1.1   1.5   2.0   3.3   3.7   3.8   3.7    .3    .3    .3    .2    .0    .0    .0   3.4   3.4   3.4   2.3   1.6   1.3
  50.  *    .9   1.1   1.9   3.4   3.8   3.9   3.9    .7    .6    .6    .4    .0    .0    .0   3.3   3.4   3.4   2.2   1.6   1.4
  55.  *    .8   1.1   1.7   3.3   3.9   4.0   4.0   1.0   1.0   1.1    .7    .1    .0    .0   3.2   3.3   3.4   2.3   1.8   1.4
  60.  *    .5    .9   1.6   3.2   3.7   3.8   3.8   1.9   1.7   1.7   1.5    .2    .1    .0   3.2   3.4   3.5   2.7   2.1   1.9
  65.  *    .4    .6   1.3   2.9   3.4   3.3   3.3   2.8   2.6   2.7   2.3    .7    .2    .1   3.5   3.5   4.0   3.1   2.5   2.7
  70.  *    .2    .4    .9   2.2   2.8   2.8   2.7   3.8   3.5   3.6   3.3   1.0    .3    .2   3.5   3.7   4.3   3.4   3.0   3.1
  75.  *    .1    .2    .5   1.6   2.1   2.0   2.1   4.7   4.5   4.5   4.1   1.4    .7    .3   3.6   4.0   4.7   3.7   3.3   3.6
  80.  *    .0    .1    .3    .9   1.3   1.3   1.4   5.3   5.1   5.0   4.6   1.9    .9    .6   4.0   4.3   5.1   3.9   3.5   4.0
  85.  *    .0    .0    .1    .5    .8    .8    .8   5.5   5.2   5.3   4.8   2.2   1.1    .8   4.1   4.6   5.4   3.6   3.0   4.4
  90.  *    .0    .0    .0    .2    .4    .4    .4   5.4   5.3   5.2   4.7   2.2   1.4    .8   4.3   4.7   5.4   3.5   3.0   4.5
  95.  *    .1    .0    .1    .1    .2    .2    .2   5.2   4.9   4.9   4.4   2.3   1.4   1.0   4.5   4.9   5.3   3.0   2.8   4.8
 100.  *    .1    .1    .1    .0    .1    .1    .1   5.0   4.8   4.6   4.1   2.3   1.5   1.1   4.5   4.9   5.1   2.8   2.9   4.8
 105.  *    .1    .1    .1    .0    .1    .1    .1   4.6   4.4   4.5   3.9   2.2   1.5   1.1   4.6   4.8   4.6   2.5   2.8   5.0
 110.  *    .1    .1    .1    .0    .1    .1    .1   4.5   4.3   4.2   3.7   2.1   1.3   1.0   4.6   4.7   4.5   2.3   3.2   5.1
 115.  *    .1    .1    .2    .0    .1    .1    .1   4.2   4.2   4.1   3.5   2.0   1.3   1.0   4.9   4.8   4.4   2.4   3.4   5.1
 120.  *    .1    .1    .2    .0    .0    .1    .1   4.0   3.9   3.9   3.2   2.0   1.3    .9   4.7   4.8   4.3   2.6   3.8   5.1
 125.  *    .1    .1    .2    .0    .0    .0    .1   3.9   3.7   3.7   3.0   1.8   1.3   1.0   4.9   4.8   4.0   2.8   4.3   5.2
 130.  *    .2    .2    .3    .1    .0    .0    .0   3.7   3.7   3.7   2.9   1.7   1.2   1.0   4.9   4.9   3.9   3.3   4.4   5.2
 135.  *    .4    .4    .4    .2    .0    .0    .0   3.6   3.6   3.5   2.8   1.8   1.2    .9   5.0   4.9   4.3   3.6   4.8   5.0
 140.  *    .8    .8    .9    .5    .0    .0    .0   3.5   3.4   3.4   2.6   1.9   1.4   1.2   5.1   4.9   4.4   4.0   4.6   4.9
 145.  *   1.2   1.2   1.6    .8    .1    .0    .0   3.5   3.5   3.5   2.9   2.3   1.7   1.7   5.3   5.2   4.6   4.5   4.6   4.7
 150.  *   2.3   2.1   2.5   1.6    .4    .1    .1   3.7   3.7   3.9   3.5   2.7   2.2   2.1   5.3   5.0   4.7   4.7   4.7   4.4
 155.  *   3.4   3.3   3.8   2.7    .7    .3    .2   3.9   4.1   4.6   4.1   3.6   2.9   2.6   5.0   5.0   4.6   4.4   4.3   4.1
 160.  *   4.6   4.5   5.1   3.8   1.3    .6    .3   4.0   4.4   5.1   5.0   4.2   3.3   3.2   4.1   4.3   4.0   4.2   3.7   3.7
 165.  *   5.6   5.6   6.2   4.5   1.8   1.1    .6   4.3   4.7   5.7   5.5   4.5   3.7   3.9   3.2   3.4   3.5   3.6   3.3   3.6
 170.  *   6.3   6.2   6.8   5.4   2.3   1.2    .8   4.4   5.1   6.0   5.5   4.4   3.8   3.9   2.5   2.6   2.6   2.9   2.9   3.2
 175.  *   6.7   6.5   7.0   5.6   2.6   1.5   1.0   4.6   5.0   6.1   5.2   4.2   3.8   4.1   1.6   1.8   2.0   2.4   2.6   3.2
 180.  *   6.6   6.5   7.0   5.6   2.8   1.6   1.3   4.8   5.3   6.1   4.7   3.6   3.7   3.9   1.1   1.2   1.6   2.2   2.4   3.1
 185.  *   6.2   6.0   6.5   5.2   2.7   1.7   1.3   5.0   5.3   6.0   4.0   3.2   3.5   3.7    .8   1.0   1.4   2.0   2.5   3.1
 190.  *   6.0   5.8   6.2   4.9   2.6   1.8   1.4   5.0   5.5   5.8   3.7   2.7   3.2   3.5    .6    .9   1.2   1.9   2.5   3.1
 195.  *   5.7   5.6   5.8   4.4   2.5   1.8   1.4   5.2   5.4   5.5   3.2   2.6   3.2   3.6    .6    .9   1.3   1.9   2.5   3.0
 200.  *   5.6   5.3   5.4   4.3   2.5   1.8   1.5   5.2   5.3   5.1   3.0   2.6   3.2   3.5    .4    .9   1.4   1.9   2.5   3.0
 205.  *   5.3   5.1   5.2   3.8   2.5   1.8   1.5   5.6   5.4   4.7   2.8   2.6   3.4   3.5    .3    .8   1.3   2.0   2.4   3.1
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                                                                                                                 PAGE  4
      JOB: Site 5 BD1/2 PM 2014 - 5B1PM14.DAT                  RUN: Site 5 BD1/2 PM 2014

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *   5.1   5.0   5.2   3.6   2.5   1.8   1.5   5.4   5.2   4.6   2.5   2.7   3.5   3.4    .2    .6   1.2   2.0   2.6   3.0
 215.  *   4.8   4.6   4.9   3.3   2.2   1.6   1.4   5.5   5.2   4.3   2.7   3.1   3.3   3.2    .1    .5   1.0   2.1   2.6   3.0
 220.  *   4.6   4.5   4.6   3.1   2.2   1.5   1.3   5.5   4.9   3.9   2.8   3.3   3.2   2.9    .0    .3    .9   2.0   2.6   2.9
 225.  *   4.4   4.4   4.6   2.8   2.0   1.5   1.2   5.4   5.1   3.6   2.5   3.3   3.1   2.8    .0    .1    .8   2.0   2.5   2.7
 230.  *   4.4   4.4   4.4   2.5   1.9   1.6   1.2   5.3   4.6   3.4   2.7   3.3   3.0   2.7    .0    .1    .7   1.9   2.3   2.5
 235.  *   4.4   4.4   4.4   2.3   1.9   1.6   1.4   5.4   4.3   3.3   2.8   3.2   2.8   2.7    .0    .0    .5   1.8   2.1   2.3
 240.  *   4.4   4.4   4.4   2.3   2.0   1.6   1.5   4.7   3.9   3.0   2.7   3.1   2.8   2.6    .0    .0    .3   1.5   1.8   2.1
 245.  *   4.5   4.5   4.6   2.4   2.1   1.8   1.9   4.3   3.6   2.7   2.6   2.9   2.7   2.7    .0    .0    .1   1.0   1.4   1.7
 250.  *   4.5   4.5   4.7   2.7   2.5   2.3   2.4   3.6   3.0   2.3   2.4   2.8   2.7   2.7    .0    .0    .1    .8   1.1   1.4
 255.  *   4.5   4.5   4.7   2.8   2.6   2.4   2.6   2.8   2.2   2.3   2.1   2.8   2.7   2.8    .0    .0    .0    .6    .7   1.1
 260.  *   4.5   4.4   4.6   3.2   2.6   2.8   3.0   2.2   1.8   1.8   1.9   2.7   2.7   2.6    .0    .0    .0    .3    .4    .7
 265.  *   4.4   4.4   4.7   3.5   2.9   2.9   3.4   1.6   1.5   1.7   2.0   2.7   2.7   2.6    .0    .0    .0    .1    .2    .4
 270.  *   4.4   4.5   4.8   3.6   2.9   3.4   3.6   1.4   1.3   1.5   1.9   2.7   2.7   2.7    .0    .0    .0    .1    .1    .3
 275.  *   4.4   4.6   5.1   3.7   3.1   3.4   3.9   1.2   1.2   1.6   2.1   2.7   2.7   2.6    .0    .0    .0    .0    .0    .2
 280.  *   4.6   4.7   5.2   3.4   3.2   3.7   3.9   1.1   1.2   1.6   2.2   2.9   2.7   2.6    .0    .0    .0    .0    .0    .1
 285.  *   4.7   5.0   5.1   3.5   2.9   3.6   4.0   1.2   1.1   1.6   2.4   2.9   2.7   2.7    .0    .0    .0    .0    .0    .1
 290.  *   5.1   5.4   5.0   3.5   3.1   3.7   4.1   1.2   1.2   1.7   2.6   2.9   2.9   2.6    .0    .0    .0    .0    .0    .1
 295.  *   5.4   5.6   5.0   3.3   3.4   3.9   4.1    .9   1.3   1.9   2.6   3.1   2.9   2.6    .0    .0    .1    .0    .0    .1
 300.  *   5.6   5.6   4.9   3.5   3.6   3.9   4.1    .9   1.2   1.9   2.9   3.1   3.0   2.5    .0    .0    .1    .0    .0    .1
 305.  *   5.8   5.6   4.9   3.4   3.7   3.9   3.7    .8   1.2   1.8   2.9   3.2   3.0   2.5    .0    .1    .1    .0    .0    .1
 310.  *   6.1   5.5   4.9   3.4   4.0   4.0   3.6    .8   1.0   1.7   3.0   3.3   3.1   2.6    .0    .1    .1    .0    .0    .1
 315.  *   6.0   5.8   4.7   3.9   4.0   3.7   3.5    .6    .9   1.7   3.0   3.3   3.1   2.7    .0    .2    .2    .0    .0    .0
 320.  *   6.4   5.6   4.9   4.1   4.1   3.6   3.4    .5    .9   1.6   3.0   3.3   3.0   2.6    .1    .3    .4    .1    .0    .0
 325.  *   6.2   5.6   4.8   4.1   4.1   3.5   3.2    .4    .6   1.4   3.0   3.2   2.7   2.5    .4    .5    .7    .5    .0    .0
 330.  *   5.9   5.3   4.7   4.5   3.8   3.4   3.3    .3    .6   1.1   2.6   3.0   2.6   2.4    .8   1.1   1.4    .8    .1    .0
 335.  *   5.4   4.6   4.5   4.2   3.7   3.3   3.1    .1    .4    .9   2.2   2.6   2.2   2.1   1.2   1.6   1.8   1.4    .2    .0
 340.  *   4.7   4.0   3.8   3.7   3.6   3.1   3.0    .1    .2    .6   1.6   1.9   1.7   1.6   1.9   2.3   2.8   1.8    .5    .1
 345.  *   3.6   3.5   3.5   3.2   3.3   3.0   2.9    .0    .1    .4   1.2   1.4   1.3   1.3   2.5   3.1   3.4   2.5    .8    .3
 350.  *   2.7   2.6   2.9   2.9   3.0   2.9   2.9    .0    .0    .2    .7    .9    .8    .8   3.0   3.6   4.2   3.2   1.2    .4
 355.  *   1.9   2.0   2.4   2.6   2.8   2.8   2.8    .0    .0    .0    .3    .5    .4    .4   3.4   4.1   4.5   3.7   1.4    .7
 360.  *   1.8   1.7   1.9   2.6   2.8   2.8   2.8    .0    .0    .0    .2    .3    .2    .2   3.7   4.3   4.6   3.8   1.6    .9
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   6.7   6.5   7.0   5.6   4.1   4.0   4.1   5.6   5.5   6.1   5.5   4.5   3.8   4.1   5.3   5.2   5.4   4.7   4.8   5.2
 DEGR. *  175   180   175   175   320    55   295   205   190   175   165   165   170   175   145   145    85   150   135   125

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                                                                                                                 PAGE  5
      JOB: Site 5 BD1/2 PM 2014 - 5B1PM14.DAT                  RUN: Site 5 BD1/2 PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .5   2.0   3.6   4.5   3.7   3.6   4.0   4.3
   5.  *    .6   2.2   3.8   4.6   3.5   3.1   3.9   4.5
  10.  *    .6   2.5   3.8   4.5   3.1   3.2   4.1   4.6
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   15.  *    .8   2.9   3.9   4.5   2.7   3.2   4.3   4.8
   20.  *    .8   3.1   4.0   4.4   2.7   3.2   4.5   4.9
   25.  *   1.0   3.2   3.8   4.4   2.6   3.4   4.7   4.9
   30.  *   1.1   3.3   3.8   4.5   3.0   3.7   5.0   4.8
   35.  *   1.0   3.2   4.0   4.4   2.9   4.0   4.8   4.7
   40.  *   1.2   3.5   4.1   4.6   3.3   4.1   5.1   4.6
   45.  *   1.4   3.5   4.3   4.7   3.8   4.4   4.9   4.7
   50.  *   1.5   3.8   4.1   5.1   4.3   4.7   4.9   4.5
   55.  *   2.3   3.8   4.6   5.4   4.8   4.9   4.9   4.4
   60.  *   2.8   4.3   4.9   5.6   5.1   4.8   4.6   4.3
   65.  *   4.0   4.2   4.5   5.6   5.2   4.8   4.4   4.0
   70.  *   5.0   3.8   4.5   5.4   4.9   4.7   4.1   3.9
   75.  *   5.5   3.1   3.7   4.8   4.2   4.1   3.9   3.7
   80.  *   5.9   2.4   3.1   4.2   3.8   3.8   3.6   3.5
   85.  *   5.8   2.2   2.4   3.3   3.1   3.7   3.5   3.5
   90.  *   5.6   1.5   1.9   2.6   2.8   3.5   3.5   3.5
   95.  *   5.4   1.5   1.7   2.3   2.6   3.5   3.5   3.5
  100.  *   5.1   1.2   1.4   1.9   2.6   3.5   3.5   3.6
  105.  *   4.7   1.4   1.5   2.0   2.9   3.6   3.7   3.7
  110.  *   4.4   1.3   1.4   2.1   2.9   3.7   3.8   3.8
  115.  *   4.1   1.4   1.5   2.1   3.1   4.0   4.0   4.0
  120.  *   3.8   1.4   1.5   2.3   3.3   4.1   4.1   4.1
  125.  *   3.6   1.3   1.6   2.5   3.7   4.4   4.3   4.3
  130.  *   3.2   1.4   1.7   2.4   3.9   4.5   4.6   4.5
  135.  *   3.0   1.3   1.7   2.4   4.1   4.6   4.8   4.6
  140.  *   2.6   1.1   1.7   2.3   4.4   4.9   5.0   4.8
  145.  *   2.3   1.1   1.4   2.2   4.5   4.9   5.2   5.0
  150.  *   1.9    .9   1.2   2.0   4.4   4.9   5.0   4.9
  155.  *   1.5    .7   1.0   1.7   4.0   4.6   4.5   4.3
  160.  *   1.2    .4    .7   1.3   3.1   3.8   3.9   3.7
  165.  *    .8    .2    .4    .8   2.2   2.9   2.9   2.8
  170.  *    .7    .1    .1    .4   1.4   1.8   2.0   1.9
  175.  *    .6    .0    .0    .1    .8   1.1   1.2   1.0
  180.  *    .6    .0    .0    .0    .4    .6    .6    .6
  185.  *    .6    .0    .0    .0    .1    .3    .3    .3
  190.  *    .6    .1    .0    .0    .1    .2    .2    .2
  195.  *    .7    .1    .0    .0    .0    .1    .2    .1
  200.  *    .6    .1    .0    .0    .0    .1    .1    .1
  205.  *    .6    .1    .1    .0    .0    .1    .1    .1
1
                                                                                                                             PAGE  6
       JOB: Site 5 BD1/2 PM 2014 - 5B1PM14.DAT                  RUN: Site 5 BD1/2 PM 2014

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
  ------*------------------------------------------------
  210.  *    .6    .1    .1    .1    .0    .1    .1    .1
  215.  *    .6    .1    .1    .1    .0    .1    .1    .1
  220.  *    .6    .1    .1    .1    .1    .1    .1    .1
  225.  *    .5    .2    .1    .1    .1    .0    .1    .0
  230.  *    .5    .2    .2    .2    .2    .0    .0    .0
  235.  *    .4    .3    .2    .3    .2    .0    .0    .0
  240.  *    .3    .3    .3    .4    .4    .0    .0    .0
  245.  *    .3    .4    .4    .7    .6    .0    .0    .0
  250.  *    .1    .4    .5   1.1   1.0    .0    .0    .0
  255.  *    .1    .5    .6   1.5   1.6    .0    .0    .0
  260.  *    .1    .6    .6   1.9   2.2    .1    .0    .0
  265.  *    .0    .6    .8   2.4   2.6    .2    .0    .0
  270.  *    .0    .6    .9   2.8   3.2    .3    .0    .0
  275.  *    .0    .7   1.2   3.3   3.5    .5    .0    .0
  280.  *    .0    .6   1.3   3.6   3.6    .8    .3    .1
  285.  *    .0    .7   1.5   3.6   3.7   1.0    .4    .1
  290.  *    .0    .7   1.7   3.7   3.8   1.3    .5    .3
  295.  *    .0    .7   1.9   3.7   3.6   1.4    .6    .3
  300.  *    .0    .7   2.1   3.7   3.4   1.5    .8    .4
  305.  *    .0    .6   2.2   3.6   3.2   1.5    .8    .5
  310.  *    .0    .6   2.3   3.4   3.0   1.4   1.1    .7
  315.  *    .0    .6   2.4   3.2   2.7   1.5   1.1    .8
  320.  *    .0    .6   2.5   3.1   2.7   1.6   1.2    .9
  325.  *    .0    .6   2.6   3.2   2.8   1.8   1.3   1.2
  330.  *    .0    .6   2.6   3.0   3.1   2.2   2.0   1.8
  335.  *    .0    .7   2.7   3.2   3.3   2.7   2.3   2.4
  340.  *    .0    .8   2.7   3.5   3.7   3.1   2.7   2.9
  345.  *    .1   1.0   3.0   3.9   4.1   3.5   3.2   3.5
  350.  *    .2   1.2   3.2   4.4   4.2   3.7   3.7   4.0
  355.  *    .4   1.6   3.3   4.6   4.0   3.7   4.0   4.1
  360.  *    .5   2.0   3.6   4.5   3.7   3.6   4.0   4.3
  ------*------------------------------------------------
  MAX   *   5.9   4.3   4.9   5.6   5.2   4.9   5.2   5.0
  DEGR. *   80    60    60    60    65    55   145   145

  THE HIGHEST CONCENTRATION IS    7.00 PPM AT  175 DEGREES FROM REC3 .
  THE 2ND HIGHEST CONCENTRATION IS    6.70 PPM AT  175 DEGREES FROM REC1 .
  THE 3RD HIGHEST CONCENTRATION IS    6.50 PPM AT  180 DEGREES FROM REC2 .
```

```
Site 5 BD1/2 PM 2030 - 5B1PM30.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                 207.     2515.       5.0
SE 164 S                 183.     2590.       5.0
SE 82 S                  154.     2668.       5.0
SE CNR                   140.     2741.       5.0
SE 82 E                  205.     2774.       5.0
SE 164 E                 283.     2802.       5.0
SE MID E                 356.     2828.       5.0
NE MID E                 323.     2935.       5.0
NE 164 E                 235.     2907.       5.0
NE 82 E                  157.     2881.       5.0
NE CNR                    95.     2864.       5.0
NE 82 N                   65.     2927.       5.0
NE 164 N                  40.     3006.       5.0
NE MID N                   8.     3095.       5.0
NW MID N                 -95.     3048.       5.0
NW 164 N                 -68.     2971.       5.0
NW 82 N                  -41.     2894.       5.0
NW CNR                   -31.     2829.       5.0
NW 82 W                  -91.     2798.       5.0
NW 164 W                -165.     2767.       5.0
NW MID W                -237.     2736.       5.0
SW MID W                -218.     2665.       5.0
SW 164 W                -153.     2690.       5.0
SW 82 W                  -77.     2713.       5.0
SW CNR                     6.     2723.       5.0
SW 82 S                   40.     2651.       5.0
SW 164 S                  68.     2573.       5.0
SW MID S                  91.     2503.       5.0
Site 5 BD1/2 PM 2030                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    3455 9.2  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    3085 9.2  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       124        75       2.0 3085   84.1 1557 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     370 9.2  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       124       105       2.0  370   84.1 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    1955 9.2  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    1615 9.2  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    1220 9.2  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       124        83       2.0 1220   84.1 1674 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     395 9.2  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
```

```
       124       113       2.0  395   84.1 1700 1 3
  1
SB         Rt16 deparAG    21.  2799.   357.  1826.    2830 9.2  0.  56   30.
  1
EB         Rt27 aprchAG  -320.  2645.  -111.  2740.    1050 9.2  0.  56   30.
  1
EB         Rt27 aprchAG  -111.  2740.    56.  2763.    1050 9.2  0.  68   30.
  2
EB         Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       124       102       2.0 1050   84.1 1706 1 3
  1
EB         Rt27 deparAG    67.  2763.   996.  3083.    2425 9.2  0.  56   30.
  1
WB         Rt27 aprchAG   981.  3134.   454.  2944.    1670 9.2  0.  56   30.
  1
WB         Rt27 aprchAG   454.  2944.    52.  2807.    1670 9.2  0.  68   30.
  2
WB         Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       124        97       2.0 1670   84.1 1640 1 3
  1
WB         Rt27 deparAG    50.  2805.   -90.  2772.     580 9.2  0.  32   30.
  1
WB         Rt27 deparAG   -90.  2772.  -337.  2669.     580 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 5 BD1/2 PM 2030 - 5B1PM30.DAT                  RUN: Site 5 BD1/2 PM 2030
      DATE: 05/06/2009   TIME: 08:46:51.81


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)        (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.   340. AG   3455.   9.2    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.   342. AG   3085.   9.2    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    1761.1   -2217.2 *    5189.   161. AG    409. 100.0    .0 36.0 1.82 263.6
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.   341. AG    370.   9.2    .0 44.0
       5. NB        Rt16 left *     88.0    2690.0     133.6    2558.7 *     139.   161. AG    382. 100.0    .0 24.0  .90   7.1
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.   341. AG   1955.   9.2    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.   160. AG   1615.   9.2    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.   161. AG   1220.   9.2    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0     -60.1    3041.3 *     195.   341. AG    453. 100.0    .0 36.0  .81   9.9
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.   162. AG    395.   9.2    .0 44.0
      11. SB        Rt16 left *     25.0    2864.0    -362.2    4025.5 *    1224.   342. AG    411. 100.0    .0 24.0 2.07  62.2
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.   161. AG   2830.   9.2    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.    66. AG   1050.   9.2    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.    82. AG   1050.   9.2    .0 68.0
      15. EB        Rt27 aprch*     -5.0    2754.0    -376.8    2706.0 *     375.   263. AG    742. 100.0    .0 48.0 1.06  19.0
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.    71. AG   2425.   9.2    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.   250. AG   1670.   9.2    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.   251. AG   1670.   9.2    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    1492.5    3296.7 *    1450.    71. AG    706. 100.0    .0 48.0 1.37  73.6
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.   257. AG    580.   9.2    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.   247. AG    580.   9.2    .0 32.0
1
                                                                                                                     PAGE  2
      JOB: Site 5 BD1/2 PM 2030 - 5B1PM30.DAT                  RUN: Site 5 BD1/2 PM 2030
      DATE: 05/06/2009   TIME: 08:46:51.81

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     124       75       2.0       3085       1557      84.10      1        3
       5. NB        Rt16 left *     124      105       2.0        370       1700      84.10      1        3
       9. SB        Rt16 thru *     124       83       2.0       1220       1674      84.10      1        3
      11. SB        Rt16 left *     124      113       2.0        395       1700      84.10      1        3
      15. EB        Rt27 aprch*     124      102       2.0       1050       1706      84.10      1        3
      19. WB        Rt27 aprch*     124       97       2.0       1670       1640      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0    *
      2. SE 164 S             *       183.0     2590.0       5.0    *
      3. SE 82 S              *       154.0     2668.0       5.0    *
      4. SE CNR               *       140.0     2741.0       5.0    *
      5. SE 82 E              *       205.0     2774.0       5.0    *
      6. SE 164 E             *       283.0     2802.0       5.0    *
      7. SE MID E             *       356.0     2828.0       5.0    *
      8. NE MID E             *       323.0     2935.0       5.0    *
      9. NE 164 E             *       235.0     2907.0       5.0    *
     10. NE 82 E              *       157.0     2881.0       5.0    *
     11. NE CNR               *        95.0     2864.0       5.0    *
     12. NE 82 N              *        65.0     2927.0       5.0    *
     13. NE 164 N             *        40.0     3006.0       5.0    *
     14. NE MID N             *         8.0     3095.0       5.0    *
     15. NW MID N             *       -95.0     3048.0       5.0    *
     16. NW 164 N             *       -68.0     2971.0       5.0    *
     17. NW 82 N              *       -41.0     2894.0       5.0    *
     18. NW CNR               *       -31.0     2829.0       5.0    *
     19. NW 82 W              *       -91.0     2798.0       5.0    *
     20. NW 164 W             *      -165.0     2767.0       5.0    *
     21. NW MID W             *      -237.0     2736.0       5.0    *
     22. SW MID W             *      -218.0     2665.0       5.0    *
     23. SW 164 W             *      -153.0     2690.0       5.0    *
     24. SW 82 W              *       -77.0     2713.0       5.0    *
     25. SW CNR               *         6.0     2723.0       5.0    *
     26. SW 82 S              *        40.0     2651.0       5.0    *
     27. SW 164 S             *        68.0     2573.0       5.0    *
     28. SW MID S             *        91.0     2503.0       5.0    *
1
                                                                                                                     PAGE  3
      JOB: Site 5 BD1/2 PM 2030 - 5B1PM30.DAT                  RUN: Site 5 BD1/2 PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
```

```
   0.  *   1.1   1.1   1.5   1.9   2.1   2.1   2.1    .0    .0    .0    .2    .2    .2    .2   1.8   2.7   3.5   2.8   1.1    .5
   5.  *   1.0   1.0   1.3   1.8   2.1   2.1   2.1    .0    .0    .0    .0    .1    .0    .0   1.8   2.8   3.4   2.9   1.2    .6
  10.  *    .9    .9   1.4   1.9   2.2   2.2   2.2    .0    .0    .0    .0    .0    .0    .0   1.7   2.8   3.5   2.8   1.3    .6
  15.  *    .9    .9   1.3   1.9   2.2   2.2   2.2    .0    .0    .0    .0    .0    .0    .0   1.6   2.9   3.3   2.7   1.4    .8
  20.  *    .9   1.0   1.3   2.0   2.2   2.2   2.3    .0    .0    .0    .0    .0    .0    .0   1.6   3.0   3.1   2.6   1.4    .8
  25.  *    .9   1.0   1.4   2.1   2.3   2.4   2.5    .1    .0    .0    .0    .0    .0    .0   1.6   2.9   3.1   2.4   1.4    .8
  30.  *   1.0   1.0   1.4   2.2   2.4   2.4   2.6    .1    .0    .0    .0    .0    .0    .0   1.6   2.9   3.1   2.2   1.4    .8
  35.  *    .9   1.1   1.4   2.3   2.5   2.5   2.5    .2    .1    .1    .0    .0    .0    .0   1.4   2.8   2.9   2.0   1.3    .8
  40.  *    .9   1.1   1.6   2.3   2.6   2.7   2.7    .2    .2    .2    .0    .0    .0    .0   1.4   2.7   2.9   1.9   1.3    .9
  45.  *    .8    .9   1.6   2.4   2.8   2.7   2.8    .3    .2    .2    .2    .0    .0    .0   1.4   2.7   2.7   1.9   1.2    .9
  50.  *    .7    .9   1.4   2.5   2.9   2.8   2.8    .4    .4    .4    .3    .0    .0    .0   1.3   2.7   2.7   1.7   1.2    .9
  55.  *    .5    .9   1.3   2.5   2.8   2.9   2.8    .8    .8    .7    .5    .1    .0    .0   1.3   2.5   2.7   1.8   1.4   1.2
  60.  *    .4    .7   1.1   2.4   2.7   2.7   2.7   1.5   1.4   1.4   1.2    .2    .1    .0   1.3   2.7   2.8   2.1   1.5   1.5
  65.  *    .2    .4    .9   2.0   2.3   2.5   2.4   2.2   2.0   2.0   1.8    .4    .1    .0   1.5   2.9   3.2   2.4   1.9   1.8
  70.  *    .1    .3    .6   1.7   2.0   1.9   2.0   2.9   2.8   2.7   2.5    .8    .2    .1   1.6   3.1   3.7   2.7   2.1   2.5
  75.  *    .0    .1    .3   1.1   1.4   1.4   1.5   3.7   3.5   3.4   3.1   1.1    .6    .2   1.7   3.4   3.9   2.9   2.3   3.1
  80.  *    .0    .0    .1    .6    .8   1.0   1.0   4.1   3.9   3.9   3.5   1.4    .8    .3   1.9   3.4   4.1   3.0   2.3   3.1
  85.  *    .0    .0    .0    .4    .5    .5    .5   4.3   4.1   4.1   3.7   1.6    .9    .6   2.3   3.6   4.2   2.8   2.2   3.2
  90.  *    .0    .0    .0    .2    .3    .3    .3   4.3   4.2   4.1   3.8   1.8   1.2    .7   2.4   3.8   4.3   2.5   2.2   3.5
  95.  *    .0    .0    .0    .0    .1    .1    .1   4.0   4.0   3.8   3.5   1.8   1.2    .7   2.7   3.9   4.1   2.2   2.0   3.8
 100.  *    .1    .0    .1    .0    .1    .1    .1   3.8   3.7   3.7   3.2   1.7   1.2    .8   3.1   3.7   4.0   2.0   1.9   3.7
 105.  *    .1    .1    .1    .0    .0    .1    .1   3.8   3.6   3.5   3.0   1.6   1.0   1.0   3.1   3.8   3.7   1.6   2.0   4.0
 110.  *    .1    .1    .1    .0    .0    .0    .1   3.4   3.3   3.4   2.8   1.6   1.0    .9   3.1   3.9   3.7   1.6   2.3   3.8
 115.  *    .1    .1    .1    .0    .0    .0    .0   3.2   3.2   3.2   2.7   1.5   1.1    .8   3.3   3.9   3.4   1.7   2.5   4.0
 120.  *    .1    .1    .1    .0    .0    .0    .0   3.1   3.1   3.1   2.6   1.5   1.1    .8   3.5   3.9   3.1   1.7   2.9   3.9
 125.  *    .1    .1    .1    .0    .0    .0    .0   3.1   3.0   3.0   2.4   1.4   1.1    .7   3.4   3.7   2.9   1.9   2.9   4.0
 130.  *    .1    .1    .2    .0    .0    .0    .0   3.0   2.9   2.9   2.2   1.4   1.0    .7   3.5   3.7   3.0   1.8   3.2   3.9
 135.  *    .2    .2    .3    .1    .0    .0    .0   2.8   2.8   2.8   2.0   1.2   1.0    .7   3.6   3.7   3.0   2.3   3.4   3.9
 140.  *    .4    .5    .6    .2    .0    .0    .0   2.8   2.7   2.7   2.1   1.3   1.1    .8   3.6   3.8   3.0   2.6   3.6   3.6
 145.  *    .8    .7    .9    .6    .1    .0    .0   2.8   2.7   2.8   2.2   1.5   1.2    .9   3.8   3.9   3.0   2.9   3.3   3.4
 150.  *   1.3   1.3   1.5   1.0    .2    .1    .0   2.8   2.8   3.0   2.4   1.8   1.4   1.3   3.8   3.4   3.1   3.1   3.2   3.2
 155.  *   1.9   2.0   2.3   1.5    .4    .2    .1   3.0   3.1   3.4   2.8   2.3   1.9   1.8   3.3   3.4   2.9   2.9   3.0   3.0
 160.  *   2.7   2.6   3.0   2.3    .8    .4    .2   3.1   3.3   3.7   3.0   2.7   2.2   2.2   2.9   2.6   2.7   2.6   2.6   3.0
 165.  *   3.3   3.2   3.7   2.8   1.0    .6    .3   3.3   3.5   4.1   3.3   2.8   2.3   2.5   2.4   2.2   2.2   2.4   2.4   2.7
 170.  *   3.6   3.6   4.0   3.3   1.3    .7    .4   3.4   3.7   4.1   3.4   2.9   2.4   2.8   1.7   1.8   2.0   2.0   2.2   2.7
 175.  *   3.8   3.8   4.1   3.6   1.5    .8    .6   3.4   3.7   4.3   3.3   2.7   2.6   2.8    .9   1.2   1.2   1.6   2.1   2.6
 180.  *   3.8   3.6   4.2   3.6   1.5   1.0    .7   3.5   3.7   4.2   2.9   2.3   2.5   2.8    .7   1.0   1.2   1.5   2.0   2.5
 185.  *   3.6   3.6   3.9   3.3   1.6    .9    .6   3.6   3.8   4.1   2.7   2.0   2.3   2.8    .7    .8   1.1   1.6   2.1   2.5
 190.  *   3.4   3.4   3.9   3.3   1.5    .9    .7   3.6   3.8   4.0   2.3   2.0   2.5   2.7    .6    .7   1.1   1.5   2.0   2.6
 195.  *   3.3   3.3   3.8   3.1   1.6    .9    .8   3.7   4.1   3.9   2.2   1.8   2.5   2.8    .5    .7    .9   1.6   1.9   2.6
 200.  *   3.1   3.1   3.7   3.0   1.5   1.0    .7   4.0   3.9   3.7   2.1   1.8   2.6   2.8    .6    .7   1.0   1.6   1.9   2.7
 205.  *   3.0   2.9   3.7   2.7   1.5   1.0    .7   4.1   4.0   3.4   1.9   2.0   2.8   2.7    .4    .7   1.1   1.6   2.2   2.7
1
                                                                                                                         PAGE  4
      JOB: Site 5 BD1/2 PM 2030 - 5B1PM30.DAT                  RUN: Site 5 BD1/2 PM 2030

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *   2.9   2.9   3.6   2.5   1.5   1.0    .9   4.1   3.9   3.3   1.9   2.2   2.7   2.6    .4    .7   1.1   1.7   2.2   2.8
 215.  *   2.9   2.8   3.5   2.3   1.5   1.0    .9   4.1   4.0   3.2   1.9   2.4   2.7   2.5    .3    .7   1.1   1.7   2.3   2.9
 220.  *   2.8   2.7   3.4   2.1   1.4   1.1    .9   4.3   3.9   2.9   1.9   2.5   2.8   2.3    .3    .5   1.1   1.8   2.3   3.0
 225.  *   2.6   2.8   3.3   1.9   1.3   1.1    .9   4.2   3.8   2.8   2.0   2.6   2.7   2.2    .2    .4   1.0   1.8   2.2   3.0
 230.  *   2.5   2.6   3.3   1.7   1.3   1.1    .8   4.2   3.8   2.7   2.2   2.7   2.6   2.1    .1    .3   1.0   1.8   2.3   3.1
 235.  *   2.6   2.7   3.3   1.8   1.3   1.2   1.0   4.1   3.4   2.6   2.2   2.7   2.4   1.9    .1    .2    .8   1.8   2.2   3.1
 240.  *   2.7   2.8   3.3   1.6   1.4   1.3   1.1   3.6   3.1   2.3   2.3   2.6   2.4   1.8    .0    .2    .6   1.5   2.2   3.0
 245.  *   2.6   2.9   3.2   1.8   1.5   1.4   1.4   3.5   2.8   2.2   2.4   2.5   2.3   1.6    .0    .1    .4   1.4   1.9   2.9
 250.  *   2.6   3.1   3.3   1.8   1.9   1.5   1.7   2.9   2.4   2.0   2.2   2.5   2.3   1.5    .0    .0    .3   1.2   1.6   2.7
 255.  *   2.6   3.0   3.3   2.3   1.9   1.9   1.9   2.3   1.7   1.5   1.9   2.4   2.2   1.4    .0    .0    .2    .8   1.3   2.2
 260.  *   2.7   3.1   3.4   2.5   1.9   2.1   2.2   1.8   1.5   1.4   1.8   2.3   2.1   1.4    .0    .0    .1    .5    .9   1.7
 265.  *   2.7   3.1   3.6   2.7   2.1   2.1   2.5   1.4   1.3   1.2   1.6   2.2   2.0   1.5    .0    .0    .0    .3    .6   1.3
 270.  *   2.5   3.2   3.9   2.9   2.2   2.3   2.8   1.2   1.1   1.1   1.6   2.2   2.0   1.4    .0    .0    .0    .2    .3    .9
 275.  *   2.7   3.3   3.9   2.8   2.2   2.6   2.8    .9   1.1   1.2   1.8   2.2   2.1   1.4    .0    .0    .0    .1    .2    .6
 280.  *   3.0   3.6   4.1   2.7   2.2   2.6   2.9    .8   1.0   1.2   1.7   2.2   2.0   1.4    .0    .0    .0    .0    .1    .3
 285.  *   3.1   3.7   3.9   2.4   2.0   2.7   3.1    .6   1.0   1.1   1.9   2.3   1.9   1.4    .0    .0    .0    .0    .0    .2
 290.  *   3.5   3.8   3.9   2.5   2.2   2.7   3.0    .5    .9   1.1   2.0   2.3   2.1   1.6    .0    .0    .0    .0    .0    .1
 295.  *   3.6   4.1   3.6   2.4   2.3   2.9   2.9    .6    .8   1.2   2.0   2.3   1.9   1.6    .0    .0    .0    .0    .0    .1
 300.  *   3.9   4.2   3.5   2.2   2.5   3.0   2.8    .6    .7   1.1   2.1   2.3   1.9   1.7    .0    .0    .0    .0    .0    .1
 305.  *   4.0   4.2   3.6   2.2   2.6   3.1   2.8    .5    .7   1.3   2.2   2.4   1.8   1.7    .0    .0    .0    .0    .0    .1
 310.  *   4.1   4.1   3.4   2.2   2.9   2.9   2.7    .5    .6   1.2   2.3   2.4   1.9   1.8    .0    .0    .1    .0    .0    .0
 315.  *   4.3   4.2   3.3   2.5   2.9   2.8   2.7    .5    .6   1.1   2.3   2.3   1.8   1.9    .0    .0    .1    .0    .0    .0
 320.  *   4.2   4.0   3.2   2.6   3.0   2.7   2.5    .4    .6   1.0   2.1   2.4   1.9   1.9    .1    .1    .2    .0    .0    .0
 325.  *   4.4   4.1   3.3   2.8   3.0   2.6   2.5    .4    .5    .9   2.0   2.2   1.9   1.9    .2    .3    .5    .2    .0    .0
 330.  *   4.2   3.8   3.3   3.0   2.8   2.6   2.5    .2    .5    .7   1.9   2.1   1.8   1.8    .4    .5    .8    .6    .1    .0
 335.  *   3.9   3.2   3.1   2.9   2.8   2.5   2.3    .1    .3    .7   1.6   1.8   1.5   1.6    .7   1.0   1.3    .9    .2    .0
 340.  *   3.2   3.0   2.8   2.7   2.6   2.4   2.3    .0    .1    .5   1.3   1.4   1.3   1.3   1.0   1.3   1.8   1.3    .4    .1
 345.  *   2.7   2.4   2.5   2.4   2.5   2.3   2.2    .0    .1    .3    .9   1.1    .9    .9   1.5   1.8   2.4   1.8    .5    .2
 350.  *   1.9   1.7   2.0   2.0   2.3   2.2   2.2    .0    .0    .1    .5    .7    .7    .7   1.6   2.1   2.9   2.3    .7    .4
 355.  *   1.4   1.4   1.6   1.9   2.1   2.1   2.1    .0    .0    .0    .2    .4    .3    .3   1.8   2.5   3.1   2.5   1.1    .5
 360.  *   1.1   1.1   1.5   1.9   2.1   2.1   2.1    .0    .0    .0    .2    .2    .2    .2   1.8   2.7   3.5   2.8   1.1    .5
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   4.4   4.2   4.2   3.6   3.0   3.1   3.1   4.3   4.2   4.3   3.8   2.9   2.8   2.8   3.8   3.9   4.3   3.1   3.6   4.0
 DEGR. *   325   300   180   175   320   305   285    85    90   175    90   170   205   180   145   110    90   150   140   115

1
                                                                                                                         PAGE  5
      JOB: Site 5 BD1/2 PM 2030 - 5B1PM30.DAT                  RUN: Site 5 BD1/2 PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *   1.1   2.3   2.8   3.8   2.8   2.5   2.7   3.2
   5.  *   1.2   2.4   2.8   3.8   2.6   2.1   2.6   3.1
  10.  *   1.1   2.5   3.0   3.7   2.3   2.3   3.0   3.5
```

```
  15.  *   1.1   2.5   3.0   3.6   2.1   2.3   3.0   3.4
  20.  *   1.2   2.5   3.1   3.7   2.0   2.2   3.2   3.4
  25.  *   1.3   2.7   3.2   3.5   2.0   2.4   3.3   3.4
  30.  *   1.5   2.6   3.2   3.5   2.0   2.7   3.5   3.3
  35.  *   1.5   2.7   3.1   3.7   2.0   2.8   3.6   3.3
  40.  *   1.6   2.8   3.2   3.5   2.3   3.1   3.7   3.2
  45.  *   1.6   2.9   3.3   3.8   2.7   3.3   3.8   3.0
  50.  *   2.0   3.1   3.5   4.0   2.9   3.5   3.7   3.0
  55.  *   2.4   3.2   3.6   4.2   3.6   3.6   3.5   2.8
  60.  *   3.2   3.3   3.7   4.4   3.7   3.7   3.4   2.6
  65.  *   4.0   3.0   3.7   4.4   3.8   3.5   3.1   2.3
  70.  *   5.0   2.8   3.2   4.1   3.5   3.2   3.1   2.1
  75.  *   5.5   2.3   2.9   3.6   3.0   2.9   2.7   2.1
  80.  *   5.7   2.1   2.4   3.0   2.6   2.9   2.7   2.0
  85.  *   5.9   1.4   1.8   2.4   2.0   2.7   2.5   2.0
  90.  *   5.9   1.2   1.3   2.0   1.8   2.6   2.5   2.0
  95.  *   5.7    .9   1.0   1.5   1.8   2.6   2.4   2.0
 100.  *   5.6    .8    .9   1.4   1.8   2.6   2.4   2.0
 105.  *   5.3    .8    .9   1.4   1.8   2.6   2.4   2.0
 110.  *   5.0    .7   1.0   1.4   2.1   2.7   2.3   2.1
 115.  *   4.7    .8   1.0   1.5   2.2   2.8   2.5   2.2
 120.  *   4.4    .7   1.0   1.4   2.4   2.9   2.5   2.4
 125.  *   4.0    .8    .9   1.5   2.5   2.9   2.4   2.3
 130.  *   3.7    .7    .9   1.4   2.7   3.0   2.5   2.5
 135.  *   3.6    .7   1.0   1.5   2.7   3.1   2.7   2.5
 140.  *   3.5    .7    .9   1.3   2.8   3.0   2.7   2.7
 145.  *   3.4    .5    .8   1.2   2.8   3.0   2.7   2.7
 150.  *   3.2    .5    .7   1.0   2.6   2.7   2.7   2.7
 155.  *   3.2    .4    .5   1.0   2.4   2.6   2.6   2.5
 160.  *   2.9    .2    .4    .7   1.8   2.2   2.1   2.2
 165.  *   2.7    .1    .2    .4   1.4   1.6   1.6   1.6
 170.  *   2.8    .1    .1    .2    .8   1.1   1.1   1.0
 175.  *   2.7    .0    .0    .1    .4    .7    .8    .6
 180.  *   2.7    .0    .0    .0    .1    .4    .4    .4
 185.  *   2.6    .0    .0    .0    .1    .2    .2    .2
 190.  *   2.7    .0    .0    .0    .0    .1    .1    .1
 195.  *   2.7    .0    .0    .0    .0    .1    .1    .1
 200.  *   2.8    .0    .0    .0    .0    .1    .1    .1
 205.  *   2.8    .1    .0    .0    .0    .1    .1    .1
1
                                                                                                                PAGE  6
      JOB: Site 5 BD1/2 PM 2030 - 5B1PM30.DAT                  RUN: Site 5 BD1/2 PM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   2.9    .1    .0    .1    .0    .1    .1    .1
 215.  *   3.0    .1    .1    .1    .0    .1    .1    .1
 220.  *   3.2    .1    .1    .1    .0    .0    .1    .0
 225.  *   3.5    .1    .1    .1    .0    .0    .0    .0
 230.  *   3.7    .1    .1    .1    .1    .0    .0    .0
 235.  *   4.0    .2    .2    .3    .2    .0    .0    .0
 240.  *   4.0    .2    .3    .4    .4    .0    .0    .0
 245.  *   4.0    .3    .4    .8    .6    .0    .0    .0
 250.  *   3.9    .3    .5   1.1   1.0    .0    .0    .0
 255.  *   3.9    .4    .8   1.7   1.5    .1    .0    .0
 260.  *   3.8    .5   1.1   2.2   2.1    .2    .0    .0
 265.  *   3.6    .8   1.4   2.7   2.6    .4    .0    .0
 270.  *   3.3    .9   1.8   3.1   3.1    .5    .1    .0
 275.  *   2.9   1.1   2.1   3.4   3.4    .7    .2    .0
 280.  *   2.4   1.3   2.4   3.5   3.5    .9    .3    .1
 285.  *   1.9   1.6   2.5   3.5   3.3   1.1    .6    .3
 290.  *   1.5   1.6   2.6   3.4   3.2   1.2    .7    .4
 295.  *   1.2   1.8   2.5   3.3   2.9   1.4    .8    .5
 300.  *   1.0   1.9   2.5   3.2   2.8   1.4    .9    .6
 305.  *   1.0   1.9   2.5   3.1   2.6   1.3    .9    .7
 310.  *    .9   2.0   2.4   2.9   2.5   1.2    .8    .6
 315.  *    .8   1.9   2.3   2.8   2.3   1.1   1.0    .6
 320.  *    .7   1.9   2.3   2.7   2.2   1.2    .9    .7
 325.  *    .6   1.9   2.3   2.6   2.2   1.3   1.2   1.0
 330.  *    .6   1.9   2.2   2.5   2.5   1.6   1.4   1.2
 335.  *    .6   1.9   2.2   2.7   2.7   1.9   1.9   1.7
 340.  *    .7   1.9   2.3   2.9   2.9   2.2   2.1   2.1
 345.  *    .8   2.0   2.4   3.2   3.0   2.3   2.4   2.6
 350.  *    .9   2.0   2.6   3.4   3.1   2.4   2.5   2.8
 355.  *   1.1   2.3   2.7   3.6   3.2   2.6   2.9   3.1
 360.  *   1.1   2.3   2.8   3.8   2.8   2.5   2.7   3.2
 ------*------------------------------------------------
 MAX   *   5.9   3.3   3.7   4.4   3.8   3.7   3.8   3.5
 DEGR. *   90    60    60    65    65    60    45    10

 THE HIGHEST CONCENTRATION IS    5.90 PPM AT   90 DEGREES FROM REC21.
 THE 2ND HIGHEST CONCENTRATION IS    4.40 PPM AT   65 DEGREES FROM REC24.
 THE 3RD HIGHEST CONCENTRATION IS    4.40 PPM AT  325 DEGREES FROM REC1 .
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Site 5 BD 3  AM 2014 - 5B3AM14.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 BD 3  AM 2014                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    372811.4  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    310311.4  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       120        82       2.0 3103  102.2 1586 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     62511.4  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       120       105       2.0  625  102.2 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    250611.4  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    257211.4  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    232111.4  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       120        86       2.0 2321  102.2 1673 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     25111.4  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
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```
       120       109       2.0  251  102.2 1700 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    512411.4  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.     53111.4  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.     53111.4  0.  68   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       120       100       2.0  531  102.2 1706 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    157711.4  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    401111.4  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    401111.4  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       120        82       2.0 4011  102.2 1683 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.    163511.4  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.    163511.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 5 BD 3  AM 2014 - 5B3AM14.DAT                   RUN: Site 5 BD 3  AM 2014
      DATE: 05/06/2009   TIME: 09:02:03.58


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *    622.   340. AG   3728.  11.4    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *    366.   342. AG   3103.  11.4    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    2164.5   -3421.3 *   6459.   161. AG    562. 100.0    .0 36.0 2.30 328.1
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *    364.   341. AG    625.  11.4    .0 44.0
       5. NB        Rt16 left *     88.0    2690.0     693.6     945.5 *   1847.   161. AG    480. 100.0    .0 24.0 2.01  93.8
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *   1000.   341. AG   2506.  11.4    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *    677.   160. AG   2572.  11.4    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *    290.   161. AG   2321.  11.4    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0   -1282.2    6687.9 *   4041.   341. AG    589. 100.0    .0 36.0 1.85 205.3
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *    279.   162. AG    251.  11.4    .0 44.0
      11. SB        Rt16 left *     25.0    2864.0     -98.9    3235.7 *    392.   342. AG    498. 100.0    .0 24.0 1.26  19.9
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *   1029.   161. AG   5124.  11.4    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *    230.    66. AG    531.  11.4    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *    169.    82. AG    531.  11.4    .0 68.0
      15. EB        Rt27 aprch*     -5.0    2754.0     -76.6    2744.8 *     72.   263. AG    914. 100.0    .0 48.0  .58   3.7
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *    983.    71. AG   1577.  11.4    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *    560.   250. AG   4011.  11.4    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *    425.   251. AG   4011.  11.4    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    5658.3    4713.0 *   5850.    71. AG    749. 100.0    .0 48.0 2.11 297.2
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *    144.   257. AG   1635.  11.4    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *    268.   247. AG   1635.  11.4    .0 32.0
1
                                                                                                                       PAGE  2
      JOB: Site 5 BD 3  AM 2014 - 5B3AM14.DAT                   RUN: Site 5 BD 3  AM 2014
      DATE: 05/06/2009   TIME: 09:02:03.58

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     120       82       2.0      3103       1586     102.20      1        3
       5. NB        Rt16 left *     120      105       2.0       625       1700     102.20      1        3
       9. SB        Rt16 thru *     120       86       2.0      2321       1673     102.20      1        3
      11. SB        Rt16 left *     120      109       2.0       251       1700     102.20      1        3
      15. EB        Rt27 aprch*     120      100       2.0       531       1706     102.20      1        3
      19. WB        Rt27 aprch*     120       82       2.0      4011       1683     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X            Y          Z      *
     -------------------------*-------------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0    *
      2. SE 164 S             *       183.0     2590.0       5.0    *
      3. SE 82 S              *       154.0     2668.0       5.0    *
      4. SE CNR               *       140.0     2741.0       5.0    *
      5. SE 82 E              *       205.0     2774.0       5.0    *
      6. SE 164 E             *       283.0     2802.0       5.0    *
      7. SE MID E             *       356.0     2828.0       5.0    *
      8. NE MID E             *       323.0     2935.0       5.0    *
      9. NE 164 E             *       235.0     2907.0       5.0    *
     10. NE 82 E              *       157.0     2881.0       5.0    *
     11. NE CNR               *        95.0     2864.0       5.0    *
     12. NE 82 N              *        65.0     2927.0       5.0    *
     13. NE 164 N             *        40.0     3006.0       5.0    *
     14. NE MID N             *         8.0     3095.0       5.0    *
     15. NW MID N             *       -95.0     3048.0       5.0    *
     16. NW 164 N             *       -68.0     2971.0       5.0    *
     17. NW 82 N              *       -41.0     2894.0       5.0    *
     18. NW CNR               *       -31.0     2829.0       5.0    *
     19. NW 82 W              *       -91.0     2798.0       5.0    *
     20. NW 164 W             *      -165.0     2767.0       5.0    *
     21. NW MID W             *      -237.0     2736.0       5.0    *
     22. SW MID W             *      -218.0     2665.0       5.0    *
     23. SW 164 W             *      -153.0     2690.0       5.0    *
     24. SW 82 W              *       -77.0     2713.0       5.0    *
     25. SW CNR               *         6.0     2723.0       5.0    *
     26. SW 82 S              *        40.0     2651.0       5.0    *
     27. SW 164 S             *        68.0     2573.0       5.0    *
     28. SW MID S             *        91.0     2503.0       5.0    *
1
                                                                                                                       PAGE  3
      JOB: Site 5 BD 3  AM 2014 - 5B3AM14.DAT                   RUN: Site 5 BD 3  AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
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   0.  *   1.6   1.7   1.9   2.4   2.7   2.7   2.7    .1    .0    .0    .2    .3    .2    .2   4.8   5.3   5.4   4.3   2.1   1.2
   5.  *   1.2   1.4   1.8   2.3   2.7   2.7   2.7    .1    .1    .1    .1    .1    .1    .1   4.6   5.1   5.3   4.3   2.2   1.3
  10.  *   1.1   1.4   1.6   2.3   2.7   2.7   2.7    .1    .1    .1    .0    .0    .0    .0   4.7   4.8   5.1   4.1   2.2   1.3
  15.  *   1.0   1.3   1.7   2.4   2.8   2.8   2.9    .1    .1    .1    .1    .0    .0    .0   4.6   4.8   5.0   3.9   2.2   1.4
  20.  *   1.1   1.3   1.7   2.5   2.8   2.8   2.9    .1    .1    .1    .1    .0    .0    .0   4.4   4.6   4.7   3.7   2.1   1.4
  25.  *   1.0   1.3   1.7   2.5   2.9   2.9   3.0    .2    .1    .1    .1    .0    .0    .0   4.2   4.3   4.5   3.5   2.0   1.5
  30.  *   1.1   1.3   1.9   2.7   2.9   3.0   3.0    .2    .1    .1    .1    .0    .0    .0   4.1   4.2   4.2   3.3   2.0   1.4
  35.  *   1.0   1.5   1.9   2.8   3.1   3.2   3.2    .3    .2    .2    .1    .0    .0    .0   4.0   4.1   4.1   3.1   1.9   1.3
  40.  *   1.1   1.4   1.9   2.9   3.2   3.2   3.3    .3    .3    .3    .1    .0    .0    .0   3.9   3.9   4.0   2.9   1.8   1.3
  45.  *   1.0   1.3   1.9   2.9   3.3   3.4   3.5    .5    .4    .4    .3    .0    .0    .0   3.7   3.9   3.9   2.8   1.8   1.3
  50.  *    .9   1.3   2.0   3.0   3.5   3.5   3.6    .8    .8    .7    .5    .0    .0    .0   3.7   3.8   3.9   2.7   1.9   1.5
  55.  *    .8   1.1   1.8   3.2   3.5   3.6   3.5   1.3   1.3   1.3   1.0    .1    .0    .0   3.6   3.8   3.9   2.9   2.1   1.7
  60.  *    .8   1.1   1.6   3.0   3.4   3.4   3.5   2.4   2.2   2.2   1.9    .4    .1    .1   3.7   3.9   4.3   3.2   2.5   2.3
  65.  *    .5    .9   1.4   2.8   3.2   3.2   3.2   3.5   3.3   3.2   2.7    .8    .3    .2   3.9   4.1   4.7   3.8   3.0   2.9
  70.  *    .4    .6   1.0   2.2   2.5   2.6   2.5   4.6   4.4   4.4   3.9   1.3    .6    .4   4.0   4.5   5.4   4.2   3.5   3.4
  75.  *    .2    .3    .7   1.5   1.8   1.9   1.8   5.4   5.1   5.1   4.6   1.8   1.0    .6   4.3   4.9   5.7   4.4   3.8   4.0
  80.  *    .1    .2    .3    .9   1.2   1.2   1.2   5.9   5.7   5.6   5.1   2.1   1.2    .7   4.5   5.1   5.9   4.4   3.8   4.0
  85.  *    .0    .1    .1    .5    .6    .6    .7   6.0   5.7   5.8   5.2   2.3   1.4    .9   4.7   5.2   6.0   4.3   3.6   3.7
  90.  *    .0    .0    .0    .2    .2    .2    .3   5.9   5.7   5.7   5.2   2.4   1.5   1.0   4.8   5.2   5.9   3.9   3.4   3.7
  95.  *    .0    .0    .1    .0    .1    .1    .1   5.5   5.4   5.2   4.8   2.3   1.5   1.1   4.8   5.4   5.8   3.5   2.9   3.3
 100.  *    .1    .1    .1    .0    .1    .1    .1   5.2   5.0   5.1   4.5   2.2   1.5   1.0   4.9   5.4   5.6   3.3   3.3   3.2
 105.  *    .1    .1    .1    .0    .0    .0    .1   4.9   4.8   4.7   4.1   2.2   1.5   1.1   5.1   5.4   5.4   3.0   3.3   3.4
 110.  *    .1    .1    .1    .0    .0    .0    .0   4.7   4.5   4.5   3.9   2.0   1.5   1.1   5.2   5.5   5.3   2.8   3.5   3.1
 115.  *    .1    .1    .1    .0    .0    .0    .0   4.6   4.3   4.3   3.7   2.0   1.5   1.1   5.1   5.5   4.9   2.9   4.0   3.1
 120.  *    .1    .1    .1    .0    .0    .0    .0   4.2   4.1   4.1   3.5   2.0   1.4   1.1   5.3   5.6   4.8   3.3   4.2   3.0
 125.  *    .1    .1    .2    .0    .0    .0    .0   4.0   3.9   3.9   3.3   1.9   1.4    .9   5.2   5.4   4.7   3.4   4.7   2.9
 130.  *    .1    .1    .3    .0    .0    .0    .0   3.9   3.9   3.8   3.1   1.8   1.4    .9   5.5   5.6   4.4   3.6   4.9   3.0
 135.  *    .3    .3    .3    .2    .0    .0    .0   3.7   3.7   3.7   3.1   1.9   1.2    .9   5.7   5.5   4.9   4.2   5.2   2.7
 140.  *    .7    .7    .8    .3    .0    .0    .0   3.7   3.6   3.6   2.9   2.0   1.5   1.1   6.0   5.8   4.7   4.5   5.1   2.5
 145.  *   1.3   1.2   1.5    .9    .1    .0    .0   3.7   3.7   3.7   3.3   2.4   1.7   1.5   6.0   6.0   5.5   5.2   5.1   2.6
 150.  *   2.2   2.1   2.5   1.7    .4    .1    .1   3.8   3.8   4.1   3.8   3.0   2.2   2.1   6.0   5.7   5.7   5.5   4.7   2.4
 155.  *   3.4   3.3   3.7   2.7    .8    .3    .1   3.9   4.2   4.8   4.4   3.8   3.1   2.7   5.4   5.5   5.4   5.4   4.2   2.0
 160.  *   4.6   4.5   5.1   3.7   1.4    .7    .4   4.4   4.6   5.3   5.4   4.5   3.8   3.6   5.0   4.8   4.9   4.9   3.5   1.6
 165.  *   5.7   5.5   6.1   4.8   2.0    .9    .7   4.7   5.1   6.0   5.8   4.9   4.3   3.9   3.6   3.8   4.2   4.0   2.7   1.2
 170.  *   6.4   6.1   6.8   5.4   2.4   1.3    .9   4.7   5.3   6.2   6.1   4.8   4.3   4.3   2.6   2.9   3.1   3.4   2.0    .9
 175.  *   6.6   6.7   7.0   5.7   2.7   1.7   1.2   4.9   5.4   6.5   5.8   4.7   4.3   4.2   1.5   1.8   2.4   2.7   1.6    .7
 180.  *   6.7   6.6   6.9   5.6   2.8   1.8   1.3   5.0   5.6   6.5   5.4   4.4   4.0   4.4   1.2   1.2   1.7   2.3   1.1    .8
 185.  *   6.4   6.2   6.6   5.2   2.9   1.9   1.4   5.1   5.6   6.2   4.8   3.7   3.6   4.1    .6    .9   1.3   1.9   1.0    .8
 190.  *   6.2   6.0   6.3   5.0   3.0   2.0   1.6   5.4   5.6   6.1   4.3   3.3   3.6   3.9    .3    .5   1.2   1.9   1.0    .8
 195.  *   5.9   5.7   6.1   4.5   2.7   1.9   1.4   5.4   5.8   5.7   3.9   3.2   3.6   3.9    .2    .3   1.0   1.7    .8    .8
 200.  *   5.6   5.4   5.6   4.3   2.7   1.8   1.4   5.5   5.8   5.4   3.8   3.0   3.6   3.7    .2    .3    .7   1.6    .8    .8
 205.  *   5.4   5.3   5.4   4.0   2.5   1.8   1.4   5.7   5.8   5.4   3.6   3.1   3.5   3.5    .2    .2    .6   1.6    .8    .9
1
                                                                                                                     PAGE  4
      JOB: Site 5 BD 3  AM 2014 - 5B3AM14.DAT                  RUN: Site 5 BD 3  AM 2014

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *   5.2   5.2   5.4   3.7   2.5   1.7   1.4   5.6   5.6   4.9   3.6   3.1   3.6   3.5    .2    .2    .7   1.4    .9    .9
 215.  *   4.8   4.8   5.0   3.3   2.2   1.7   1.4   5.7   5.7   4.8   3.4   3.2   3.3   3.4    .2    .2    .6   1.5    .7    .9
 220.  *   4.8   4.6   4.8   3.1   2.2   1.6   1.5   5.8   5.5   4.5   3.1   3.1   3.2   3.2    .0    .2    .4   1.2    .8    .9
 225.  *   4.5   4.6   4.8   2.9   2.0   1.7   1.3   5.9   5.3   4.3   3.2   3.1   3.2   3.1    .0    .1    .3   1.1    .8    .9
 230.  *   4.5   4.5   4.6   2.6   2.0   1.6   1.3   5.7   5.0   4.1   3.1   3.1   3.2   3.0    .0    .1    .2    .9    .8    .8
 235.  *   4.5   4.5   4.7   2.4   1.8   1.4   1.3   5.7   4.9   3.9   3.0   3.1   3.2   3.0    .0    .0    .2    .7    .8    .8
 240.  *   4.6   4.6   4.7   2.4   1.8   1.5   1.5   5.3   4.5   3.4   2.7   3.2   3.1   3.0    .0    .0    .1    .6    .7    .7
 245.  *   4.6   4.6   4.7   2.3   1.7   1.6   1.6   4.9   4.1   3.1   2.5   3.1   3.1   2.9    .0    .0    .1    .5    .6    .6
 250.  *   4.7   4.6   4.8   2.4   2.0   1.7   1.7   4.2   3.4   2.7   2.3   3.2   3.1   2.9    .0    .0    .0    .3    .5    .4
 255.  *   4.7   4.6   4.8   2.6   2.3   2.0   2.2   3.4   2.7   2.3   2.1   3.2   3.0   2.9    .0    .0    .0    .2    .3    .3
 260.  *   4.7   4.6   4.6   2.7   2.2   2.2   2.7   2.7   2.3   2.1   2.2   3.1   3.0   3.0    .0    .0    .0    .1    .2    .2
 265.  *   4.7   4.5   4.7   2.9   2.5   2.6   3.0   2.1   1.6   1.8   2.2   3.1   3.0   2.9    .0    .0    .0    .1    .1    .1
 270.  *   4.7   4.5   4.7   2.9   2.4   2.9   3.2   1.7   1.6   1.7   2.1   3.2   2.9   3.0    .0    .0    .0    .0    .1    .1
 275.  *   4.7   4.6   4.8   2.9   2.6   3.1   3.3   1.4   1.5   1.8   2.4   3.1   3.0   3.0    .0    .0    .0    .0    .0    .0
 280.  *   4.7   4.8   4.9   3.2   2.6   3.4   3.6   1.3   1.3   1.8   2.6   3.2   3.0   3.0    .0    .0    .1    .0    .0    .0
 285.  *   4.9   4.8   5.2   3.1   2.7   3.6   3.7   1.3   1.4   1.9   2.7   3.2   3.1   3.1    .0    .1    .1    .0    .0    .0
 290.  *   5.0   5.2   5.0   3.3   3.0   3.5   3.8   1.3   1.4   1.9   2.9   3.3   3.2   3.2    .0    .1    .1    .0    .0    .0
 295.  *   5.5   5.4   5.0   3.4   3.2   3.9   4.0   1.2   1.5   1.9   3.2   3.5   3.4   3.4    .0    .1    .1    .0    .0    .0
 300.  *   5.6   5.6   4.9   3.2   3.5   4.0   3.9   1.2   1.4   2.0   3.3   3.6   3.4   3.5    .0    .1    .1    .0    .0    .0
 305.  *   5.8   5.7   5.1   3.4   3.9   4.0   3.8   1.1   1.5   2.0   3.4   3.6   3.4   3.5    .0    .1    .1    .0    .0    .0
 310.  *   6.1   5.7   4.9   3.5   4.0   3.9   3.7   1.0   1.5   2.1   3.4   3.8   3.6   3.6    .0    .1    .2    .0    .0    .0
 315.  *   6.3   5.6   4.8   3.9   4.2   4.1   3.6   1.0   1.3   2.1   3.6   3.8   3.6   3.5    .2    .2    .3    .1    .0    .0
 320.  *   6.5   6.1   5.0   4.2   4.3   3.9   3.5    .8   1.3   2.0   3.4   3.9   3.6   3.5    .4    .5    .6    .3    .0    .0
 325.  *   6.3   5.7   5.1   4.4   4.1   3.8   3.4    .6   1.1   1.9   3.4   3.9   3.7   3.5    .7    .9   1.1    .6    .1    .0
 330.  *   6.2   5.6   5.2   4.5   4.2   3.6   3.3    .6   1.0   1.6   3.3   3.6   3.4   3.2   1.4   1.7   1.8   1.2    .2    .1
 335.  *   5.6   5.2   4.7   4.6   3.9   3.4   3.3    .3    .7   1.3   2.9   3.3   2.9   2.8   2.2   2.5   2.7   1.9    .5    .2
 340.  *   4.9   4.3   4.3   4.1   3.4   3.3   3.0    .2    .6   1.0   2.3   2.6   2.3   2.3   3.1   3.4   3.7   2.7   1.0    .5
 345.  *   3.8   3.5   3.6   3.5   3.2   2.9   2.9    .1    .2    .6   1.6   1.9   1.7   1.6   3.7   4.2   4.5   3.4   1.4    .7
 350.  *   2.9   2.8   3.0   3.0   2.9   2.8   2.8    .1    .1    .3   1.0   1.1   1.0    .9   4.5   4.8   5.2   4.0   1.8    .9
 355.  *   2.0   2.0   2.3   2.7   2.7   2.7   2.7    .0    .0    .1    .6    .7    .6    .6   4.7   5.2   5.5   4.3   1.9   1.1
 360.  *   1.6   1.7   1.9   2.4   2.7   2.7   2.7    .1    .0    .0    .2    .3    .2    .2   4.8   5.3   5.4   4.3   2.1   1.2
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   6.7   6.7   7.0   5.7   4.3   4.1   4.0   6.0   5.8   6.5   6.1   4.9   4.3   4.4   6.0   6.0   6.0   5.5   5.2   4.0
 DEGR. *  180   175   175   175   320   315   295    85   195   175   170   165   165   180   140   145    85   150   135    75

1
                                                                                                                     PAGE  5
      JOB: Site 5 BD 3  AM 2014 - 5B3AM14.DAT                  RUN: Site 5 BD 3  AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .8   1.5   1.8   3.7   4.7   4.6   4.9   5.5
   5.  *    .9   1.5   1.9   4.1   4.2   4.3   4.8   5.5
  10.  *   1.0   1.8   2.0   4.0   3.6   4.0   5.0   5.5
```

```
  15.  *   1.1   1.7   1.9   4.2   3.3   3.9   5.2   5.5
  20.  *   1.2   1.6   1.9   4.3   3.3   3.8   5.4   5.5
  25.  *   1.0   1.7   1.9   4.4   3.3   4.1   5.3   5.5
  30.  *   1.1   1.8   2.0   4.3   3.4   4.4   5.5   5.5
  35.  *   1.2   1.7   2.2   4.4   3.6   4.6   5.5   5.3
  40.  *   1.1   2.0   2.3   4.6   4.1   4.8   5.5   5.3
  45.  *   1.3   2.1   2.6   4.9   4.4   4.9   5.6   5.2
  50.  *   1.2   2.2   3.0   5.4   4.7   5.1   5.4   5.0
  55.  *   1.7   2.5   3.4   5.5   5.2   5.3   5.3   5.0
  60.  *   2.2   3.0   3.7   5.9   5.5   5.4   5.3   4.9
  65.  *   2.6   3.3   3.9   6.0   5.7   5.5   5.1   5.0
  70.  *   3.3   3.2   3.9   5.7   5.1   5.4   5.0   4.6
  75.  *   3.8   3.0   3.6   5.1   4.6   4.8   4.6   4.5
  80.  *   3.4   2.3   2.8   4.3   3.9   4.5   4.3   4.2
  85.  *   3.3   1.8   2.3   3.4   3.4   4.1   4.2   4.0
  90.  *   2.9   1.6   1.9   2.5   3.2   4.0   4.1   4.0
  95.  *   2.7   1.3   1.7   2.4   3.0   4.0   4.1   4.0
 100.  *   2.5   1.1   1.6   2.1   3.0   4.1   4.1   4.2
 105.  *   2.2   1.2   1.7   2.1   3.2   4.2   4.3   4.3
 110.  *   2.2   1.4   1.7   2.3   3.4   4.4   4.4   4.5
 115.  *   2.4   1.5   1.7   2.3   3.6   4.7   4.8   4.7
 120.  *   2.3   1.5   1.7   2.3   3.9   4.8   4.9   4.8
 125.  *   2.3   1.5   1.8   2.5   4.2   5.1   5.1   5.1
 130.  *   2.2   1.4   1.8   2.6   4.6   5.3   5.4   5.3
 135.  *   2.2   1.3   1.9   2.5   4.7   5.5   5.5   5.5
 140.  *   2.0   1.3   1.8   2.7   5.0   5.7   5.9   5.7
 145.  *   2.0   1.2   1.6   2.6   5.3   6.0   6.2   6.0
 150.  *   1.7    .9   1.4   2.3   5.2   6.0   6.1   5.8
 155.  *   1.6    .8   1.2   1.8   4.7   5.6   5.6   5.3
 160.  *   1.2    .5    .9   1.3   3.9   4.7   4.8   4.7
 165.  *   1.0    .3    .4   1.0   2.8   3.7   3.7   3.5
 170.  *    .8    .1    .1    .4   1.7   2.5   2.6   2.3
 175.  *    .7    .0    .0    .2   1.1   1.5   1.6   1.5
 180.  *    .7    .0    .0    .0    .5    .8    .9    .8
 185.  *    .8    .0    .0    .0    .2    .4    .5    .4
 190.  *    .8    .0    .0    .0    .1    .3    .3    .3
 195.  *    .8    .0    .0    .0    .1    .2    .2    .2
 200.  *    .9    .0    .0    .0    .0    .2    .2    .2
 205.  *    .9    .0    .0    .0    .0    .2    .2    .2
1                                                                                                                PAGE  6
      JOB: Site 5 BD 3  AM 2014 - 5B3AM14.DAT                  RUN: Site 5 BD 3  AM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .8    .0    .0    .0    .0    .2    .2    .1
 215.  *    .8    .0    .0    .0    .0    .1    .1    .1
 220.  *    .8    .1    .0    .0    .0    .1    .1    .1
 225.  *    .8    .1    .1    .0    .0    .1    .1    .1
 230.  *    .7    .1    .1    .0    .0    .0    .1    .0
 235.  *    .7    .1    .1    .0    .0    .0    .0    .0
 240.  *    .5    .2    .1    .1    .1    .0    .0    .0
 245.  *    .4    .2    .3    .2    .4    .0    .0    .0
 250.  *    .3    .3    .3    .2    .6    .0    .0    .0
 255.  *    .2    .3    .4    .5    .8    .0    .0    .0
 260.  *    .1    .3    .4    .5   1.2    .0    .0    .0
 265.  *    .1    .4    .6    .6   1.6    .1    .0    .0
 270.  *    .0    .4    .6    .6   1.9    .1    .0    .0
 275.  *    .0    .5    .6    .7   2.3    .3    .1    .1
 280.  *    .0    .5    .6    .7   2.5    .3    .2    .1
 285.  *    .0    .5    .6    .7   2.6    .5    .2    .1
 290.  *    .0    .6    .6    .6   2.8    .6    .3    .2
 295.  *    .0    .6    .6    .6   3.0    .7    .3    .3
 300.  *    .0    .6    .6    .5   3.0    .8    .4    .3
 305.  *    .0    .6    .6    .6   3.0   1.0    .4    .3
 310.  *    .0    .6    .6    .6   2.9   1.2    .6    .4
 315.  *    .0    .6    .6    .6   2.9   1.4    .8    .5
 320.  *    .0    .6    .6    .5   2.9   1.7   1.2    .9
 325.  *    .0    .6    .6    .8   3.1   2.1   1.7   1.5
 330.  *    .1    .7    .7   1.0   3.4   2.7   2.4   2.2
 335.  *    .1    .7    .8   1.4   3.9   3.4   3.4   3.0
 340.  *    .2    .8   1.0   1.8   4.4   4.2   4.1   3.8
 345.  *    .4   1.1   1.3   2.4   5.0   4.8   4.7   4.7
 350.  *    .6   1.3   1.4   2.9   5.0   4.7   4.8   5.2
 355.  *    .7   1.3   1.6   3.4   4.9   4.6   5.2   5.5
 360.  *    .8   1.5   1.8   3.7   4.7   4.6   4.9   5.5
 ------*------------------------------------------------
 MAX   *   3.8   3.3   3.9   6.0   5.7   6.0   6.2   6.0
 DEGR. *   75    65    65    65    65   145   145   145

 THE HIGHEST CONCENTRATION IS    7.00 PPM AT  175 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    6.70 PPM AT  180 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    6.70 PPM AT  175 DEGREES FROM REC2 .
```

```
Site 5 BD 3  AM 2030 - 5B3AM30.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 BD 3  AM 2030                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    3305 9.2  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    2740 9.2  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       120        84       2.0 2704   84.1 1601 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     565 9.2  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       120       108       2.0  565   84.1 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.     515 9.2  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    2300 9.2  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    2100 9.2  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       120        86       2.0 2100   84.1 1672 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     200 9.2  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
```

```
       120       110       2.0  200   84.1 1700 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    4340 9.2  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.     460 9.2  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.     460 9.2  0.  68   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       120        98       2.0  460   84.1 1706 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    1180 9.2  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    3315 9.2  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    3315 9.2  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       120        84       2.0 3315   84.1 1681 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.    1445 9.2  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.    1445 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 5 BD 3  AM 2030 - 5B3AM30.DAT                    RUN: Site 5 BD 3  AM 2030
      DATE: 05/07/2009   TIME: 03:50:11.78


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =     .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =    .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.   340. AG   3305.   9.2    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.   342. AG   2740.   9.2    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    1796.8   -2323.8 *    5301.   161. AG    474. 100.0    .0 36.0 2.12 269.3
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.   341. AG    565.   9.2    .0 44.0
       5. NB        Rt16 left *     88.0    2690.0     730.6     838.9 *    1959.   161. AG    406. 100.0    .0 24.0 2.50  99.5
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.   341. AG    515.   9.2    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.   160. AG   2300.   9.2    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.   161. AG   2100.   9.2    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0   -1037.5    5957.7 *    3271.   341. AG    485. 100.0    .0 36.0 1.67 166.2
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.   162. AG    200.   9.2    .0 44.0
      11. SB        Rt16 left *     25.0    2864.0     -57.5    3111.4 *     261.   342. AG    414. 100.0    .0 24.0 1.18  13.2
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.   161. AG   4340.   9.2    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.    66. AG    460.   9.2    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.    82. AG    460.   9.2    .0 68.0
      15. EB        Rt27 aprch*     -5.0    2754.0     -66.1    2746.1 *      62.   263. AG    737. 100.0    .0 48.0  .45   3.1
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.    71. AG   1180.   9.2    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.   250. AG   3315.   9.2    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.   251. AG   3315.   9.2    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    4201.2    4217.6 *    4311.    71. AG    632. 100.0    .0 48.0 1.85 219.0
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.   257. AG   1445.   9.2    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.   247. AG   1445.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 5 BD 3  AM 2030 - 5B3AM30.DAT                    RUN: Site 5 BD 3  AM 2030
      DATE: 05/07/2009   TIME: 03:50:11.78

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     120       84       2.0      2704       1601      84.10      1        3
       5. NB        Rt16 left *     120      108       2.0       565       1700      84.10      1        3
       9. SB        Rt16 thru *     120       86       2.0      2100       1672      84.10      1        3
      11. SB        Rt16 left *     120      110       2.0       200       1700      84.10      1        3
      15. EB        Rt27 aprch*     120       98       2.0       460       1706      84.10      1        3
      19. WB        Rt27 aprch*     120       84       2.0      3315       1681      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)         *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
      1. SE MID S             *       207.0     2515.0        5.0   *
      2. SE 164 S             *       183.0     2590.0        5.0   *
      3. SE 82 S              *       154.0     2668.0        5.0   *
      4. SE CNR               *       140.0     2741.0        5.0   *
      5. SE 82 E              *       205.0     2774.0        5.0   *
      6. SE 164 E             *       283.0     2802.0        5.0   *
      7. SE MID E             *       356.0     2828.0        5.0   *
      8. NE MID E             *       323.0     2935.0        5.0   *
      9. NE 164 E             *       235.0     2907.0        5.0   *
     10. NE 82 E              *       157.0     2881.0        5.0   *
     11. NE CNR               *        95.0     2864.0        5.0   *
     12. NE 82 N              *        65.0     2927.0        5.0   *
     13. NE 164 N             *        40.0     3006.0        5.0   *
     14. NE MID N             *         8.0     3095.0        5.0   *
     15. NW MID N             *       -95.0     3048.0        5.0   *
     16. NW 164 N             *       -68.0     2971.0        5.0   *
     17. NW 82 N              *       -41.0     2894.0        5.0   *
     18. NW CNR               *       -31.0     2829.0        5.0   *
     19. NW 82 W              *       -91.0     2798.0        5.0   *
     20. NW 164 W             *      -165.0     2767.0        5.0   *
     21. NW MID W             *      -237.0     2736.0        5.0   *
     22. SW MID W             *      -218.0     2665.0        5.0   *
     23. SW 164 W             *      -153.0     2690.0        5.0   *
     24. SW 82 W              *       -77.0     2713.0        5.0   *
     25. SW CNR               *         6.0     2723.0        5.0   *
     26. SW 82 S              *        40.0     2651.0        5.0   *
     27. SW 164 S             *        68.0     2573.0        5.0   *
     28. SW MID S             *        91.0     2503.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 5 BD 3  AM 2030 - 5B3AM30.DAT                    RUN: Site 5 BD 3  AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
```

```
   0.  *   1.3   1.1   1.2   1.6   2.0   2.0   2.0    .0    .0    .0    .1    .1    .1    .1   3.1   3.6   3.9   3.1   1.3    .8
   5.  *   1.0   1.0   1.2   1.6   2.0   2.0   2.0    .1    .0    .0    .0    .0    .0    .0   3.0   3.6   3.7   3.0   1.4    .8
  10.  *    .8   1.0   1.1   1.7   2.0   2.0   2.0    .1    .1    .1    .0    .0    .0    .0   2.8   3.4   3.7   2.9   1.5    .9
  15.  *    .8   1.0   1.1   1.7   2.0   2.0   2.0    .1    .1    .1    .0    .0    .0    .0   2.8   3.3   3.5   2.7   1.5    .8
  20.  *    .8    .9   1.4   1.8   2.0   2.1   2.2    .1    .1    .1    .0    .0    .0    .0   2.6   3.3   3.3   2.6   1.4    .9
  25.  *    .8    .9   1.4   1.9   2.2   2.2   2.2    .1    .1    .1    .1    .0    .0    .0   2.8   3.2   3.2   2.5   1.4   1.0
  30.  *    .8   1.0   1.3   2.0   2.2   2.3   2.3    .1    .1    .1    .1    .0    .0    .0   2.7   3.0   3.2   2.3   1.3    .9
  35.  *    .9   1.1   1.4   2.0   2.2   2.3   2.3    .1    .1    .1    .1    .0    .0    .0   2.6   2.9   2.9   2.2   1.3    .9
  40.  *   1.0    .9   1.5   2.3   2.4   2.4   2.4    .2    .2    .2    .1    .0    .0    .0   2.6   2.8   2.9   1.9   1.2    .9
  45.  *    .8   1.0   1.4   2.2   2.4   2.5   2.6    .4    .3    .3    .2    .0    .0    .0   2.7   2.8   2.8   1.9   1.2    .9
  50.  *    .7   1.0   1.4   2.3   2.6   2.6   2.5    .6    .6    .5    .4    .0    .0    .0   2.6   2.8   2.8   1.8   1.2    .9
  55.  *    .7    .9   1.4   2.3   2.5   2.6   2.7   1.1   1.0    .9    .7    .1    .0    .0   2.6   2.8   2.9   1.8   1.2   1.2
  60.  *    .6    .8   1.2   2.2   2.5   2.6   2.6   1.8   1.6   1.6   1.3    .2    .1    .1   2.8   2.9   3.0   2.2   1.8   1.6
  65.  *    .4    .6   1.0   1.9   2.3   2.4   2.4   2.6   2.5   2.4   2.1    .6    .2    .1   2.9   3.0   3.5   2.5   2.1   2.1
  70.  *    .3    .4    .8   1.7   1.9   1.9   1.9   3.5   3.3   3.3   3.0    .9    .5    .3   3.1   3.3   3.7   3.0   2.3   2.4
  75.  *    .2    .2    .5   1.1   1.4   1.4   1.3   4.2   3.9   3.9   3.4   1.4    .7    .4   3.3   3.5   4.2   3.1   2.7   2.5
  80.  *    .1    .1    .2    .6    .8    .8    .8   4.6   4.3   4.4   3.9   1.6    .8    .6   3.3   3.7   4.5   3.2   2.7   2.7
  85.  *    .0    .0    .1    .3    .3    .5    .6   4.6   4.4   4.4   4.1   1.8   1.2    .7   3.4   3.9   4.4   2.8   2.6   2.5
  90.  *    .0    .0    .0    .1    .2    .2    .2   4.4   4.3   4.3   3.9   1.8   1.2    .7   3.7   4.0   4.4   2.9   2.4   2.4
  95.  *    .0    .0    .0    .0    .1    .1    .1   4.2   4.0   4.0   3.7   1.7   1.2    .8   3.6   3.9   4.3   2.3   2.3   2.4
 100.  *    .0    .0    .1    .0    .0    .0    .0   3.9   3.9   3.7   3.3   1.7   1.1    .9   3.6   4.0   4.1   2.0   2.3   2.3
 105.  *    .1    .0    .1    .0    .0    .0    .0   3.7   3.5   3.5   3.2   1.6   1.1    .8   3.7   3.9   3.8   2.0   2.4   2.0
 110.  *    .1    .1    .1    .0    .0    .0    .0   3.6   3.4   3.4   2.9   1.6   1.2    .8   3.8   4.0   3.8   1.9   2.5   2.2
 115.  *    .1    .1    .1    .0    .0    .0    .0   3.3   3.2   3.2   2.8   1.5   1.0    .9   3.9   3.9   3.5   1.9   2.8   2.1
 120.  *    .1    .1    .1    .0    .0    .0    .0   3.2   3.2   3.1   2.7   1.5   1.0    .8   3.9   3.9   3.5   2.2   3.1   2.1
 125.  *    .1    .1    .1    .0    .0    .0    .0   3.1   3.1   3.0   2.4   1.4   1.0    .8   3.9   4.0   3.2   2.3   3.4   2.1
 130.  *    .1    .1    .2    .0    .0    .0    .0   3.0   2.9   2.9   2.3   1.4   1.0    .7   4.2   4.1   3.3   2.8   3.7   1.9
 135.  *    .2    .2    .3    .2    .0    .0    .0   2.9   2.9   2.8   2.1   1.3    .9    .7   4.2   4.2   3.5   3.1   3.7   1.8
 140.  *    .5    .6    .7    .2    .0    .0    .0   2.9   2.8   2.7   2.1   1.4   1.0    .8   4.2   4.2   3.7   3.4   3.7   2.0
 145.  *    .9    .8   1.1    .6    .1    .0    .0   2.9   2.8   2.9   2.5   1.7   1.3   1.2   4.3   4.4   3.9   3.9   3.6   2.0
 150.  *   1.7   1.7   2.0   1.2    .3    .1    .0   2.9   2.9   3.1   2.7   2.1   1.7   1.4   4.4   4.3   4.1   4.1   3.4   1.7
 155.  *   2.6   2.5   2.8   2.2    .7    .3    .1   3.0   3.2   3.6   3.4   2.8   2.2   1.9   4.3   4.0   3.9   4.1   3.1   1.5
 160.  *   3.5   3.6   3.8   3.0   1.0    .5    .3   3.3   3.6   4.2   3.9   3.0   2.5   2.5   3.5   3.6   3.8   3.6   2.4   1.2
 165.  *   4.5   4.4   4.7   3.8   1.6    .8    .4   3.5   3.8   4.6   4.3   3.4   2.6   2.6   2.8   2.9   3.0   3.1   1.7    .9
 170.  *   4.9   4.8   5.3   4.3   1.8   1.1    .8   3.7   4.0   4.9   4.4   3.2   2.7   2.9   2.2   2.0   2.5   2.6   1.3    .6
 175.  *   5.1   5.1   5.4   4.4   2.1   1.2    .8   3.7   4.3   5.0   4.1   2.8   2.5   2.6   1.2   1.3   1.7   1.9    .9    .5
 180.  *   5.1   5.1   5.3   4.4   2.1   1.5   1.1   4.0   4.3   4.7   3.8   2.6   2.5   2.7    .6    .9   1.1   1.8    .6    .5
 185.  *   4.9   4.9   5.0   4.1   2.3   1.4   1.1   4.1   4.4   4.7   3.3   2.0   2.1   2.5    .4    .7    .7   1.5    .6    .5
 190.  *   4.7   4.6   4.9   4.0   2.1   1.4   1.2   4.1   4.4   4.7   2.7   1.7   2.4   2.2    .3    .3    .6   1.3    .5    .5
 195.  *   4.6   4.4   4.5   3.5   2.2   1.5   1.3   4.3   4.3   4.3   2.4   1.7   2.1   2.2    .2    .3    .6   1.3    .5    .5
 200.  *   4.4   4.3   4.4   3.4   2.1   1.5   1.2   4.2   4.4   4.1   2.4   1.5   2.0   2.4    .2    .2    .5   1.2    .7    .6
 205.  *   4.3   3.9   4.2   3.1   2.0   1.3   1.1   4.2   4.3   4.0   2.0   1.6   2.2   2.4    .2    .2    .4   1.0    .6    .6
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                                                                                                                 PAGE  4
      JOB: Site 5 BD 3  AM 2030 - 5B3AM30.DAT                    RUN: Site 5 BD 3  AM 2030

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *   3.9   3.9   4.0   2.8   2.0   1.2   1.0   4.4   4.2   3.7   1.8   1.6   2.1   2.2    .1    .2    .4   1.0    .5    .6
 215.  *   3.9   3.7   3.9   2.6   1.8   1.2   1.0   4.5   4.1   3.3   2.0   1.6   2.0   2.0    .0    .1    .2    .9    .6    .6
 220.  *   3.8   3.7   3.8   2.3   1.7   1.2   1.0   4.4   4.1   2.9   1.8   1.8   2.0   1.8    .0    .1    .2    .8    .6    .6
 225.  *   3.6   3.6   3.7   2.1   1.6   1.0   1.0   4.4   4.1   2.9   1.9   1.7   1.9   1.8    .0    .1    .2    .7    .6    .6
 230.  *   3.5   3.5   3.7   1.9   1.4   1.1   1.1   4.4   3.6   2.8   1.9   1.8   1.9   1.8    .0    .0    .1    .6    .6    .6
 235.  *   3.6   3.5   3.7   1.8   1.4   1.0   1.0   4.1   3.4   2.6   1.7   1.8   1.7   1.8    .0    .0    .1    .4    .6    .6
 240.  *   3.6   3.6   3.7   1.6   1.4    .9   1.0   3.8   3.4   2.1   1.5   1.7   1.8   1.8    .0    .0    .1    .4    .5    .5
 245.  *   3.7   3.6   3.7   1.7   1.3   1.0   1.1   3.5   2.8   2.0   1.4   1.9   1.8   1.9    .0    .0    .1    .3    .5    .3
 250.  *   3.7   3.6   3.8   1.5   1.3   1.1   1.2   2.9   2.3   1.8   1.4   1.8   1.8   1.8    .0    .0    .0    .2    .3    .3
 255.  *   3.7   3.6   3.7   1.7   1.3   1.2   1.3   2.2   1.9   1.6   1.2   1.8   1.8   1.7    .0    .0    .0    .1    .2    .2
 260.  *   3.7   3.6   3.6   2.0   1.5   1.5   1.5   1.6   1.4   1.4   1.3   1.8   1.8   1.7    .0    .0    .0    .1    .1    .1
 265.  *   3.6   3.5   3.6   2.1   1.4   1.7   1.9   1.4   1.0   1.1   1.0   1.8   1.8   1.7    .0    .0    .0    .0    .1    .1
 270.  *   3.7   3.4   3.7   2.2   1.5   1.9   2.3   1.0    .9   1.1   1.2   1.8   1.7   1.7    .0    .0    .0    .0    .0    .0
 275.  *   3.7   3.5   3.6   2.2   1.8   2.2   2.4    .9   1.1   1.1   1.4   1.8   1.8   1.6    .0    .0    .0    .0    .0    .0
 280.  *   3.7   3.8   3.7   2.2   1.7   2.2   2.4    .9    .9   1.1   1.4   1.8   1.8   1.5    .0    .0    .0    .0    .0    .0
 285.  *   3.7   3.9   3.6   2.2   1.8   2.2   2.6    .8    .9   1.3   1.5   1.8   1.8   1.6    .0    .0    .0    .0    .0    .0
 290.  *   3.9   3.9   3.8   2.1   2.0   2.5   2.7    .8    .9   1.3   1.7   2.0   2.0   1.6    .0    .0    .1    .0    .0    .0
 295.  *   4.1   4.1   3.8   2.1   2.3   2.6   2.7    .6    .9   1.3   1.7   2.0   2.1   1.6    .0    .1    .1    .0    .0    .0
 300.  *   4.2   4.1   3.6   2.0   2.2   2.7   2.8    .6    .9   1.4   1.9   2.0   2.1   1.5    .0    .1    .1    .0    .0    .0
 305.  *   4.2   4.2   3.5   2.1   2.5   2.7   2.6    .6    .9   1.4   1.9   2.1   2.0   1.5    .0    .1    .1    .0    .0    .0
 310.  *   4.4   4.3   3.7   2.4   2.8   2.7   2.5    .5    .7   1.3   2.1   2.2   2.1   1.7    .0    .1    .1    .0    .0    .0
 315.  *   4.6   4.4   3.4   2.7   2.8   2.7   2.6    .5    .7   1.3   2.2   2.2   2.0   1.6    .1    .2    .2    .1    .0    .0
 320.  *   4.6   4.2   3.5   2.7   3.0   2.6   2.5    .5    .7   1.2   2.1   2.2   2.0   1.7    .3    .4    .4    .1    .0    .0
 325.  *   4.7   4.2   3.6   2.9   3.0   2.6   2.5    .5    .6   1.0   2.0   2.1   1.9   1.6    .6    .7    .8    .5    .1    .0
 330.  *   4.5   4.2   3.4   2.9   2.8   2.5   2.4    .3    .5   1.0   1.8   2.0   1.8   1.6   1.0   1.2   1.3    .7    .2    .1
 335.  *   3.9   3.6   3.2   2.8   2.6   2.5   2.3    .3    .5    .8   1.5   1.8   1.5   1.4   1.5   1.8   1.9   1.4    .4    .2
 340.  *   3.4   3.2   2.9   2.5   2.4   2.3   2.2    .2    .3    .5   1.3   1.4   1.1   1.1   2.2   2.5   2.6   1.9    .6    .3
 345.  *   2.8   2.4   2.4   2.3   2.4   2.2   2.1    .1    .2    .4    .8   1.0    .8    .8   2.6   3.0   3.3   2.4    .9    .5
 350.  *   2.3   1.9   1.9   2.1   2.1   2.1   2.0    .0    .1    .2    .6    .6    .5    .5   2.9   3.4   3.7   2.8   1.2    .6
 355.  *   1.4   1.3   1.4   1.6   2.1   2.0   2.0    .0    .0    .1    .1    .3    .2    .2   3.1   3.5   3.9   3.1   1.2    .7
 360.  *   1.3   1.1   1.2   1.6   2.0   2.0   2.0    .0    .0    .0    .1    .1    .1    .1   3.1   3.6   3.9   3.1   1.3    .8
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   5.1   5.1   5.4   4.4   3.0   2.7   2.8   4.6   4.4   5.0   4.4   3.4   2.7   2.9   4.4   4.4   4.5   4.1   3.7   2.7
 DEGR. *  175   175   175   175   320   300   300    80    85   175   170   165   170   170   150   145    80   150   140    80

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                                                                                                                 PAGE  5
      JOB: Site 5 BD 3  AM 2030 - 5B3AM30.DAT                    RUN: Site 5 BD 3  AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .5    .9   1.1   2.0   3.0   2.9   3.2   3.8
   5.  *    .5    .9   1.2   2.2   2.8   2.8   3.5   3.9
  10.  *    .5   1.0   1.2   2.3   2.4   2.6   3.6   4.0
```

```
  15.  *    .6   1.2   1.2   2.4   2.1   2.7   3.6   4.0
  20.  *    .7   1.2   1.1   2.6   2.3   2.6   3.8   4.2
  25.  *    .7   1.2   1.2   2.5   2.1   2.8   4.0   4.1
  30.  *    .8   1.1   1.2   2.7   2.2   3.2   4.1   4.3
  35.  *    .6   1.1   1.3   2.8   2.3   3.2   4.2   4.1
  40.  *    .6   1.2   1.6   3.1   2.5   3.3   4.1   4.0
  45.  *    .6   1.2   1.5   3.1   2.9   3.7   4.1   3.9
  50.  *    .8   1.6   1.8   3.5   3.2   3.8   4.1   3.9
  55.  *    .9   1.8   2.4   3.8   3.8   4.0   4.1   3.7
  60.  *   1.5   2.1   2.7   4.1   3.9   4.1   4.0   3.6
  65.  *   1.9   2.2   2.7   4.0   4.0   3.9   4.0   3.7
  70.  *   2.2   2.0   2.7   3.9   3.8   4.0   3.7   3.5
  75.  *   2.3   2.0   2.3   3.3   3.3   3.7   3.5   3.4
  80.  *   2.5   1.7   2.1   2.8   2.9   3.3   3.2   3.1
  85.  *   2.4   1.4   1.5   2.3   2.4   3.1   3.1   3.0
  90.  *   2.0   1.0   1.5   2.0   2.1   3.0   3.0   3.0
  95.  *   1.8   1.0   1.2   1.7   2.1   3.1   3.1   3.1
 100.  *   1.7   1.0   1.1   1.5   2.1   3.1   3.1   3.2
 105.  *   1.6    .9   1.1   1.5   2.3   3.2   3.2   3.3
 110.  *   1.6   1.0   1.2   1.7   2.5   3.2   3.3   3.2
 115.  *   1.5   1.0   1.4   1.7   2.8   3.4   3.4   3.5
 120.  *   1.5   1.1   1.3   1.8   2.9   3.6   3.7   3.7
 125.  *   1.6   1.1   1.3   1.9   3.2   3.8   3.8   3.9
 130.  *   1.6   1.1   1.4   1.8   3.3   3.9   3.9   3.9
 135.  *   1.6   1.1   1.4   2.0   3.6   4.3   4.3   4.1
 140.  *   1.6   1.1   1.3   2.0   3.8   4.3   4.4   4.3
 145.  *   1.5   1.0   1.2   2.0   4.0   4.6   4.6   4.5
 150.  *   1.4    .8   1.1   1.7   3.8   4.5   4.4   4.4
 155.  *   1.1    .6    .9   1.5   3.4   4.1   4.2   4.0
 160.  *    .9    .3    .6   1.1   2.8   3.6   3.6   3.5
 165.  *    .7    .1    .4    .8   1.9   2.7   2.7   2.6
 170.  *    .6    .1    .1    .4   1.3   1.7   1.9   1.8
 175.  *    .5    .0    .0    .1    .6   1.2   1.2   1.2
 180.  *    .5    .0    .0    .0    .4    .6    .7    .6
 185.  *    .5    .0    .0    .0    .1    .3    .3    .3
 190.  *    .5    .0    .0    .0    .1    .2    .2    .2
 195.  *    .5    .0    .0    .0    .0    .2    .2    .1
 200.  *    .6    .0    .0    .0    .0    .1    .1    .1
 205.  *    .6    .0    .0    .0    .0    .1    .1    .1
1
                                                                                                                PAGE  6
      JOB: Site 5 BD 3  AM 2030 - 5B3AM30.DAT                    RUN: Site 5 BD 3  AM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .6    .0    .0    .0    .0    .1    .1    .1
 215.  *    .6    .0    .0    .0    .0    .1    .1    .1
 220.  *    .6    .0    .0    .0    .0    .1    .1    .1
 225.  *    .6    .0    .0    .0    .0    .1    .1    .1
 230.  *    .6    .1    .1    .0    .0    .0    .0    .0
 235.  *    .4    .1    .1    .0    .0    .0    .0    .0
 240.  *    .4    .1    .1    .1    .1    .0    .0    .0
 245.  *    .3    .1    .1    .2    .1    .0    .0    .0
 250.  *    .2    .1    .2    .2    .4    .0    .0    .0
 255.  *    .1    .2    .3    .2    .6    .0    .0    .0
 260.  *    .1    .3    .4    .4    .8    .0    .0    .0
 265.  *    .1    .3    .4    .4   1.1    .0    .0    .0
 270.  *    .0    .4    .4    .4   1.4    .1    .0    .0
 275.  *    .0    .4    .5    .5   1.5    .1    .1    .0
 280.  *    .0    .4    .5    .5   1.7    .2    .1    .1
 285.  *    .0    .4    .5    .5   1.9    .3    .2    .1
 290.  *    .0    .5    .5    .5   2.0    .3    .2    .1
 295.  *    .0    .5    .4    .5   2.2    .4    .2    .2
 300.  *    .0    .4    .4    .4   2.1    .5    .2    .2
 305.  *    .0    .4    .4    .4   2.3    .6    .4    .2
 310.  *    .0    .4    .4    .4   2.1    .9    .4    .4
 315.  *    .0    .4    .4    .3   2.1   1.0    .5    .4
 320.  *    .0    .4    .4    .3   2.1   1.2    .6    .6
 325.  *    .0    .4    .4    .4   2.3   1.5   1.2    .9
 330.  *    .0    .4    .5    .4   2.6   1.9   1.8   1.5
 335.  *    .1    .5    .5    .8   2.7   2.4   2.1   2.2
 340.  *    .2    .6    .7   1.0   3.3   2.8   2.6   2.7
 345.  *    .3    .7    .9   1.1   3.6   3.2   3.3   3.2
 350.  *    .5    .9   1.0   1.5   3.6   3.3   3.4   3.6
 355.  *    .5    .9   1.0   1.9   3.3   3.1   3.5   3.7
 360.  *    .5    .9   1.1   2.0   3.0   2.9   3.2   3.8
 ------*------------------------------------------------
 MAX   *   2.5   2.2   2.7   4.1   4.0   4.6   4.6   4.5
 DEGR. *   80    65    60    60    65   145   145   145

 THE HIGHEST CONCENTRATION IS    5.40 PPM AT  175 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    5.10 PPM AT  175 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    5.10 PPM AT  175 DEGREES FROM REC2 .
```

```
Site 5 BD 3  PM 2014 - 5B3PM14.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 BD 3  PM 2014                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    477311.4  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    429611.4  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       120        84       2.0 4296  102.2 1676 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     47711.4  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       120       105       2.0  477  102.2 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    267011.4  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    270811.4  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    213311.4  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       120        88       2.0 2133  102.2 1676 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     57511.4  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
```

```
       120       109       2.0  575  102.2 1700 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    452111.4  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.    124811.4  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.    124811.4  0.  68   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       120        97       2.0 1248  102.2 1706 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    323511.4  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    242311.4  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    242311.4  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       120        82       2.0 2423  102.2 1644 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.     72611.4  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.     72611.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                       CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 5 BD 3  PM 2014 - 5B3PM14.DAT                  RUN: Site 5 BD 3  PM 2014
      DATE: 05/06/2009   TIME: 09:27:32.76


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *          LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.   340. AG   4773.  11.4    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.   342. AG   4296.  11.4    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    3509.1   -7435.4 *    *****   161. AG    576. 100.0    .0 36.0 3.21 543.2
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.   341. AG    477.  11.4    .0 44.0
       5. NB        Rt16 left *     88.0    2690.0     431.3    1701.1 *    1047.   161. AG    480. 100.0    .0 24.0 1.54  53.2
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.   341. AG   2670.  11.4    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.   160. AG   2708.  11.4    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.   161. AG   2133.  11.4    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0   -1163.1    6332.5 *    3667.   341. AG    603. 100.0    .0 36.0 1.82 186.3
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.   162. AG    575.  11.4    .0 44.0
      11. SB        Rt16 left *     25.0    2864.0    -658.8    4915.4 *    2162.   342. AG    498. 100.0    .0 24.0 2.90 109.8
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.   161. AG   4521.  11.4    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.    66. AG   1248.  11.4    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.    82. AG   1248.  11.4    .0 68.0
      15. EB        Rt27 aprch*     -5.0    2754.0    -670.8    2668.1 *     671.   263. AG    886. 100.0    .0 48.0 1.16  34.1
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.    71. AG   3235.  11.4    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.   250. AG   2423.  11.4    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.   251. AG   2423.  11.4    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    1810.6    3404.8 *    1786.    71. AG    749. 100.0    .0 48.0 1.30  90.7
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.   257. AG    726.  11.4    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.   247. AG    726.  11.4    .0 32.0
1
                                                                                                                    PAGE  2
      JOB: Site 5 BD 3  PM 2014 - 5B3PM14.DAT                  RUN: Site 5 BD 3  PM 2014
      DATE: 05/06/2009   TIME: 09:27:32.76

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     120       84       2.0       4296       1676     102.20      1        3
       5. NB        Rt16 left *     120      105       2.0        477       1700     102.20      1        3
       9. SB        Rt16 thru *     120       88       2.0       2133       1676     102.20      1        3
      11. SB        Rt16 left *     120      109       2.0        575       1700     102.20      1        3
      15. EB        Rt27 aprch*     120       97       2.0       1248       1706     102.20      1        3
      19. WB        Rt27 aprch*     120       82       2.0       2423       1644     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X            Y          Z      *
     -------------------------*------------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0   *
      2. SE 164 S             *       183.0     2590.0       5.0   *
      3. SE 82 S              *       154.0     2668.0       5.0   *
      4. SE CNR               *       140.0     2741.0       5.0   *
      5. SE 82 E              *       205.0     2774.0       5.0   *
      6. SE 164 E             *       283.0     2802.0       5.0   *
      7. SE MID E             *       356.0     2828.0       5.0   *
      8. NE MID E             *       323.0     2935.0       5.0   *
      9. NE 164 E             *       235.0     2907.0       5.0   *
     10. NE 82 E              *       157.0     2881.0       5.0   *
     11. NE CNR               *        95.0     2864.0       5.0   *
     12. NE 82 N              *        65.0     2927.0       5.0   *
     13. NE 164 N             *        40.0     3006.0       5.0   *
     14. NE MID N             *         8.0     3095.0       5.0   *
     15. NW MID N             *       -95.0     3048.0       5.0   *
     16. NW 164 N             *       -68.0     2971.0       5.0   *
     17. NW 82 N              *       -41.0     2894.0       5.0   *
     18. NW CNR               *       -31.0     2829.0       5.0   *
     19. NW 82 W              *       -91.0     2798.0       5.0   *
     20. NW 164 W             *      -165.0     2767.0       5.0   *
     21. NW MID W             *      -237.0     2736.0       5.0   *
     22. SW MID W             *      -218.0     2665.0       5.0   *
     23. SW 164 W             *      -153.0     2690.0       5.0   *
     24. SW 82 W              *       -77.0     2713.0       5.0   *
     25. SW CNR               *         6.0     2723.0       5.0   *
     26. SW 82 S              *        40.0     2651.0       5.0   *
     27. SW 164 S             *        68.0     2573.0       5.0   *
     28. SW MID S             *        91.0     2503.0       5.0   *
1
                                                                                                                    PAGE  3
      JOB: Site 5 BD 3  PM 2014 - 5B3PM14.DAT                  RUN: Site 5 BD 3  PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------------
```

```
   0.  *   1.9   1.8   2.2   2.7   2.8   2.9   2.9    .0    .0    .0    .3    .4    .4    .4   5.5   5.7   5.8   4.7   2.4   1.7
   5.  *   1.4   1.4   2.0   2.6   2.8   2.9   2.9    .0    .0    .0    .1    .1    .1    .1   5.2   5.3   5.4   4.4   2.3   1.6
  10.  *   1.3   1.3   1.8   2.5   2.9   2.9   2.9    .1    .1    .0    .0    .0    .0    .0   4.9   5.2   5.2   4.3   2.4   1.5
  15.  *   1.2   1.4   1.8   2.6   2.9   2.9   3.0    .1    .1    .1    .0    .0    .0    .0   4.7   4.9   4.9   3.9   2.3   1.5
  20.  *   1.2   1.4   1.8   2.7   3.0   3.0   3.1    .1    .1    .1    .0    .0    .0    .0   4.5   4.7   4.7   3.7   2.3   1.5
  25.  *   1.2   1.3   1.8   2.8   3.2   3.2   3.3    .1    .1    .1    .1    .0    .0    .0   4.3   4.6   4.6   3.5   2.1   1.5
  30.  *   1.1   1.4   2.0   2.9   3.3   3.2   3.3    .1    .1    .1    .1    .0    .0    .0   4.3   4.2   4.4   3.3   2.1   1.5
  35.  *   1.1   1.5   2.0   3.0   3.4   3.5   3.5    .2    .1    .1    .1    .0    .0    .0   4.0   4.0   4.1   3.0   2.0   1.4
  40.  *   1.0   1.4   2.0   3.1   3.5   3.6   3.7    .2    .2    .2    .1    .0    .0    .0   3.8   4.0   4.0   2.9   1.8   1.4
  45.  *   1.1   1.5   1.9   3.3   3.7   3.7   3.8    .3    .3    .3    .2    .0    .0    .0   3.8   3.8   3.9   2.8   1.8   1.5
  50.  *    .9   1.2   2.0   3.3   3.9   3.9   3.8    .7    .6    .5    .3    .0    .0    .0   3.8   3.7   3.8   2.7   1.9   1.4
  55.  *    .8   1.0   1.7   3.5   3.9   4.0   3.9   1.1   1.1   1.1    .9    .1    .0    .0   3.8   3.7   3.8   2.5   1.9   1.5
  60.  *    .6    .8   1.6   3.2   3.8   3.8   3.8   1.9   1.8   1.7   1.4    .2    .1    .0   3.8   3.8   4.0   2.9   2.2   2.1
  65.  *    .4    .7   1.2   2.8   3.3   3.4   3.5   2.9   2.5   2.6   2.3    .6    .2    .1   3.9   4.0   4.5   3.4   2.8   2.8
  70.  *    .2    .4    .9   2.2   2.7   2.8   2.8   3.7   3.5   3.6   3.3   1.0    .4    .1   4.0   4.3   5.0   3.7   3.2   3.4
  75.  *    .1    .1    .6   1.6   2.0   2.1   2.1   4.6   4.4   4.3   4.0   1.4    .7    .3   4.1   4.5   5.3   4.0   3.3   3.9
  80.  *    .0    .1    .3   1.0   1.3   1.4   1.4   5.1   5.0   4.8   4.5   1.8    .9    .6   4.3   4.9   5.5   4.2   3.4   4.1
  85.  *    .0    .0    .1    .5    .7    .7    .7   5.5   5.2   5.2   4.7   2.2   1.3    .7   4.4   4.9   5.7   4.1   3.4   4.7
  90.  *    .0    .0    .1    .2    .4    .4    .4   5.4   5.3   5.1   4.8   2.2   1.4    .8   4.7   5.0   5.8   3.7   3.3   4.7
  95.  *    .1    .0    .1    .1    .2    .2    .2   5.2   5.0   4.9   4.3   2.3   1.4    .9   4.7   5.1   5.8   3.5   3.0   4.9
 100.  *    .1    .1    .1    .0    .1    .1    .1   4.9   4.7   4.7   4.1   2.2   1.4   1.0   4.9   5.3   5.5   3.2   3.1   5.1
 105.  *    .1    .1    .1    .0    .1    .1    .1   4.6   4.3   4.3   3.9   2.1   1.4   1.0   5.2   5.3   5.4   2.9   3.2   5.3
 110.  *    .1    .1    .2    .0    .1    .1    .1   4.4   4.2   4.2   3.6   2.0   1.5   1.1   5.1   5.3   5.1   2.9   3.5   5.3
 115.  *    .1    .1    .2    .0    .1    .1    .1   4.1   4.0   4.0   3.5   1.9   1.4   1.2   5.2   5.5   5.1   2.8   3.7   5.3
 120.  *    .2    .1    .2    .0    .1    .1    .1   4.0   3.9   3.9   3.4   1.9   1.3   1.1   5.5   5.6   4.7   3.2   4.2   5.5
 125.  *    .2    .2    .2    .1    .0    .0    .1   3.9   3.8   3.8   3.0   1.8   1.3    .9   5.4   5.5   4.7   3.5   4.7   5.6
 130.  *    .2    .2    .4    .1    .0    .0    .0   3.7   3.7   3.5   2.9   1.7   1.3    .9   5.6   5.5   4.4   3.7   5.0   5.6
 135.  *    .4    .4    .4    .2    .0    .0    .0   3.6   3.5   3.5   2.9   1.8   1.2   1.0   5.7   5.6   5.0   4.1   5.2   5.3
 140.  *    .8    .7   1.0    .5    .0    .0    .0   3.6   3.4   3.4   2.8   1.8   1.5   1.2   5.8   5.8   5.0   4.6   5.4   5.2
 145.  *   1.3   1.3   1.7   1.0    .1    .0    .0   3.6   3.5   3.5   3.2   2.3   1.9   1.6   6.0   6.1   5.4   5.1   5.1   4.9
 150.  *   2.3   2.2   2.8   1.6    .4    .1    .1   3.7   3.6   3.9   3.8   3.1   2.5   2.2   5.8   5.6   5.6   5.1   5.0   4.6
 155.  *   3.7   3.6   4.0   2.9    .9    .3    .2   3.8   3.9   4.5   4.5   3.7   3.2   2.9   5.7   5.7   5.3   5.2   4.5   4.5
 160.  *   4.9   5.0   5.5   4.0   1.5    .7    .3   4.1   4.4   5.2   5.3   4.8   3.8   3.7   4.9   4.7   4.9   4.7   4.1   4.1
 165.  *   6.0   6.1   6.6   5.1   2.0   1.0    .7   4.6   4.7   5.8   5.9   5.0   4.3   4.1   3.8   3.9   4.0   3.9   3.5   3.7
 170.  *   6.7   6.7   7.3   5.9   2.4   1.4    .8   4.5   5.1   6.1   6.1   5.0   4.5   4.4   2.8   2.8   3.0   3.2   3.1   3.4
 175.  *   7.1   7.1   7.6   6.1   2.7   1.7   1.1   4.7   5.2   6.4   6.0   4.7   4.4   4.6   2.0   2.1   2.4   2.6   2.6   3.4
 180.  *   7.1   7.1   7.6   6.1   2.9   1.9   1.2   4.9   5.4   6.3   5.2   4.3   4.1   4.5   1.2   1.4   1.8   2.2   2.5   3.3
 185.  *   6.8   6.7   7.0   5.7   2.9   2.0   1.4   5.1   5.6   6.2   4.7   3.8   3.8   4.1   1.1   1.2   1.4   2.0   2.6   3.2
 190.  *   6.5   6.4   6.7   5.5   2.8   1.9   1.5   5.2   5.6   6.0   4.3   3.4   3.7   4.1    .8   1.0   1.3   2.1   2.5   3.2
 195.  *   6.4   6.0   6.4   4.9   2.8   2.1   1.7   5.3   5.6   5.8   3.9   3.4   3.7   4.2    .8   1.0   1.4   2.0   2.6   3.2
 200.  *   6.0   5.9   6.0   4.7   2.8   2.2   1.6   5.4   5.5   5.4   3.5   3.1   3.8   4.1    .8   1.0   1.5   2.0   2.6   3.3
 205.  *   5.9   5.7   5.8   4.3   2.8   1.9   1.6   5.5   5.6   5.1   3.3   3.0   3.9   4.1    .8   1.0   1.4   2.0   2.5   3.4
1
                                                                                                                         PAGE  4
      JOB: Site 5 BD 3  PM 2014 - 5B3PM14.DAT                  RUN: Site 5 BD 3  PM 2014

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *   5.6   5.4   5.6   4.0   2.7   1.9   1.6   5.4   5.4   4.7   3.1   3.1   4.0   4.2    .8   1.1   1.4   2.1   2.7   3.5
 215.  *   5.3   5.1   5.3   3.6   2.5   1.8   1.5   5.5   5.3   4.5   3.0   3.6   3.9   3.9    .7   1.1   1.5   2.2   2.8   3.6
 220.  *   5.1   5.0   5.2   3.4   2.5   1.8   1.4   5.6   5.1   4.1   3.2   3.7   3.9   3.7    .6    .9   1.4   2.3   2.9   3.7
 225.  *   5.1   4.9   5.0   3.2   2.3   1.7   1.5   5.5   5.1   4.1   3.3   3.9   3.9   3.6    .6    .9   1.3   2.3   2.9   3.8
 230.  *   4.8   4.8   5.0   2.8   2.1   1.7   1.4   5.5   4.8   3.9   3.4   4.0   3.9   3.6    .5    .7   1.3   2.3   2.9   3.9
 235.  *   4.8   4.8   5.0   2.8   2.1   1.7   1.5   5.6   4.6   3.6   3.5   4.0   3.8   3.5    .4    .7   1.3   2.4   3.0   4.0
 240.  *   4.9   4.9   5.0   2.8   2.2   1.8   1.7   5.1   4.4   3.8   3.6   4.2   3.7   3.5    .3    .6   1.1   2.4   3.0   4.1
 245.  *   5.0   4.9   5.1   3.0   2.5   2.2   2.2   4.8   4.1   3.6   3.5   3.9   3.5   3.3    .2    .4    .9   1.9   2.8   4.0
 250.  *   5.1   5.0   5.3   3.4   3.0   2.6   2.7   4.2   3.6   3.3   3.6   3.8   3.4   3.3    .1    .3    .7   1.8   2.5   3.9
 255.  *   5.1   5.1   5.4   3.6   3.1   3.1   3.2   3.3   2.7   2.9   3.3   3.6   3.3   3.2    .0    .2    .5   1.5   2.1   3.5
 260.  *   4.9   5.0   5.7   4.1   3.4   3.4   3.7   2.6   2.2   2.3   2.7   3.4   3.2   3.2    .0    .1    .3   1.1   1.6   2.9
 265.  *   5.0   5.2   5.6   4.4   3.6   3.8   4.1   2.0   1.9   2.1   2.6   3.3   3.1   3.1    .0    .0    .2    .7   1.1   2.2
 270.  *   5.1   5.2   5.8   4.5   3.8   3.8   4.0   1.6   1.8   2.0   2.5   3.2   3.1   3.1    .0    .0    .1    .4    .7   1.5
 275.  *   5.2   5.6   6.0   4.6   3.6   3.8   4.1   1.4   1.7   1.9   2.5   3.1   3.1   3.2    .0    .0    .0    .2    .4   1.0
 280.  *   5.4   5.7   6.1   4.3   3.5   3.8   4.2   1.2   1.4   1.8   2.6   3.1   3.1   3.1    .0    .0    .0    .1    .2    .6
 285.  *   5.7   6.0   6.0   4.0   3.3   4.2   4.2   1.3   1.4   2.0   2.7   3.2   3.2   3.2    .0    .1    .1    .0    .1    .3
 290.  *   6.0   6.1   5.9   4.0   3.4   3.9   4.0   1.2   1.6   2.0   2.8   3.4   3.2   3.3    .0    .1    .1    .0    .0    .2
 295.  *   6.4   6.3   5.7   4.0   3.7   4.2   4.4   1.2   1.5   2.0   3.1   3.4   3.5   3.5    .0    .1    .1    .0    .0    .1
 300.  *   6.4   6.2   5.6   3.7   3.8   4.2   4.3   1.2   1.5   2.1   3.1   3.6   3.5   3.5    .0    .1    .1    .0    .0    .1
 305.  *   6.6   6.3   5.6   4.2   4.0   4.3   4.1   1.2   1.6   2.3   3.5   3.8   3.6   3.8    .0    .1    .1    .0    .0    .1
 310.  *   6.7   6.2   5.5   4.1   4.4   4.2   4.0   1.2   1.5   2.4   3.5   4.0   3.9   3.9    .0    .1    .2    .0    .0    .1
 315.  *   7.0   6.2   5.5   4.4   4.6   4.4   4.0   1.2   1.4   2.1   3.7   4.1   4.0   4.1    .2    .2    .2    .1    .0    .0
 320.  *   7.1   6.4   5.6   4.9   4.7   4.2   4.1   1.1   1.5   2.3   3.8   4.3   4.2   4.2    .5    .6    .7    .3    .0    .0
 325.  *   7.2   6.6   5.8   5.3   4.7   4.2   4.0   1.0   1.4   2.3   3.9   4.4   4.1   4.2    .8   1.0   1.2    .7    .1    .0
 330.  *   6.9   6.2   5.9   5.3   4.8   4.1   3.8    .9   1.3   2.1   3.8   4.2   4.0   4.1   1.7   2.0   2.0   1.5    .4    .1
 335.  *   6.5   5.9   5.5   5.3   4.5   3.9   3.5    .6   1.0   1.7   3.4   3.9   3.7   3.8   2.6   2.9   3.1   2.2    .7    .3
 340.  *   5.7   5.2   5.1   4.8   4.0   3.6   3.3    .3    .8   1.2   2.9   3.2   3.1   3.1   3.8   4.1   4.2   3.1   1.2    .7
 345.  *   4.4   4.1   4.3   3.9   3.7   3.2   3.1    .2    .3   1.0   2.0   2.4   2.2   2.2   4.7   5.0   5.0   3.9   1.7   1.0
 350.  *   3.5   3.1   3.4   3.4   3.3   3.1   3.0    .1    .2    .5   1.3   1.5   1.4   1.4   5.3   5.5   5.6   4.5   2.2   1.3
 355.  *   2.4   2.3   2.7   2.9   3.0   2.9   2.9    .0    .0    .2    .7    .8    .8    .8   5.6   5.7   6.0   4.7   2.3   1.4
 360.  *   1.9   1.8   2.2   2.7   2.8   2.9   2.9    .0    .0    .0    .3    .4    .4    .4   5.5   5.7   5.8   4.7   2.4   1.7
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   7.2   7.1   7.6   6.1   4.8   4.4   4.4   5.6   5.6   6.4   6.1   5.0   4.5   4.6   6.0   6.1   6.0   5.2   5.4   5.6
 DEGR. *  325   175   175   175   330   315   295   220   205   175   170   165   170   175   145   145   355   155   140   125

1
                                                                                                                         PAGE  5
      JOB: Site 5 BD 3  PM 2014 - 5B3PM14.DAT                  RUN: Site 5 BD 3  PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *   2.0   3.6   4.4   5.3   4.5   4.5   4.8   5.4
   5.  *   2.1   3.8   4.2   5.3   4.3   4.1   4.8   5.3
  10.  *   1.9   3.8   4.3   5.1   3.7   3.8   4.9   5.4
```

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  15.  *   1.9   3.8   4.3   5.0   3.4   3.9   5.0   5.5
  20.  *   2.1   3.7   4.3   4.8   3.4   3.9   5.3   5.6
  25.  *   1.9   3.7   4.2   5.0   3.3   3.9   5.3   5.5
  30.  *   2.0   3.8   4.0   5.0   3.4   4.3   5.5   5.5
  35.  *   2.2   3.8   4.3   4.8   3.5   4.7   5.4   5.4
  40.  *   2.3   3.9   4.4   5.1   3.9   4.7   5.5   5.3
  45.  *   2.3   3.9   4.5   4.9   4.2   4.9   5.5   5.2
  50.  *   2.5   4.0   4.7   5.4   4.8   5.2   5.3   5.1
  55.  *   3.4   4.3   4.9   5.7   5.3   5.3   5.3   4.8
  60.  *   4.1   4.5   5.2   6.0   5.6   5.4   5.1   4.8
  65.  *   5.4   4.3   5.0   6.1   5.6   5.2   4.9   4.5
  70.  *   6.2   3.9   4.6   5.6   5.3   5.2   4.7   4.5
  75.  *   7.1   3.4   4.0   5.3   4.7   4.8   4.5   4.3
  80.  *   7.6   2.8   3.3   4.5   4.2   4.3   4.2   4.1
  85.  *   7.8   2.3   2.5   3.5   3.6   4.2   4.0   4.0
  90.  *   7.4   1.6   2.1   3.0   3.3   4.0   4.0   4.0
  95.  *   7.3   1.6   2.0   2.7   3.1   4.0   4.2   4.1
 100.  *   7.0   1.3   1.6   2.4   3.1   4.2   4.2   4.3
 105.  *   6.9   1.5   1.7   2.3   3.4   4.3   4.3   4.4
 110.  *   6.6   1.5   1.8   2.4   3.4   4.3   4.5   4.5
 115.  *   6.3   1.6   1.6   2.4   3.7   4.6   4.6   4.7
 120.  *   5.9   1.6   1.8   2.7   4.0   4.8   5.0   4.9
 125.  *   5.6   1.6   1.8   2.7   4.3   4.9   5.1   5.0
 130.  *   5.1   1.5   1.9   2.7   4.6   5.3   5.3   5.4
 135.  *   5.1   1.4   1.8   2.7   4.8   5.5   5.5   5.5
 140.  *   4.9   1.3   1.7   2.6   5.1   5.6   5.7   5.6
 145.  *   4.6   1.2   1.6   2.5   5.2   5.9   6.0   5.8
 150.  *   4.5    .9   1.3   2.3   5.0   5.9   5.8   5.6
 155.  *   4.0    .7   1.0   1.8   4.6   5.4   5.3   5.2
 160.  *   3.9    .4    .7   1.4   3.7   4.5   4.7   4.3
 165.  *   3.5    .2    .4    .8   2.7   3.5   3.5   3.3
 170.  *   3.4    .1    .1    .4   1.6   2.3   2.4   2.3
 175.  *   3.3    .0    .1    .1    .9   1.4   1.3   1.3
 180.  *   3.3    .0    .0    .0    .5    .8    .8    .8
 185.  *   3.4    .1    .0    .0    .2    .4    .4    .4
 190.  *   3.4    .1    .0    .0    .1    .3    .3    .3
 195.  *   3.5    .1    .0    .0    .0    .2    .2    .2
 200.  *   3.5    .1    .1    .0    .0    .2    .2    .2
 205.  *   3.6    .1    .1    .0    .0    .2    .2    .2
1
                                                                                                          PAGE  6
      JOB: Site 5 BD 3  PM 2014 - 5B3PM14.DAT                   RUN: Site 5 BD 3  PM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   3.6    .1    .1    .1    .0    .1    .1    .1
 215.  *   3.7    .1    .1    .1    .1    .1    .1    .1
 220.  *   3.9    .1    .1    .1    .1    .1    .1    .1
 225.  *   4.3    .2    .1    .1    .1    .1    .1    .1
 230.  *   4.8    .2    .2    .3    .2    .0    .1    .0
 235.  *   5.2    .3    .3    .4    .3    .0    .0    .0
 240.  *   5.3    .4    .4    .7    .6    .0    .0    .0
 245.  *   5.6    .5    .7   1.0    .8    .0    .0    .0
 250.  *   5.6    .7   1.0   1.7   1.4    .1    .0    .0
 255.  *   5.8   1.0   1.5   2.4   2.2    .2    .0    .0
 260.  *   5.8   1.4   2.0   3.2   3.0    .5    .1    .0
 265.  *   5.4   1.8   2.5   3.8   3.7    .7    .2    .1
 270.  *   4.9   2.2   3.0   4.3   4.2   1.0    .3    .1
 275.  *   4.1   2.5   3.4   4.7   4.4   1.4    .6    .3
 280.  *   3.3   2.7   3.6   4.8   4.5   1.6    .9    .5
 285.  *   2.6   2.9   3.5   4.6   4.2   1.7   1.0    .6
 290.  *   2.0   2.8   3.5   4.3   4.1   1.8   1.1    .8
 295.  *   1.6   2.8   3.4   4.2   3.9   1.8   1.2    .9
 300.  *   1.2   2.8   3.3   4.1   3.6   1.9   1.3   1.0
 305.  *   1.2   2.7   3.2   3.8   3.3   1.9   1.2   1.0
 310.  *   1.1   2.7   3.0   3.6   3.1   1.6   1.3   1.0
 315.  *    .9   2.5   2.9   3.4   3.0   1.7   1.3   1.1
 320.  *    .8   2.4   2.9   3.2   2.9   1.9   1.5   1.2
 325.  *    .8   2.5   2.8   3.3   3.1   2.3   1.9   1.6
 330.  *    .7   2.5   3.0   3.5   3.6   3.1   2.6   2.4
 335.  *    .8   2.6   3.2   3.8   4.2   3.7   3.3   3.2
 340.  *   1.1   2.8   3.5   4.2   4.8   4.4   4.1   3.8
 345.  *   1.6   3.2   3.8   4.8   5.2   5.0   4.9   4.8
 350.  *   2.0   3.5   4.0   5.2   5.5   5.1   5.1   5.1
 355.  *   2.0   3.4   4.2   5.5   5.3   4.9   5.2   5.4
 360.  *   2.0   3.6   4.4   5.3   4.5   4.5   4.8   5.4
 ------*------------------------------------------------
 MAX   *   7.8   4.5   5.2   6.1   5.6   5.9   6.0   5.8
 DEGR. *   85    60    60    65    60   145   145   145

 THE HIGHEST CONCENTRATION IS    7.80 PPM AT   85 DEGREES FROM REC21.
 THE 2ND HIGHEST CONCENTRATION IS    7.60 PPM AT  175 DEGREES FROM REC3 .
 THE 3RD HIGHEST CONCENTRATION IS    7.20 PPM AT  325 DEGREES FROM REC1 .
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Site 5 BD 3  PM 2030 - 5B3PM30.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.        5.0
SE 164 S                  183.     2590.        5.0
SE 82 S                   154.     2668.        5.0
SE CNR                    140.     2741.        5.0
SE 82 E                   205.     2774.        5.0
SE 164 E                  283.     2802.        5.0
SE MID E                  356.     2828.        5.0
NE MID E                  323.     2935.        5.0
NE 164 E                  235.     2907.        5.0
NE 82 E                   157.     2881.        5.0
NE CNR                     95.     2864.        5.0
NE 82 N                    65.     2927.        5.0
NE 164 N                   40.     3006.        5.0
NE MID N                    8.     3095.        5.0
NW MID N                  -95.     3048.        5.0
NW 164 N                  -68.     2971.        5.0
NW 82 N                   -41.     2894.        5.0
NW CNR                    -31.     2829.        5.0
NW 82 W                   -91.     2798.        5.0
NW 164 W                 -165.     2767.        5.0
NW MID W                 -237.     2736.        5.0
SW MID W                 -218.     2665.        5.0
SW 164 W                 -153.     2690.        5.0
SW 82 W                   -77.     2713.        5.0
SW CNR                      6.     2723.        5.0
SW 82 S                    40.     2651.        5.0
SW 164 S                   68.     2573.        5.0
SW MID S                   91.     2503.        5.0
Site 5 BD 3  PM 2030                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    4040 9.2  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    3630 9.2  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       125        83       2.0 3630   84.1 1569 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     410 9.2  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       125       114       2.0  410   84.1 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    2485 9.2  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    2640 9.2  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    2100 9.2  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       125        82       2.0 2100   84.1 1676 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     540 9.2  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
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       125       112       2.0  540   84.1 1700 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    4090 9.2  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.    1100 9.2  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.    1100 9.2  0.  68   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       125       103       2.0 1100   84.1 1706 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    2615 9.2  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    2045 9.2  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    2045 9.2  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       125        87       2.0 2045   84.1 1642 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.     635 9.2  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.     635 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 5 BD 3  PM 2030 - 5B3PM30.DAT                  RUN: Site 5 BD 3  PM 2030
      DATE: 05/07/2009   TIME: 03:55:04.81


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt16 aprch*   404.0    1854.0     192.0    2439.0 *    622.   340. AG  4040.   9.2    .0 56.0
       2. NB        Rt16 thru *   200.0    2443.0      84.0    2790.0 *    366.   342. AG  3630.   9.2    .0 56.0
       3. NB        Rt16 thru *   113.0    2703.0    2667.7   -4923.6 *   8043.   161. AG   449. 100.0    .0 36.0 2.54 408.6
       4. NB        Rt16 left *   176.0    2437.0      56.0    2781.0 *    364.   341. AG   410.   9.2    .0 44.0
       5. NB        Rt16 left *    88.0    2690.0     518.7    1449.5 *   1313.   161. AG   411. 100.0    .0 24.0 2.16  66.7
       6. NB        Rt16 depar*    85.0    2793.0    -247.0    3736.0 *   1000.   341. AG  2485.   9.2    .0 32.0
       7. SB        Rt16 aprch*  -294.0    3720.0     -67.0    3082.0 *    677.   160. AG  2640.   9.2    .0 56.0
       8. SB        Rt16 thru *   -72.0    3076.0      21.0    2801.0 *    290.   161. AG  2100.   9.2    .0 56.0
       9. SB        Rt16 thru *     2.0    2856.0    -701.7    4955.9 *   2215.   341. AG   444. 100.0    .0 36.0 1.34 112.5
      10. SB        Rt16 left *   -47.0    3080.0      41.0    2815.0 *    279.   162. AG   540.   9.2    .0 44.0
      11. SB        Rt16 left *    25.0    2864.0    -525.6    4515.9 *   1741.   342. AG   404. 100.0    .0 24.0 2.21  88.5
      12. SB        Rt16 depar*    21.0    2799.0     357.0    1826.0 *   1029.   161. AG  4090.   9.2    .0 56.0
      13. EB        Rt27 aprch*  -320.0    2645.0    -111.0    2740.0 *    230.    66. AG  1100.   9.2    .0 56.0
      14. EB        Rt27 aprch*  -111.0    2740.0      56.0    2763.0 *    169.    82. AG  1100.   9.2    .0 68.0
      15. EB        Rt27 aprch*    -5.0    2754.0    -536.2    2685.5 *    536.   263. AG   744. 100.0    .0 48.0 1.12  27.2
      16. EB        Rt27 depar*    67.0    2763.0     996.0    3083.0 *    983.    71. AG  2615.   9.2    .0 56.0
      17. WB        Rt27 aprch*   981.0    3134.0     454.0    2944.0 *    560.   250. AG  2045.   9.2    .0 56.0
      18. WB        Rt27 aprch*   454.0    2944.0      52.0    2807.0 *    425.   251. AG  2045.   9.2    .0 68.0
      19. WB        Rt27 aprch*   120.0    2830.0    1067.2    3152.0 *   1000.    71. AG   628. 100.0    .0 48.0 1.15  50.8
      20. WB        Rt27 depar*    50.0    2805.0     -90.0    2772.0 *    144.   257. AG   635.   9.2    .0 32.0
      21. WB        Rt27 depar*   -90.0    2772.0    -337.0    2669.0 *    268.   247. AG   635.   9.2    .0 32.0
1
                                                                                                                            PAGE  2
      JOB: Site 5 BD 3  PM 2030 - 5B3PM30.DAT                  RUN: Site 5 BD 3  PM 2030
      DATE: 05/07/2009   TIME: 03:55:04.81

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*------------------------------------------------------------------------------
       3. NB        Rt16 thru *     125       83       2.0      3630       1569      84.10      1        3
       5. NB        Rt16 left *     125      114       2.0       410       1700      84.10      1        3
       9. SB        Rt16 thru *     125       82       2.0      2100       1676      84.10      1        3
      11. SB        Rt16 left *     125      112       2.0       540       1700      84.10      1        3
      15. EB        Rt27 aprch*     125      103       2.0      1100       1706      84.10      1        3
      19. WB        Rt27 aprch*     125       87       2.0      2045       1642      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X           Y          Z        *
     -------------------------*--------------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0    *
      2. SE 164 S             *       183.0     2590.0       5.0    *
      3. SE 82 S              *       154.0     2668.0       5.0    *
      4. SE CNR               *       140.0     2741.0       5.0    *
      5. SE 82 E              *       205.0     2774.0       5.0    *
      6. SE 164 E             *       283.0     2802.0       5.0    *
      7. SE MID E             *       356.0     2828.0       5.0    *
      8. NE MID E             *       323.0     2935.0       5.0    *
      9. NE 164 E             *       235.0     2907.0       5.0    *
     10. NE 82 E              *       157.0     2881.0       5.0    *
     11. NE CNR               *        95.0     2864.0       5.0    *
     12. NE 82 N              *        65.0     2927.0       5.0    *
     13. NE 164 N             *        40.0     3006.0       5.0    *
     14. NE MID N             *         8.0     3095.0       5.0    *
     15. NW MID N             *       -95.0     3048.0       5.0    *
     16. NW 164 N             *       -68.0     2971.0       5.0    *
     17. NW 82 N              *       -41.0     2894.0       5.0    *
     18. NW CNR               *       -31.0     2829.0       5.0    *
     19. NW 82 W              *       -91.0     2798.0       5.0    *
     20. NW 164 W             *      -165.0     2767.0       5.0    *
     21. NW MID W             *      -237.0     2736.0       5.0    *
     22. SW MID W             *      -218.0     2665.0       5.0    *
     23. SW 164 W             *      -153.0     2690.0       5.0    *
     24. SW 82 W              *       -77.0     2713.0       5.0    *
     25. SW CNR               *         6.0     2723.0       5.0    *
     26. SW 82 S              *        40.0     2651.0       5.0    *
     27. SW 164 S             *        68.0     2573.0       5.0    *
     28. SW MID S             *        91.0     2503.0       5.0    *
1
                                                                                                                            PAGE  3
      JOB: Site 5 BD 3  PM 2030 - 5B3PM30.DAT                  RUN: Site 5 BD 3  PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
  ------*----------------------------------------------------------------------------------------------------------------------------
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```
  0.  *   1.1   1.3   1.6   1.8   2.1   2.2   2.2    .0    .0    .0    .2    .3    .3    .3   4.2   4.2   4.5   3.6   1.7   1.2
  5.  *   1.0   1.0   1.3   1.7   2.2   2.2   2.2    .0    .0    .0    .0    .1    .1    .1   4.0   4.2   4.2   3.5   1.8   1.3
 10.  *    .9   1.1   1.3   1.8   2.2   2.2   2.2    .0    .0    .0    .0    .0    .0    .0   3.8   4.0   4.0   3.3   1.7   1.3
 15.  *    .8   1.0   1.3   1.8   2.2   2.2   2.3    .1    .0    .0    .0    .0    .0    .0   3.6   3.8   3.8   2.9   1.8   1.1
 20.  *    .8   1.0   1.3   2.0   2.3   2.3   2.3    .1    .0    .0    .0    .0    .0    .0   3.5   3.6   3.6   2.8   1.7   1.1
 25.  *    .8    .9   1.4   2.0   2.3   2.4   2.4    .1    .1    .1    .0    .0    .0    .0   3.4   3.6   3.5   2.7   1.6   1.2
 30.  *    .9    .9   1.4   2.2   2.4   2.5   2.5    .1    .1    .1    .0    .0    .0    .0   3.2   3.2   3.3   2.5   1.6   1.1
 35.  *    .9   1.0   1.4   2.3   2.5   2.6   2.5    .1    .1    .1    .0    .0    .0    .0   3.0   3.0   3.1   2.4   1.5   1.1
 40.  *    .8   1.1   1.5   2.3   2.5   2.7   2.7    .2    .2    .2    .0    .0    .0    .0   2.9   3.0   3.0   2.1   1.5   1.2
 45.  *    .8    .9   1.5   2.4   2.7   2.7   2.7    .3    .2    .2    .2    .0    .0    .0   3.0   3.0   3.0   2.1   1.3   1.1
 50.  *    .5    .8   1.4   2.5   2.7   2.9   2.8    .5    .4    .3    .3    .0    .0    .0   2.8   2.9   3.0   2.0   1.4   1.1
 55.  *    .4    .7   1.3   2.5   2.9   2.8   2.8    .8    .8    .8    .5    .0    .0    .0   2.9   3.0   3.0   2.0   1.4   1.3
 60.  *    .3    .5    .9   2.2   2.7   2.6   2.6   1.4   1.3   1.3   1.1    .1    .0    .0   2.9   3.0   3.1   2.2   1.6   1.6
 65.  *    .1    .3    .7   1.8   2.3   2.3   2.1   1.9   1.9   1.8   1.6    .3    .1    .0   3.0   3.1   3.3   2.4   2.0   2.2
 70.  *    .0    .2    .6   1.5   1.8   1.9   1.8   2.7   2.6   2.6   2.3    .6    .1    .0   3.0   3.2   3.7   2.8   2.2   2.4
 75.  *    .0    .0    .2   1.0   1.4   1.3   1.3   3.3   3.2   3.2   2.9    .9    .5    .1   3.0   3.5   3.9   3.0   2.4   2.9
 80.  *    .0    .0    .2    .5    .9    .9    .9   3.7   3.7   3.7   3.3   1.2    .6    .2   3.3   3.6   4.3   3.2   2.5   3.0
 85.  *    .0    .0    .0    .3    .4    .4    .4   4.1   4.0   4.0   3.6   1.4    .7    .5   3.4   3.7   4.4   2.9   2.4   3.3
 90.  *    .0    .0    .0    .1    .3    .3    .3   4.1   3.9   4.0   3.6   1.6   1.0    .5   3.5   3.9   4.5   2.9   2.2   3.8
 95.  *    .0    .0    .1    .0    .1    .1    .1   3.9   3.7   3.8   3.3   1.7   1.0    .6   3.7   4.0   4.3   2.5   2.1   3.9
100.  *    .1    .1    .1    .0    .1    .1    .1   3.7   3.6   3.5   3.2   1.6   1.1    .7   3.9   4.1   4.3   2.4   2.3   4.0
105.  *    .1    .1    .1    .0    .1    .1    .1   3.6   3.4   3.4   3.0   1.6   1.2    .9   3.9   4.0   4.0   2.1   2.3   4.0
110.  *    .1    .1    .1    .0    .0    .0    .1   3.4   3.3   3.3   2.8   1.6   1.0    .9   3.8   4.1   4.1   2.1   2.4   4.2
115.  *    .1    .1    .1    .0    .0    .0    .1   3.2   3.1   3.1   2.6   1.5   1.0    .8   4.0   4.1   3.7   2.0   2.6   4.3
120.  *    .1    .1    .1    .0    .0    .0    .0   3.1   3.0   2.9   2.5   1.5   1.0    .8   4.0   4.1   3.8   2.1   3.3   4.3
125.  *    .1    .1    .1    .0    .0    .0    .0   2.9   2.9   2.9   2.3   1.4   1.0    .7   4.0   4.1   3.4   2.3   3.5   4.4
130.  *    .1    .1    .3    .0    .0    .0    .0   2.9   2.8   2.8   2.1   1.4   1.0    .7   4.2   4.3   3.5   2.5   3.6   4.3
135.  *    .3    .3    .3    .2    .0    .0    .0   2.7   2.6   2.6   2.1   1.3    .9    .7   4.2   4.3   3.7   3.0   4.0   4.2
140.  *    .5    .5    .7    .2    .0    .0    .0   2.6   2.6   2.6   2.0   1.5   1.2    .9   4.5   4.4   3.8   3.5   4.0   4.0
145.  *    .9   1.0   1.2    .7    .1    .0    .0   2.7   2.6   2.7   2.5   1.9   1.5   1.1   4.4   4.5   4.0   3.8   4.1   4.0
150.  *   1.8   1.7   1.9   1.4    .4    .1    .1   2.8   2.7   3.0   2.7   2.3   2.0   1.4   4.7   4.5   4.2   4.0   3.9   3.8
155.  *   2.8   2.7   3.0   2.1    .6    .2    .1   2.9   3.0   3.5   3.3   2.9   2.3   2.1   4.2   4.3   3.8   4.0   3.7   3.5
160.  *   3.8   3.7   4.2   3.1   1.0    .5    .2   3.0   3.5   4.1   3.9   3.4   3.0   2.8   3.6   3.6   3.7   3.5   3.1   3.1
165.  *   4.6   4.5   5.0   3.9   1.5    .9    .5   3.3   3.7   4.3   4.2   3.7   3.0   2.9   2.9   2.8   3.0   3.1   2.7   2.9
170.  *   5.1   5.1   5.4   4.4   2.0   1.0    .7   3.5   4.0   4.6   4.4   3.8   3.1   3.5   2.3   2.2   2.3   2.5   2.4   2.7
175.  *   5.4   5.4   5.7   4.7   2.2   1.2    .9   3.6   4.0   4.9   4.4   3.4   3.1   3.4   1.3   1.6   1.8   1.8   2.2   2.6
180.  *   5.5   5.3   5.7   4.6   2.3   1.5   1.0   3.7   4.1   4.9   4.0   3.1   3.3   3.4    .9   1.2   1.4   1.7   2.0   2.6
185.  *   5.1   5.1   5.4   4.3   2.3   1.5   1.1   3.9   4.1   4.6   3.5   2.7   2.8   3.3    .7    .9   1.1   1.6   2.1   2.6
190.  *   5.0   4.9   5.1   4.1   2.2   1.5   1.2   4.1   4.3   4.4   2.9   2.5   3.0   2.9    .6    .7   1.1   1.5   2.1   2.6
195.  *   4.6   4.5   4.9   3.8   2.3   1.4   1.3   4.1   4.2   4.2   2.8   2.3   2.9   3.2    .7    .8   1.0   1.6   1.9   2.6
200.  *   4.6   4.4   4.5   3.5   2.0   1.4   1.2   4.1   4.1   3.9   2.5   2.4   2.9   3.1    .7    .8   1.1   1.6   2.0   2.7
205.  *   4.5   4.3   4.4   3.3   1.9   1.4   1.3   4.2   4.0   3.9   2.3   2.3   3.0   3.1    .6    .8   1.2   1.6   2.2   2.7
1
                                                                                                                        PAGE  4
      JOB: Site 5 BD 3  PM 2030 - 5B3PM30.DAT                   RUN: Site 5 BD 3  PM 2030

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *   4.3   4.0   4.3   2.9   1.9   1.3   1.2   4.3   4.1   3.5   2.1   2.6   2.9   3.1    .5    .8   1.3   1.7   2.2   2.8
215.  *   4.0   3.9   4.0   2.8   1.8   1.4   1.2   4.3   4.1   3.4   2.4   2.8   3.1   3.0    .5    .7   1.2   1.8   2.3   2.9
220.  *   3.9   3.7   4.0   2.6   1.6   1.4   1.1   4.2   4.0   3.0   2.3   2.9   3.1   2.9    .4    .7   1.1   1.8   2.3   3.0
225.  *   3.8   3.7   3.8   2.3   1.7   1.2   1.0   4.2   3.9   3.0   2.2   3.0   3.0   2.9    .4    .6   1.1   1.8   2.3   3.1
230.  *   3.8   3.7   3.8   2.2   1.5   1.2   1.0   4.2   3.8   2.9   2.6   3.1   2.8   2.7    .3    .5   1.1   1.9   2.3   3.1
235.  *   3.8   3.7   3.8   2.1   1.5   1.3   1.1   4.1   3.4   2.8   2.7   3.1   2.7   2.6    .2    .5   1.0   1.9   2.3   3.3
240.  *   3.8   3.7   3.8   1.9   1.6   1.4   1.2   3.9   3.5   2.8   2.8   3.0   2.7   2.8    .1    .4    .8   1.7   2.3   3.2
245.  *   3.8   3.8   3.8   2.1   1.7   1.5   1.5   3.6   3.1   2.7   2.8   2.9   2.6   2.7    .1    .2    .6   1.6   2.2   3.2
250.  *   3.8   3.8   3.9   2.3   2.1   1.9   1.9   3.1   2.6   2.3   2.8   2.9   2.5   2.5    .0    .1    .5   1.4   1.9   3.1
255.  *   3.8   3.8   4.0   2.8   2.1   2.2   2.1   2.4   2.1   2.0   2.2   2.8   2.4   2.6    .0    .1    .3   1.1   1.6   2.7
260.  *   3.8   3.8   4.1   2.9   2.5   2.3   2.4   1.8   1.7   1.8   2.1   2.7   2.3   2.4    .0    .0    .2    .7   1.2   2.2
265.  *   3.8   3.8   4.1   3.2   2.6   2.7   2.8   1.5   1.4   1.6   2.0   2.6   2.2   2.5    .0    .0    .1    .5    .8   1.6
270.  *   3.9   3.9   4.4   3.4   2.6   2.6   3.0   1.1   1.1   1.5   1.9   2.3   2.2   2.4    .0    .0    .0    .3    .5   1.2
275.  *   4.0   4.1   4.7   3.2   2.6   2.7   3.0    .9   1.3   1.5   1.9   2.5   2.4   2.5    .0    .0    .0    .1    .3    .7
280.  *   4.1   4.2   4.6   3.1   2.4   2.9   3.0   1.0   1.1   1.4   1.9   2.5   2.5   2.5    .0    .0    .0    .1    .1    .4
285.  *   4.3   4.4   4.5   2.9   2.4   2.8   3.1   1.1   1.0   1.5   2.1   2.5   2.6   2.5    .0    .0    .0    .0    .1    .3
290.  *   4.5   4.5   4.3   2.9   2.4   3.0   3.1   1.0   1.1   1.5   2.2   2.5   2.6   2.5    .0    .0    .1    .0    .0    .2
295.  *   4.8   4.8   4.2   2.8   2.8   3.0   3.2    .9   1.2   1.6   2.4   2.6   2.6   2.6    .0    .1    .1    .0    .0    .1
300.  *   4.9   4.8   4.3   2.9   2.6   3.2   3.2    .9   1.2   1.7   2.5   2.8   2.7   2.9    .0    .1    .1    .0    .0    .1
305.  *   5.0   4.8   4.1   2.8   2.9   3.2   3.3   1.0   1.1   1.7   2.5   3.0   2.9   2.9    .0    .1    .1    .0    .0    .1
310.  *   5.0   4.8   4.0   2.8   3.2   3.2   3.1   1.0   1.1   1.6   2.8   3.0   2.9   3.0    .0    .1    .1    .0    .0    .0
315.  *   5.2   5.0   4.1   3.3   3.3   3.3   3.1    .8   1.1   1.7   2.9   3.0   3.1   3.1    .1    .2    .2    .0    .0    .0
320.  *   5.3   4.9   4.2   3.7   3.4   3.2   3.0    .8   1.2   1.8   2.9   3.4   3.2   3.2    .3    .4    .6    .1    .0    .0
325.  *   5.2   4.8   3.9   3.8   3.6   3.2   2.9    .7   1.1   1.6   2.9   3.3   3.1   3.2    .7    .8    .8    .5    .1    .0
330.  *   5.3   4.5   4.2   3.8   3.4   2.9   2.9    .6    .9   1.5   2.9   3.3   3.1   3.2   1.2   1.4   1.5    .9    .2    .0
335.  *   4.8   4.1   4.1   3.8   3.1   2.9   2.6    .3    .7   1.2   2.4   2.9   2.8   2.8   2.0   2.1   2.3   1.6    .5    .2
340.  *   3.9   3.7   3.6   3.4   2.9   2.7   2.5    .2    .5    .9   2.1   2.3   2.3   2.3   2.8   3.0   3.0   2.3    .8    .4
345.  *   3.2   2.9   3.0   2.9   2.7   2.4   2.3    .1    .2    .6   1.3   1.8   1.6   1.6   3.4   3.7   3.8   2.9   1.2    .6
350.  *   2.5   2.2   2.5   2.5   2.4   2.1   2.2    .0    .1    .3    .9   1.1   1.1   1.1   4.0   4.1   4.2   3.4   1.6    .9
355.  *   1.7   1.6   1.8   2.1   2.1   2.2   2.2    .0    .0    .0    .4    .7    .6    .5   4.2   4.3   4.6   3.5   1.7   1.1
360.  *   1.1   1.3   1.6   1.8   2.1   2.2   2.2    .0    .0    .0    .2    .3    .3    .3   4.2   4.2   4.5   3.6   1.7   1.2
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   5.5   5.4   5.7   4.7   3.6   3.3   3.3   4.3   4.3   4.9   4.4   3.8   3.3   3.5   4.7   4.5   4.6   4.0   4.1   4.4
DEGR. *  180   175   175   175   325   315   305   210   190   175   170   170   180   170   150   145   355   150   145   125

1
                                                                                                                        PAGE  5
      JOB: Site 5 BD 3  PM 2030 - 5B3PM30.DAT                   RUN: Site 5 BD 3  PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
------*------------------------------------------------
  0.  *   1.6   2.8   3.3   4.4   3.6   3.4   3.6   4.1
  5.  *   1.7   2.8   3.5   4.2   3.3   2.8   3.7   3.9
 10.  *   1.6   2.8   3.3   4.0   2.9   2.8   3.6   4.2
```

```
  15.  *   1.6   2.9   3.3   4.0   2.6   3.0   3.7   4.1
  20.  *   1.5   2.9   3.4   3.9   2.5   2.8   4.0   4.1
  25.  *   1.6   2.8   3.5   3.7   2.5   2.9   4.1   4.2
  30.  *   1.6   2.7   3.4   3.8   2.4   3.1   4.2   4.1
  35.  *   1.6   2.8   3.4   3.9   2.5   3.2   4.3   4.1
  40.  *   1.7   2.8   3.5   4.0   2.7   3.4   4.3   4.2
  45.  *   1.7   2.9   3.6   4.0   3.1   3.7   4.2   4.0
  50.  *   2.1   3.1   3.5   4.3   3.4   3.9   4.1   3.9
  55.  *   2.5   3.2   3.7   4.3   3.8   4.0   4.1   3.6
  60.  *   3.1   3.4   3.9   4.6   4.1   4.0   3.9   3.6
  65.  *   4.2   3.1   3.7   4.5   3.9   3.9   3.8   3.5
  70.  *   4.9   2.8   3.5   4.2   3.8   3.7   3.6   3.4
  75.  *   5.8   2.6   2.9   3.8   3.4   3.5   3.4   3.3
  80.  *   6.0   2.1   2.4   3.2   2.9   3.3   3.3   3.3
  85.  *   5.9   1.5   1.8   2.6   2.5   3.0   3.2   3.2
  90.  *   5.9   1.3   1.5   2.1   2.3   3.0   3.1   3.0
  95.  *   5.7   1.1   1.3   1.8   2.1   3.2   3.2   3.1
 100.  *   5.7   1.0   1.3   1.7   2.4   3.3   3.3   3.3
 105.  *   5.6   1.1   1.2   1.6   2.4   3.3   3.3   3.3
 110.  *   5.3   1.2   1.2   1.7   2.5   3.4   3.4   3.4
 115.  *   5.1   1.0   1.3   1.7   2.8   3.4   3.6   3.5
 120.  *   4.8   1.1   1.3   1.9   3.0   3.6   3.6   3.6
 125.  *   4.4   1.2   1.5   2.0   3.3   3.9   3.9   3.9
 130.  *   4.2   1.1   1.4   2.1   3.4   3.9   4.0   3.9
 135.  *   4.1   1.1   1.4   2.1   3.6   4.2   4.3   4.1
 140.  *   3.9   1.0   1.3   1.9   3.9   4.4   4.4   4.4
 145.  *   3.7    .9   1.2   2.0   4.1   4.5   4.4   4.4
 150.  *   3.6    .8   1.0   1.8   3.9   4.4   4.3   4.3
 155.  *   3.3    .5    .9   1.4   3.4   4.1   4.1   3.9
 160.  *   3.2    .4    .6   1.0   2.9   3.4   3.5   3.4
 165.  *   2.9    .2    .4    .7   2.1   2.6   2.6   2.6
 170.  *   2.8    .1    .1    .4   1.2   1.8   1.9   1.8
 175.  *   2.7    .0    .0    .1    .8   1.1   1.1   1.0
 180.  *   2.7    .0    .0    .0    .3    .6    .7    .6
 185.  *   2.8    .0    .0    .0    .1    .3    .3    .3
 190.  *   2.8    .0    .0    .0    .1    .2    .2    .2
 195.  *   2.8    .0    .0    .0    .0    .1    .2    .1
 200.  *   2.9    .1    .0    .0    .0    .1    .1    .1
 205.  *   2.9    .1    .0    .0    .0    .1    .1    .1
1
                                                                                                                PAGE  6
      JOB: Site 5 BD 3  PM 2030 - 5B3PM30.DAT                  RUN: Site 5 BD 3  PM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   2.9    .1    .0    .1    .0    .1    .1    .1
 215.  *   3.0    .1    .1    .1    .0    .1    .1    .1
 220.  *   3.2    .1    .1    .1    .0    .1    .1    .1
 225.  *   3.6    .1    .1    .1    .0    .0    .1    .0
 230.  *   3.9    .2    .1    .1    .1    .0    .0    .0
 235.  *   4.2    .2    .2    .3    .2    .0    .0    .0
 240.  *   4.4    .3    .3    .4    .4    .0    .0    .0
 245.  *   4.4    .4    .5    .9    .7    .0    .0    .0
 250.  *   4.5    .4    .7   1.2   1.1    .1    .0    .0
 255.  *   4.6    .7   1.1   1.9   1.7    .1    .0    .0
 260.  *   4.5    .9   1.5   2.4   2.3    .3    .0    .0
 265.  *   4.3   1.2   1.8   3.0   2.9    .5    .1    .0
 270.  *   3.9   1.5   2.2   3.4   3.3    .7    .2    .1
 275.  *   3.3   1.7   2.5   3.7   3.5    .9    .4    .1
 280.  *   2.7   1.9   2.7   3.9   3.6   1.2    .5    .3
 285.  *   2.1   2.1   2.8   3.7   3.4   1.3    .8    .4
 290.  *   1.6   2.2   2.8   3.5   3.4   1.4    .9    .5
 295.  *   1.3   2.2   2.7   3.4   3.1   1.5    .9    .6
 300.  *   1.0   2.1   2.6   3.2   2.9   1.4    .9    .7
 305.  *   1.0   2.1   2.5   3.1   2.6   1.3    .9    .8
 310.  *   1.0   2.0   2.4   2.9   2.5   1.2    .9    .9
 315.  *    .8   2.0   2.3   2.8   2.3   1.2   1.0    .7
 320.  *    .7   1.9   2.3   2.7   2.3   1.3   1.1    .9
 325.  *    .6   1.9   2.3   2.7   2.5   1.7   1.5   1.2
 330.  *    .6   1.9   2.2   2.7   2.9   2.2   2.0   1.9
 335.  *    .7   2.0   2.4   3.0   3.2   2.7   2.5   2.4
 340.  *    .9   2.1   2.5   3.4   3.7   3.3   2.9   3.0
 345.  *   1.0   2.2   2.8   3.7   4.1   3.5   3.4   3.5
 350.  *   1.4   2.5   3.1   4.1   4.2   3.5   3.6   3.9
 355.  *   1.5   2.6   3.2   4.4   3.8   3.5   4.0   4.0
 360.  *   1.6   2.8   3.3   4.4   3.6   3.4   3.6   4.1
 ------*------------------------------------------------
 MAX   *   6.0   3.4   3.9   4.6   4.2   4.5   4.4   4.4
 DEGR. *   80    60    60    60   350   145   145   145

 THE HIGHEST CONCENTRATION IS    6.00 PPM AT   80 DEGREES FROM REC21.
 THE 2ND HIGHEST CONCENTRATION IS    5.70 PPM AT  175 DEGREES FROM REC3 .
 THE 3RD HIGHEST CONCENTRATION IS    5.50 PPM AT  180 DEGREES FROM REC1 .
```

```
Site 5 BD 8  AM 2014 - 5B8AM14.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 BD 8  AM 2014                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    289011.4  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    234011.4  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       120        79       2.0 2340  102.2 1563 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     55011.4  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       120       105       2.0  550  102.2 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    167011.4  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    229011.4  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    206011.4  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       120        83       2.0 2060  102.2 1673 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     23011.4  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
```

```
       120       109       2.0  230  102.2 1700 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    504511.4  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.     41511.4  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.     41511.4  0.  68   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       120       103       2.0  415  102.2 1706 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    145511.4  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    416511.4  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    416511.4  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       120        82       2.0 4165  102.2 1691 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.    159011.4  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.    159011.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 5 BD 8  AM 2014 - 5B8AM14.DAT                  RUN: Site 5 BD 8  AM 2014
      DATE: 05/07/2009   TIME: 04:03:42.59


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *      622.   340. AG   2890.  11.4    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *      366.   342. AG   2340.  11.4    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    1209.7    -571.0 *     3453.   161. AG    541. 100.0    .0 36.0 1.62 175.4
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *      364.   341. AG    550.  11.4    .0 44.0
       5. NB        Rt16 left *     88.0    2690.0     562.4    1323.3 *     1447.   161. AG    480. 100.0    .0 24.0 1.77  73.5
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *     1000.   341. AG   1670.  11.4    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *      677.   160. AG   2290.  11.4    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *      290.   161. AG   2060.  11.4    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0    -853.2    5407.7 *     2691.   341. AG    569. 100.0    .0 36.0 1.49 136.7
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *      279.   162. AG    230.  11.4    .0 44.0
      11. SB        Rt16 left *     25.0    2864.0     -64.3    3132.0 *      282.   342. AG    498. 100.0    .0 24.0 1.16  14.3
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *     1029.   161. AG   5045.  11.4    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *      230.    66. AG    415.  11.4    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *      169.    82. AG    415.  11.4    .0 68.0
      15. EB        Rt27 aprch*     -5.0    2754.0     -62.5    2746.6 *       58.   263. AG    941. 100.0    .0 48.0  .56   2.9
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *      983.    71. AG   1455.  11.4    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *      560.   250. AG   4165.  11.4    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *      425.   251. AG   4165.  11.4    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    6017.9    4835.3 *     6229.    71. AG    749. 100.0    .0 48.0 2.17 316.5
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *      144.   257. AG   1590.  11.4    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *      268.   247. AG   1590.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 5 BD 8  AM 2014 - 5B8AM14.DAT                  RUN: Site 5 BD 8  AM 2014
      DATE: 05/07/2009   TIME: 04:03:42.59

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *    120        79       2.0      2340       1563     102.20      1        3
       5. NB        Rt16 left *    120       105       2.0       550       1700     102.20      1        3
       9. SB        Rt16 thru *    120        83       2.0      2060       1673     102.20      1        3
      11. SB        Rt16 left *    120       109       2.0       230       1700     102.20      1        3
      15. EB        Rt27 aprch*    120       103       2.0       415       1706     102.20      1        3
      19. WB        Rt27 aprch*    120        82       2.0      4165       1691     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *       207.0     2515.0        5.0   *
      2. SE 164 S             *       183.0     2590.0        5.0   *
      3. SE 82 S              *       154.0     2668.0        5.0   *
      4. SE CNR               *       140.0     2741.0        5.0   *
      5. SE 82 E              *       205.0     2774.0        5.0   *
      6. SE 164 E             *       283.0     2802.0        5.0   *
      7. SE MID E             *       356.0     2828.0        5.0   *
      8. NE MID E             *       323.0     2935.0        5.0   *
      9. NE 164 E             *       235.0     2907.0        5.0   *
     10. NE 82 E              *       157.0     2881.0        5.0   *
     11. NE CNR               *        95.0     2864.0        5.0   *
     12. NE 82 N              *        65.0     2927.0        5.0   *
     13. NE 164 N             *        40.0     3006.0        5.0   *
     14. NE MID N             *         8.0     3095.0        5.0   *
     15. NW MID N             *       -95.0     3048.0        5.0   *
     16. NW 164 N             *       -68.0     2971.0        5.0   *
     17. NW 82 N              *       -41.0     2894.0        5.0   *
     18. NW CNR               *       -31.0     2829.0        5.0   *
     19. NW 82 W              *       -91.0     2798.0        5.0   *
     20. NW 164 W             *      -165.0     2767.0        5.0   *
     21. NW MID W             *      -237.0     2736.0        5.0   *
     22. SW MID W             *      -218.0     2665.0        5.0   *
     23. SW 164 W             *      -153.0     2690.0        5.0   *
     24. SW 82 W              *       -77.0     2713.0        5.0   *
     25. SW CNR               *         6.0     2723.0        5.0   *
     26. SW 82 S              *        40.0     2651.0        5.0   *
     27. SW 164 S             *        68.0     2573.0        5.0   *
     28. SW MID S             *        91.0     2503.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 5 BD 8  AM 2014 - 5B8AM14.DAT                  RUN: Site 5 BD 8  AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
```

```
    0.  *   1.4   1.5   1.8   2.3   2.7   2.7   2.7    .1    .0    .0    .2    .2    .2    .2   3.9   4.6   4.8   3.9   1.8   1.0
    5.  *   1.1   1.3   1.6   2.2   2.7   2.7   2.7    .1    .1    .1    .0    .1    .0    .0   3.7   4.4   4.9   3.8   1.8   1.1
   10.  *   1.0   1.3   1.6   2.2   2.7   2.7   2.7    .1    .1    .1    .0    .0    .0    .0   3.7   4.4   4.6   3.8   1.9   1.1
   15.  *   1.0   1.3   1.6   2.3   2.7   2.7   2.8    .1    .1    .1    .1    .0    .0    .0   3.7   4.2   4.5   3.6   1.8   1.1
   20.  *   1.1   1.3   1.6   2.5   2.7   2.7   2.8    .1    .1    .1    .1    .0    .0    .0   3.6   4.1   4.3   3.5   1.9   1.3
   25.  *   1.0   1.4   1.7   2.6   3.0   2.9   3.1    .2    .1    .1    .1    .0    .0    .0   3.6   4.1   4.1   3.2   1.8   1.2
   30.  *   1.1   1.3   1.8   2.7   3.0   3.0   3.0    .2    .2    .1    .1    .0    .0    .0   3.6   3.9   3.9   3.1   1.8   1.1
   35.  *   1.0   1.5   1.9   2.7   3.1   3.2   3.2    .3    .2    .2    .1    .0    .0    .0   3.5   3.8   3.9   2.9   1.7   1.1
   40.  *   1.1   1.3   2.0   2.9   3.1   3.2   3.3    .3    .3    .3    .1    .0    .0    .0   3.5   3.7   3.8   2.8   1.5   1.1
   45.  *    .9   1.3   1.9   2.9   3.4   3.4   3.4    .6    .4    .4    .3    .0    .0    .0   3.5   3.6   3.7   2.4   1.7   1.1
   50.  *    .9   1.3   1.9   3.1   3.4   3.4   3.5    .8    .8    .7    .5    .0    .0    .0   3.4   3.5   3.6   2.4   1.7   1.3
   55.  *    .9   1.1   1.7   3.1   3.6   3.6   3.6   1.4   1.4   1.3   1.0    .1    .1    .0   3.5   3.6   3.6   2.6   1.9   1.6
   60.  *    .8   1.1   1.6   3.0   3.3   3.6   3.5   2.3   2.3   2.2   1.9    .4    .1    .1   3.5   3.6   4.0   2.8   2.3   2.1
   65.  *    .6    .9   1.5   2.7   3.2   3.1   3.1   3.5   3.3   3.2   2.9    .8    .3    .2   3.7   3.9   4.5   3.4   2.9   2.8
   70.  *    .4    .6   1.1   2.2   2.5   2.5   2.6   4.8   4.4   4.4   4.0   1.3    .7    .4   3.8   4.3   5.2   3.9   3.5   3.3
   75.  *    .2    .3    .7   1.5   1.8   1.9   1.9   5.5   5.3   5.2   4.7   1.8   1.0    .6   4.1   4.7   5.5   4.2   3.7   3.8
   80.  *    .1    .2    .3   1.0   1.1   1.1   1.2   6.1   5.7   5.8   5.2   2.1   1.3    .7   4.2   4.8   5.6   4.3   3.9   3.9
   85.  *    .0    .1    .1    .5    .6    .6    .6   6.1   5.9   5.8   5.3   2.3   1.4    .9   4.5   4.9   5.7   4.1   3.5   3.5
   90.  *    .0    .0    .0    .2    .2    .2    .2   5.9   5.6   5.7   5.2   2.5   1.5   1.0   4.6   5.0   5.7   3.8   3.3   3.3
   95.  *    .0    .0    .0    .0    .1    .1    .1   5.7   5.3   5.2   4.8   2.4   1.5   1.2   4.7   5.0   5.6   3.3   2.9   3.1
  100.  *    .0    .0    .1    .0    .1    .1    .1   5.2   5.0   5.0   4.5   2.2   1.4   1.0   4.6   5.1   5.3   3.0   3.1   2.8
  105.  *    .1    .1    .1    .0    .0    .0    .0   4.9   4.8   4.7   4.2   2.3   1.5   1.1   4.9   5.3   5.1   2.7   3.2   2.9
  110.  *    .1    .1    .1    .0    .0    .0    .0   4.7   4.5   4.5   3.9   2.1   1.4   1.1   4.9   5.1   5.0   2.6   3.4   2.8
  115.  *    .1    .1    .1    .0    .0    .0    .0   4.5   4.3   4.3   3.7   2.1   1.5   1.1   4.9   5.1   4.6   2.7   3.7   2.7
  120.  *    .1    .1    .1    .0    .0    .0    .0   4.3   4.1   4.1   3.6   2.1   1.3   1.1   5.0   5.1   4.5   3.0   3.8   2.8
  125.  *    .1    .1    .1    .0    .0    .0    .0   4.1   4.0   4.0   3.3   1.9   1.3    .9   5.0   5.2   4.4   3.2   4.0   2.7
  130.  *    .1    .1    .2    .0    .0    .0    .0   3.9   3.9   3.8   3.2   1.8   1.3   1.0   5.1   5.0   4.2   3.4   4.5   2.5
  135.  *    .3    .2    .3    .2    .0    .0    .0   3.8   3.8   3.8   3.0   1.8   1.2   1.0   5.4   5.2   4.3   4.0   4.5   2.5
  140.  *    .6    .6    .8    .3    .0    .0    .0   3.7   3.6   3.6   2.9   1.9   1.3   1.2   5.5   5.2   4.5   4.3   4.5   2.4
  145.  *   1.1   1.0   1.2    .7    .1    .0    .0   3.7   3.7   3.7   3.4   2.3   1.7   1.4   5.5   5.4   5.0   4.9   4.4   2.2
  150.  *   2.0   1.9   2.1   1.4    .3    .1    .0   3.8   3.9   4.2   3.6   2.7   2.2   1.9   5.5   5.4   5.0   5.1   4.0   2.0
  155.  *   2.9   3.0   3.3   2.4    .7    .3    .1   4.0   4.1   4.6   4.3   3.4   2.6   2.4   5.0   5.2   5.1   5.1   3.5   1.7
  160.  *   4.1   4.0   4.5   3.3   1.3    .6    .3   4.3   4.5   5.2   5.2   4.2   3.2   3.2   4.5   4.3   4.6   4.7   2.6   1.5
  165.  *   5.0   4.9   5.5   4.3   1.7    .8    .5   4.6   4.9   5.9   5.5   4.5   3.8   3.4   3.5   3.6   3.8   3.7   2.0   1.1
  170.  *   5.8   5.6   6.1   4.9   2.2   1.2    .8   4.6   5.2   6.0   5.5   4.4   3.8   3.8   2.5   2.5   2.9   3.1   1.5    .8
  175.  *   6.1   6.0   6.3   5.1   2.5   1.4   1.0   4.8   5.3   6.2   5.4   4.1   3.9   3.8   1.4   1.6   2.2   2.5   1.1    .7
  180.  *   6.2   6.1   6.3   5.2   2.5   1.7   1.2   5.1   5.4   6.3   5.1   3.9   3.5   3.6   1.1   1.2   1.6   2.2    .8    .6
  185.  *   5.8   5.7   6.1   4.8   2.7   1.8   1.3   5.2   5.6   6.0   4.4   3.2   3.3   3.7    .5    .7   1.1   1.8    .7    .7
  190.  *   5.6   5.5   5.7   4.7   2.5   1.8   1.3   5.3   5.5   5.8   4.0   2.7   3.1   3.4    .3    .4    .9   1.7    .7    .7
  195.  *   5.4   5.1   5.3   4.2   2.6   1.8   1.4   5.3   5.7   5.6   3.5   2.7   3.1   3.2    .2    .3    .7   1.5    .7    .7
  200.  *   5.1   5.0   5.2   3.9   2.5   1.7   1.3   5.5   5.5   5.4   3.5   2.5   3.0   3.3    .2    .2    .5   1.4    .8    .7
  205.  *   4.9   4.8   5.0   3.7   2.4   1.7   1.3   5.7   5.7   5.1   3.4   2.4   3.1   3.1    .2    .2    .5   1.3    .7    .8
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                                                                                                                     PAGE  4
      JOB: Site 5 BD 8  AM 2014 - 5B8AM14.DAT                  RUN: Site 5 BD 8  AM 2014

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
  210.  *   4.8   4.6   4.8   3.3   2.4   1.5   1.4   5.6   5.7   4.9   3.0   2.5   3.2   3.0    .2    .2    .5   1.2    .8    .8
  215.  *   4.5   4.4   4.5   3.0   2.1   1.6   1.3   5.8   5.5   4.6   3.0   2.7   3.0   3.0    .1    .2    .4   1.0    .7    .8
  220.  *   4.4   4.3   4.5   2.9   2.0   1.5   1.4   5.9   5.4   4.4   2.9   2.8   2.9   2.9    .0    .1    .3   1.0    .8    .8
  225.  *   4.3   4.2   4.3   2.5   1.9   1.7   1.2   6.0   5.2   4.0   3.0   2.7   2.7   2.7    .0    .1    .2   1.0    .8    .8
  230.  *   4.2   4.2   4.3   2.3   1.9   1.5   1.2   5.7   4.9   4.0   2.8   2.7   2.7   2.6    .0    .1    .2    .7    .8    .8
  235.  *   4.2   4.2   4.3   2.1   1.7   1.2   1.3   5.5   4.9   3.6   2.6   2.8   2.7   2.5    .0    .0    .1    .6    .8    .8
  240.  *   4.2   4.2   4.3   1.9   1.7   1.3   1.3   5.2   4.5   3.2   2.4   2.7   2.6   2.5    .0    .0    .1    .5    .7    .7
  245.  *   4.2   4.2   4.4   2.1   1.6   1.4   1.4   4.9   4.0   3.0   2.2   2.8   2.6   2.6    .0    .0    .1    .4    .6    .5
  250.  *   4.4   4.3   4.4   2.2   1.9   1.5   1.7   4.1   3.1   2.4   2.0   2.8   2.6   2.6    .0    .0    .0    .3    .4    .3
  255.  *   4.4   4.3   4.4   2.2   1.9   1.9   1.9   3.3   2.7   2.1   1.8   2.7   2.6   2.6    .0    .0    .0    .2    .3    .2
  260.  *   4.2   4.2   4.3   2.3   1.9   2.0   2.4   2.6   2.4   1.9   1.9   2.7   2.6   2.6    .0    .0    .0    .1    .2    .2
  265.  *   4.2   4.2   4.3   2.5   2.0   2.5   3.0   1.8   1.6   1.5   1.9   2.7   2.6   2.5    .0    .0    .0    .1    .1    .1
  270.  *   4.2   4.2   4.3   2.6   2.2   2.7   3.2   1.5   1.5   1.4   1.8   2.7   2.6   2.5    .0    .0    .0    .0    .1    .1
  275.  *   4.2   4.3   4.3   2.6   2.3   2.9   3.3   1.3   1.5   1.6   2.1   2.8   2.6   2.7    .0    .0    .0    .0    .0    .0
  280.  *   4.3   4.3   4.3   2.9   2.4   3.0   3.5   1.1   1.3   1.7   2.2   2.8   2.8   2.6    .0    .0    .0    .0    .0    .0
  285.  *   4.5   4.6   4.5   2.7   2.6   3.4   3.6   1.1   1.3   1.8   2.3   2.8   2.9   2.6    .0    .1    .1    .0    .0    .0
  290.  *   4.6   4.6   4.4   2.8   2.9   3.5   3.6   1.0   1.4   1.8   2.5   2.9   2.8   2.6    .0    .1    .1    .0    .0    .0
  295.  *   5.0   4.8   4.5   2.8   3.0   3.8   3.8   1.1   1.3   1.7   2.8   2.9   2.7   2.5    .0    .1    .1    .0    .0    .0
  300.  *   5.1   5.0   4.3   2.8   3.1   3.7   3.9    .9   1.3   1.8   2.9   3.2   2.8   2.5    .0    .1    .1    .0    .0    .0
  305.  *   5.4   5.1   4.4   2.9   3.5   3.7   3.6    .9   1.3   1.8   3.0   3.2   3.0   2.5    .0    .1    .1    .0    .0    .0
  310.  *   5.5   5.0   4.4   3.1   3.9   3.7   3.4    .8   1.2   1.8   3.0   3.1   2.9   2.5    .0    .1    .2    .0    .0    .0
  315.  *   5.6   5.2   4.4   3.3   4.0   3.8   3.4    .8   1.1   1.8   2.9   3.2   3.0   2.6    .2    .2    .2    .1    .0    .0
  320.  *   5.8   5.2   4.2   3.8   4.1   3.7   3.3    .7   1.1   1.6   3.0   3.2   2.9   2.6    .3    .5    .6    .3    .0    .0
  325.  *   5.6   5.3   4.4   4.0   4.1   3.7   3.3    .6    .9   1.5   3.0   3.3   2.8   2.5    .7    .9    .9    .5    .1    .0
  330.  *   5.7   5.0   4.4   3.9   4.0   3.4   3.3    .5    .7   1.3   2.8   2.9   2.6   2.3   1.1   1.5   1.7   1.0    .2    .1
  335.  *   5.0   4.4   3.9   4.0   3.6   3.3   3.0    .3    .6   1.1   2.4   2.5   2.3   2.1   1.9   2.3   2.4   1.6    .5    .2
  340.  *   4.4   3.6   3.6   3.6   3.3   3.1   2.9    .2    .4    .7   1.9   2.1   1.8   1.8   2.6   3.0   3.3   2.4    .8    .4
  345.  *   3.5   3.1   3.1   3.0   3.2   2.9   2.8    .1    .2    .5   1.4   1.5   1.3   1.2   3.2   3.7   4.1   3.0   1.1    .5
  350.  *   2.6   2.4   2.6   2.7   2.8   2.8   2.7    .0    .1    .3    .8    .9    .8    .8   3.6   4.2   4.6   3.5   1.4    .8
  355.  *   1.9   1.8   2.1   2.5   2.8   2.7   2.7    .0    .0    .1    .3    .5    .5    .5   4.0   4.4   4.8   3.8   1.8    .9
  360.  *   1.4   1.5   1.8   2.3   2.7   2.7   2.7    .1    .0    .0    .2    .2    .2    .2   3.9   4.6   4.8   3.9   1.8   1.0
 ------*-----------------------------------------------------------------------------------------------------------------------
 MAX    *   6.2   6.1   6.3   5.2   4.1   3.8   3.9   6.1   5.9   6.3   5.5   4.5   3.9   3.8   5.5   5.4   5.7   5.1   4.5   3.9
 DEGR.  *   180   180   180   180   320   295   300    80    85   180   165   165   175   170   140   150    85   150   130    80

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                                                                                                                     PAGE  5
      JOB: Site 5 BD 8  AM 2014 - 5B8AM14.DAT                  RUN: Site 5 BD 8  AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
    0.  *    .8   1.3   1.6   2.5   4.1   4.2   4.6   5.1
    5.  *    .8   1.4   1.6   2.7   3.8   4.0   4.6   5.1
   10.  *    .8   1.5   1.5   2.8   3.5   4.0   4.8   5.1
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  15.  *    .9   1.4   1.5   3.0   3.1   3.7   4.8   5.2
  20.  *    .8   1.5   1.6   3.0   3.0   3.6   5.1   5.3
  25.  *    .9   1.5   1.6   3.3   3.0   3.9   5.1   5.2
  30.  *    .9   1.4   1.6   3.5   3.1   4.2   5.3   5.2
  35.  *    .9   1.5   1.7   3.6   3.3   4.3   5.4   5.2
  40.  *   1.0   1.7   2.0   4.0   3.7   4.6   5.2   5.1
  45.  *   1.2   1.9   2.2   4.2   4.1   4.7   5.5   4.9
  50.  *   1.1   1.9   2.6   4.5   4.5   4.9   5.3   4.9
  55.  *   1.6   2.3   3.0   4.9   5.1   5.1   5.2   4.9
  60.  *   2.1   2.8   3.6   5.4   5.4   5.1   5.2   4.8
  65.  *   2.4   3.3   3.6   5.3   5.3   5.2   4.9   4.7
  70.  *   2.9   2.9   3.6   5.2   5.0   5.1   4.9   4.5
  75.  *   3.4   2.7   3.3   4.7   4.4   4.7   4.5   4.3
  80.  *   3.4   2.0   2.7   3.9   3.8   4.3   4.2   4.0
  85.  *   3.1   1.8   2.1   3.1   3.2   4.0   4.0   3.8
  90.  *   2.7   1.5   1.7   2.3   3.0   3.9   3.9   3.8
  95.  *   2.5   1.2   1.4   2.3   2.7   3.8   3.9   3.8
 100.  *   2.2   1.1   1.3   1.9   2.7   3.9   4.0   4.0
 105.  *   2.0   1.2   1.4   2.0   3.0   4.0   4.0   4.1
 110.  *   2.1   1.2   1.5   2.0   3.0   4.1   4.1   4.2
 115.  *   2.1   1.3   1.6   2.1   3.3   4.4   4.5   4.4
 120.  *   2.0   1.4   1.7   2.1   3.7   4.6   4.6   4.6
 125.  *   2.1   1.5   1.6   2.4   4.0   4.8   4.8   4.8
 130.  *   2.2   1.4   1.7   2.4   4.4   5.0   5.1   5.1
 135.  *   2.1   1.3   1.8   2.4   4.5   5.3   5.3   5.2
 140.  *   2.0   1.3   1.7   2.3   4.9   5.3   5.4   5.4
 145.  *   1.8   1.1   1.6   2.2   5.0   5.8   5.9   5.5
 150.  *   1.6    .9   1.3   2.0   4.8   5.6   5.7   5.5
 155.  *   1.4    .5   1.0   1.8   4.4   5.2   5.2   5.1
 160.  *   1.1    .4    .6   1.2   3.6   4.4   4.3   4.3
 165.  *    .8    .1    .4    .8   2.6   3.3   3.4   3.2
 170.  *    .8    .0    .1    .3   1.6   2.3   2.3   2.2
 175.  *    .7    .0    .0    .2    .9   1.5   1.6   1.5
 180.  *    .7    .0    .0    .0    .5    .8    .9    .8
 185.  *    .7    .0    .0    .0    .2    .4    .5    .4
 190.  *    .7    .0    .0    .0    .1    .3    .3    .3
 195.  *    .7    .0    .0    .0    .1    .2    .2    .2
 200.  *    .7    .0    .0    .0    .0    .2    .2    .2
 205.  *    .8    .0    .0    .0    .0    .2    .2    .2
1
                                                                                                                 PAGE  6
      JOB: Site 5 BD 8  AM 2014 - 5B8AM14.DAT                  RUN: Site 5 BD 8  AM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .8    .0    .0    .0    .0    .1    .2    .1
 215.  *    .8    .0    .0    .0    .0    .1    .1    .1
 220.  *    .8    .0    .0    .0    .0    .1    .1    .1
 225.  *    .8    .1    .0    .0    .0    .1    .1    .1
 230.  *    .7    .1    .1    .0    .0    .0    .1    .0
 235.  *    .7    .1    .1    .0    .0    .0    .0    .0
 240.  *    .5    .1    .1    .1    .1    .0    .0    .0
 245.  *    .4    .1    .2    .2    .2    .0    .0    .0
 250.  *    .3    .3    .3    .2    .4    .0    .0    .0
 255.  *    .2    .3    .4    .3    .7    .0    .0    .0
 260.  *    .1    .3    .4    .4   1.0    .0    .0    .0
 265.  *    .1    .4    .5    .5   1.3    .1    .0    .0
 270.  *    .0    .4    .5    .5   1.6    .1    .0    .0
 275.  *    .0    .5    .6    .5   1.8    .2    .1    .1
 280.  *    .0    .5    .6    .6   2.2    .2    .2    .1
 285.  *    .0    .5    .6    .6   2.4    .4    .2    .1
 290.  *    .0    .6    .6    .6   2.5    .4    .3    .2
 295.  *    .0    .6    .6    .6   2.8    .6    .3    .3
 300.  *    .0    .6    .6    .5   2.8    .6    .3    .3
 305.  *    .0    .6    .6    .5   2.8    .9    .4    .3
 310.  *    .0    .6    .5    .5   2.8   1.0    .6    .4
 315.  *    .0    .5    .5    .5   2.8   1.3    .6    .5
 320.  *    .0    .5    .5    .4   2.7   1.5   1.1    .8
 325.  *    .0    .6    .5    .5   3.0   2.0   1.5   1.2
 330.  *    .0    .6    .7    .7   3.2   2.6   2.2   2.0
 335.  *    .1    .7    .8    .8   3.7   3.2   2.8   2.7
 340.  *    .2    .8   1.0   1.0   4.0   4.1   3.6   3.5
 345.  *    .3    .9   1.0   1.6   4.5   4.4   4.2   4.4
 350.  *    .5   1.1   1.2   1.8   4.7   4.5   4.5   4.8
 355.  *    .7   1.2   1.4   2.2   4.5   4.5   4.8   5.0
 360.  *    .8   1.3   1.6   2.5   4.1   4.2   4.6   5.1
 ------*------------------------------------------------
 MAX   *   3.4   3.3   3.6   5.4   5.4   5.8   5.9   5.5
 DEGR. *   75    65    60    60    60   145   145   145

 THE HIGHEST CONCENTRATION IS    6.30 PPM AT  180 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    6.30 PPM AT  180 DEGREES FROM REC10.
 THE 3RD HIGHEST CONCENTRATION IS    6.20 PPM AT  180 DEGREES FROM REC1 .
```

```
Site 5 BD 8  AM 2030 - 5B8AM30.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 BD 8  AM 2030                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    2595 9.2  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    2095 9.2  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       120        86       2.0 2095   84.1 1558 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     500 9.2  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       120       108       2.0  500   84.1 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    1425 9.2  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    1950 9.2  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    1725 9.2  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       120        88       2.0 1725   84.1 1672 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     225 9.2  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
```

```
       120       110       2.0  225   84.1 1700 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    3920 9.2  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.     395 9.2  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.     395 9.2  0.  68   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       120        97       2.0  395   84.1 1706 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    1380 9.2  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    3165 9.2  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    3165 9.2  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       120        83       2.0 3165   84.1 1692 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.    1380 9.2  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.    1380 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                       CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 5 BD 8  AM 2030 - 5B8AM30.DAT                  RUN: Site 5 BD 8  AM 2030
      DATE: 05/07/2009   TIME: 04:44:05.19


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-------------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.   340. AG  2595.   9.2    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.   342. AG  2095.   9.2    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    1237.9    -655.3 *    3542.   161. AG   485. 100.0    .0 36.0 1.79 179.9
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.   341. AG   500.   9.2    .0 44.0
       5. NB        Rt16 left *     88.0    2690.0     616.3    1168.2 *    1611.   161. AG   406. 100.0    .0 24.0 2.21  81.8
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.   341. AG  1425.   9.2    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.   160. AG  1950.   9.2    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.   161. AG  1725.   9.2    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0    -709.5    4979.1 *    2239.   341. AG   496. 100.0    .0 36.0 1.47 113.7
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.   162. AG   225.   9.2    .0 44.0
      11. SB        Rt16 left *     25.0    2864.0     -99.1    3236.3 *     392.   342. AG   414. 100.0    .0 24.0 1.32  19.9
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.   161. AG  3920.   9.2    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.    66. AG   395.   9.2    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.    82. AG   395.   9.2    .0 68.0
      15. EB        Rt27 aprch*     -5.0    2754.0     -56.6    2747.3 *      52.   263. AG   729. 100.0    .0 48.0  .36   2.6
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.    71. AG  1380.   9.2    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.   250. AG  3165.   9.2    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.   251. AG  3165.   9.2    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    3666.6    4035.8 *    3746.    71. AG   624. 100.0    .0 48.0 1.70 190.3
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.   257. AG  1380.   9.2    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.   247. AG  1380.   9.2    .0 32.0
1
                                                                                                                            PAGE  2
      JOB: Site 5 BD 8  AM 2030 - 5B8AM30.DAT                  RUN: Site 5 BD 8  AM 2030
      DATE: 05/07/2009   TIME: 04:44:05.19

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE  EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*----------------------------------------------------------------------------------
       3. NB        Rt16 thru *     120       86       2.0       2095       1558      84.10      1        3
       5. NB        Rt16 left *     120      108       2.0        500       1700      84.10      1        3
       9. SB        Rt16 thru *     120       88       2.0       1725       1672      84.10      1        3
      11. SB        Rt16 left *     120      110       2.0        225       1700      84.10      1        3
      15. EB        Rt27 aprch*     120       97       2.0        395       1706      84.10      1        3
      19. WB        Rt27 aprch*     120       83       2.0       3165       1692      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *       X          Y          Z       *
     -------------------------*-------------------------------------*
      1. SE MID S             *       207.0     2515.0        5.0   *
      2. SE 164 S             *       183.0     2590.0        5.0   *
      3. SE 82 S              *       154.0     2668.0        5.0   *
      4. SE CNR               *       140.0     2741.0        5.0   *
      5. SE 82 E              *       205.0     2774.0        5.0   *
      6. SE 164 E             *       283.0     2802.0        5.0   *
      7. SE MID E             *       356.0     2828.0        5.0   *
      8. NE MID E             *       323.0     2935.0        5.0   *
      9. NE 164 E             *       235.0     2907.0        5.0   *
     10. NE 82 E              *       157.0     2881.0        5.0   *
     11. NE CNR               *        95.0     2864.0        5.0   *
     12. NE 82 N              *        65.0     2927.0        5.0   *
     13. NE 164 N             *        40.0     3006.0        5.0   *
     14. NE MID N             *         8.0     3095.0        5.0   *
     15. NW MID N             *       -95.0     3048.0        5.0   *
     16. NW 164 N             *       -68.0     2971.0        5.0   *
     17. NW 82 N              *       -41.0     2894.0        5.0   *
     18. NW CNR               *       -31.0     2829.0        5.0   *
     19. NW 82 W              *       -91.0     2798.0        5.0   *
     20. NW 164 W             *      -165.0     2767.0        5.0   *
     21. NW MID W             *      -237.0     2736.0        5.0   *
     22. SW MID W             *      -218.0     2665.0        5.0   *
     23. SW 164 W             *      -153.0     2690.0        5.0   *
     24. SW 82 W              *       -77.0     2713.0        5.0   *
     25. SW CNR               *         6.0     2723.0        5.0   *
     26. SW 82 S              *        40.0     2651.0        5.0   *
     27. SW 164 S             *        68.0     2573.0        5.0   *
     28. SW MID S             *        91.0     2503.0        5.0   *
1
                                                                                                                            PAGE  3
      JOB: Site 5 BD 8  AM 2030 - 5B8AM30.DAT                  RUN: Site 5 BD 8  AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
```

```
   0.  *    1.0   1.1   1.4   1.5   1.9   2.0   2.0    .0    .0    .0    .2    .2    .2    .2   3.5   3.8   4.1   3.2   1.5    .8
   5.  *     .9    .8   1.2   1.6   1.9   2.1   2.1    .1    .0    .0    .0    .0    .0    .0   3.4   3.6   3.9   3.0   1.6    .9
  10.  *     .8    .9   1.2   1.7   2.1   2.1   2.1    .1    .1    .1    .0    .0    .0    .0   3.4   3.7   3.6   2.8   1.6   1.0
  15.  *     .8    .9   1.2   1.7   2.1   2.1   2.1    .1    .1    .1    .0    .0    .0    .0   3.3   3.5   3.4   2.7   1.5   1.0
  20.  *     .8    .9   1.3   1.9   2.1   2.1   2.1    .1    .1    .1    .0    .0    .0    .0   3.2   3.4   3.4   2.6   1.4   1.1
  25.  *     .8    .9   1.3   1.9   2.1   2.2   2.2    .1    .1    .1    .1    .0    .0    .0   3.1   3.2   3.3   2.5   1.4   1.1
  30.  *     .8    .9   1.3   2.0   2.2   2.4   2.4    .1    .1    .1    .1    .0    .0    .0   2.9   3.1   3.2   2.4   1.3   1.0
  35.  *     .8    .9   1.4   2.0   2.3   2.3   2.3    .1    .1    .1    .1    .0    .0    .0   3.0   2.9   2.9   2.2   1.3   1.0
  40.  *     .8    .9   1.5   2.2   2.5   2.4   2.5    .2    .2    .2    .1    .0    .0    .0   2.9   2.9   2.9   1.9   1.3   1.0
  45.  *     .7   1.0   1.3   2.2   2.4   2.5   2.5    .4    .2    .3    .2    .0    .0    .0   2.8   2.8   2.9   1.9   1.2   1.0
  50.  *     .7   1.0   1.4   2.4   2.6   2.7   2.6    .6    .6    .5    .4    .0    .0    .0   2.8   2.8   2.8   1.8   1.2   1.0
  55.  *     .7    .8   1.3   2.4   2.6   2.6   2.8   1.1    .9    .9    .7    .1    .0    .0   2.8   2.8   2.9   1.8   1.2   1.2
  60.  *     .6    .8   1.3   2.2   2.6   2.5   2.5   1.8   1.6   1.5   1.3    .2    .1    .0   2.9   2.9   3.0   2.2   1.7   1.6
  65.  *     .4    .7    .9   2.0   2.2   2.2   2.3   2.6   2.5   2.4   2.1    .6    .2    .1   2.9   3.0   3.4   2.5   2.1   2.0
  70.  *     .3    .4    .8   1.6   1.9   1.9   1.9   3.4   3.1   3.1   2.8    .9    .5    .2   3.1   3.3   3.7   2.9   2.4   2.4
  75.  *     .1    .2    .6   1.1   1.5   1.4   1.4   4.1   3.9   3.9   3.5   1.3    .7    .4   3.3   3.5   4.1   3.2   2.8   2.7
  80.  *     .1    .1    .2    .7    .9    .9    .9   4.3   4.2   4.2   3.8   1.6    .8    .6   3.4   3.8   4.4   3.1   2.7   2.8
  85.  *     .0    .0    .1    .3    .4    .5    .5   4.5   4.3   4.4   3.9   1.7   1.1    .6   3.5   3.8   4.4   2.8   2.5   2.6
  90.  *     .0    .0    .0    .1    .2    .2    .2   4.5   4.3   4.2   3.8   1.8   1.1    .8   3.7   3.9   4.5   2.7   2.5   2.2
  95.  *     .0    .0    .0    .0    .1    .1    .1   4.2   4.0   4.0   3.6   1.8   1.1    .8   3.7   3.9   4.3   2.3   2.2   2.1
 100.  *     .0    .0    .0    .0    .0    .0    .0   3.9   3.8   3.7   3.4   1.7   1.1    .8   3.6   4.0   4.2   2.1   2.1   2.0
 105.  *     .0    .0    .1    .0    .0    .0    .0   3.7   3.6   3.6   3.0   1.7   1.1    .8   3.7   3.9   3.8   1.8   2.2   1.7
 110.  *     .1    .0    .1    .0    .0    .0    .0   3.6   3.4   3.3   2.9   1.7   1.1    .8   3.8   3.9   3.7   1.9   2.4   1.9
 115.  *     .1    .1    .1    .0    .0    .0    .0   3.3   3.2   3.2   2.7   1.6   1.0    .9   4.0   4.0   3.6   1.7   2.3   2.0
 120.  *     .1    .1    .1    .0    .0    .0    .0   3.2   3.0   3.0   2.6   1.6   1.0    .8   3.9   3.9   3.3   1.9   2.8   1.9
 125.  *     .1    .1    .1    .0    .0    .0    .0   3.0   3.0   2.9   2.4   1.3   1.0    .7   4.0   4.0   3.0   2.1   3.0   1.9
 130.  *     .1    .1    .2    .0    .0    .0    .0   2.9   2.9   2.9   2.2   1.3   1.0    .7   3.9   3.9   3.2   2.5   3.3   1.9
 135.  *     .2    .2    .2    .1    .0    .0    .0   2.8   2.7   2.7   2.1   1.2    .9    .7   4.2   3.9   3.4   2.8   3.2   1.8
 140.  *     .5    .5    .6    .2    .0    .0    .0   2.7   2.7   2.7   2.1   1.3   1.0    .8   4.3   3.9   3.6   3.3   3.3   1.8
 145.  *     .8    .8   1.1    .6    .1    .0    .0   2.8   2.7   2.8   2.3   1.6   1.4   1.1   4.3   4.4   3.6   3.6   3.2   1.7
 150.  *    1.6   1.5   1.8   1.2    .3    .1    .0   2.9   2.8   3.0   2.7   2.0   1.7   1.4   4.3   4.2   3.7   3.8   2.8   1.6
 155.  *    2.4   2.4   2.6   2.0    .6    .3    .1   3.0   3.1   3.6   3.1   2.4   2.1   1.8   3.9   3.9   3.6   3.9   2.3   1.4
 160.  *    3.3   3.1   3.6   2.7    .9    .4    .3   3.2   3.5   4.0   3.5   2.9   2.5   2.5   3.2   3.4   3.2   3.4   1.9   1.0
 165.  *    4.1   4.0   4.3   3.4   1.5    .8    .4   3.3   3.6   4.3   4.1   3.2   2.7   2.6   2.7   2.7   2.6   3.0   1.5    .9
 170.  *    4.6   4.5   4.9   4.0   1.8   1.0    .8   3.7   3.9   4.6   4.1   3.2   2.9   2.8   1.8   1.9   2.0   2.3    .8    .6
 175.  *    4.9   4.8   5.0   4.1   1.9   1.2    .8   3.6   4.0   4.7   4.0   3.0   2.6   2.8   1.0   1.1   1.3   1.8    .7    .5
 180.  *    4.8   4.8   5.1   4.0   2.1   1.2   1.0   3.8   4.2   4.6   3.6   2.6   2.5   2.8    .5    .8   1.0   1.7    .5    .5
 185.  *    4.6   4.5   4.8   3.9   2.0   1.4   1.0   3.8   4.1   4.5   3.2   2.2   2.4   2.7    .4    .6    .6   1.4    .4    .5
 190.  *    4.5   4.2   4.5   3.5   2.0   1.3   1.0   4.0   4.3   4.4   2.7   1.9   2.5   2.4    .2    .3    .5   1.2    .5    .5
 195.  *    4.2   4.1   4.2   3.4   1.9   1.3   1.1   4.2   4.2   4.3   2.5   1.7   2.3   2.4    .2    .3    .5   1.1    .5    .5
 200.  *    4.1   4.1   4.1   3.1   1.9   1.3   1.2   4.0   4.2   3.9   2.3   1.7   2.3   2.4    .1    .2    .4   1.0    .4    .5
 205.  *    4.0   3.8   4.0   2.8   1.8   1.2   1.2   4.1   4.1   3.7   2.0   1.6   2.3   2.4    .1    .1    .4    .8    .6    .6
1
                                                                                                                     PAGE  4
      JOB: Site 5 BD 8  AM 2030 - 5B8AM30.DAT                  RUN: Site 5 BD 8  AM 2030

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    3.8   3.7   3.8   2.5   1.8   1.2   1.0   4.2   4.1   3.6   2.0   1.6   2.4   2.3    .1    .1    .2    .8    .5    .6
 215.  *    3.6   3.5   3.6   2.4   1.7   1.2    .8   4.2   4.1   3.4   1.8   1.7   2.3   2.3    .0    .1    .1    .6    .5    .6
 220.  *    3.4   3.4   3.5   2.2   1.6   1.2    .8   4.2   4.0   2.9   1.9   2.1   2.2   2.2    .0    .1    .1    .5    .6    .6
 225.  *    3.4   3.4   3.4   1.9   1.5   1.0    .9   4.1   3.9   2.9   1.8   1.9   2.2   2.1    .0    .1    .1    .5    .6    .6
 230.  *    3.4   3.4   3.4   1.7   1.3   1.1    .9   4.2   3.4   2.7   1.8   2.1   2.2   2.1    .0    .0    .1    .5    .6    .6
 235.  *    3.4   3.4   3.4   1.6   1.2   1.1    .8   4.2   3.4   2.4   1.7   2.1   2.0   2.0    .0    .0    .1    .4    .6    .6
 240.  *    3.4   3.4   3.4   1.4   1.3    .9    .8   3.7   3.2   2.2   1.6   2.0   2.1   2.0    .0    .0    .1    .3    .5    .5
 245.  *    3.4   3.4   3.4   1.5   1.1   1.0   1.1   3.3   2.9   2.0   1.5   2.2   2.1   2.1    .0    .0    .0    .3    .5    .3
 250.  *    3.4   3.4   3.5   1.4   1.2   1.2   1.1   3.0   2.4   1.7   1.4   2.1   2.1   2.1    .0    .0    .0    .2    .3    .2
 255.  *    3.4   3.4   3.4   1.6   1.3   1.1   1.3   2.3   1.9   1.6   1.3   2.1   2.1   2.0    .0    .0    .0    .1    .2    .2
 260.  *    3.4   3.4   3.3   1.6   1.3   1.4   1.6   1.7   1.4   1.4   1.4   2.1   2.1   2.1    .0    .0    .0    .1    .1    .1
 265.  *    3.4   3.3   3.3   1.8   1.4   1.7   1.8   1.4   1.2   1.1   1.2   2.1   2.1   2.1    .0    .0    .0    .0    .1    .1
 270.  *    3.4   3.2   3.5   1.9   1.5   2.0   2.3   1.1   1.0   1.2   1.4   2.1   2.0   2.1    .0    .0    .0    .0    .0    .0
 275.  *    3.4   3.4   3.4   1.9   1.8   2.2   2.5   1.0   1.1   1.2   1.6   2.1   2.1   2.1    .0    .0    .0    .0    .0    .0
 280.  *    3.4   3.4   3.5   1.9   1.7   2.3   2.6   1.0   1.0   1.3   1.6   2.2   2.1   2.2    .0    .0    .0    .0    .0    .0
 285.  *    3.5   3.6   3.4   1.9   1.9   2.4   2.8    .9   1.0   1.4   1.8   2.2   2.1   2.2    .0    .0    .0    .0    .0    .0
 290.  *    3.6   3.7   3.5   1.8   2.0   2.7   2.9    .9   1.0   1.4   2.0   2.2   2.2   2.2    .0    .0    .0    .0    .0    .0
 295.  *    3.8   3.8   3.3   2.0   2.1   2.7   2.8    .8   1.1   1.4   2.0   2.2   2.2   2.2    .0    .0    .1    .0    .0    .0
 300.  *    4.0   3.8   3.3   2.1   2.4   2.9   2.9    .8   1.1   1.4   2.2   2.4   2.2   2.3    .0    .0    .1    .0    .0    .0
 305.  *    4.1   3.9   3.1   2.2   2.6   3.0   2.8    .7   1.0   1.5   2.2   2.6   2.4   2.5    .0    .1    .1    .0    .0    .0
 310.  *    4.2   4.0   3.4   2.2   2.8   2.9   2.8    .7    .9   1.5   2.2   2.5   2.4   2.5    .0    .1    .1    .0    .0    .0
 315.  *    4.2   4.0   3.4   2.5   2.9   2.8   2.8    .7    .8   1.4   2.3   2.5   2.5   2.4    .1    .2    .2    .1    .0    .0
 320.  *    4.4   4.1   3.4   2.8   3.1   2.8   2.8    .5    .8   1.4   2.4   2.7   2.6   2.4    .3    .4    .3    .1    .0    .0
 325.  *    4.7   4.1   3.4   2.9   3.2   2.7   2.6    .5    .7   1.3   2.3   2.6   2.4   2.3    .5    .6    .8    .4    .1    .0
 330.  *    4.5   3.9   3.2   3.0   3.0   2.7   2.3    .3    .6   1.2   2.2   2.5   2.3   2.1    .9   1.3   1.3    .8    .1    .1
 335.  *    4.0   3.5   3.0   2.9   2.7   2.5   2.2    .2    .5    .8   1.9   2.2   2.1   1.9   1.7   1.9   2.0   1.4    .4    .1
 340.  *    3.4   3.0   2.9   2.6   2.6   2.2   2.1    .1    .2    .7   1.4   1.6   1.5   1.4   2.3   2.4   2.6   1.9    .6    .2
 345.  *    2.7   2.4   2.6   2.2   2.2   2.1   2.1    .1    .1    .3   1.1   1.1   1.0   1.0   2.8   3.1   3.3   2.5    .9    .5
 350.  *    2.0   1.7   1.9   2.1   2.1   2.1   2.0    .0    .1    .1    .7    .7    .7    .6   3.2   3.6   3.9   2.9   1.3    .6
 355.  *    1.5   1.4   1.5   1.7   2.0   2.0   2.0    .0    .0    .1    .3    .4    .2    .3   3.5   3.9   3.9   3.2   1.4    .8
 360.  *    1.0   1.1   1.4   1.5   1.9   2.0   2.0    .0    .0    .0    .2    .2    .2    .2   3.5   3.8   4.1   3.2   1.5    .8
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    4.9   4.8   5.1   4.1   3.2   3.0   2.9   4.5   4.3   4.7   4.1   3.2   2.9   2.8   4.3   4.4   4.5   3.9   3.3   2.8
 DEGR. *   175   175   180   175   325   305   290    85    85   175   165   165   170   170   140   145    90   155   130    80

1
                                                                                                                     PAGE  5
      JOB: Site 5 BD 8  AM 2030 - 5B8AM30.DAT                  RUN: Site 5 BD 8  AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *     .6   1.0   1.1   1.8   3.1   2.9   3.2   3.6
   5.  *     .7   1.1   1.3   1.9   2.7   2.9   3.3   3.7
  10.  *     .7   1.1   1.3   2.0   2.4   2.4   3.4   3.7
```

```
  15.  *    .7   1.3   1.4   2.1   2.1   2.5   3.3   3.7
  20.  *    .8   1.3   1.3   2.1   2.1   2.4   3.6   3.9
  25.  *    .9   1.2   1.3   2.2   2.1   2.8   3.7   3.9
  30.  *    .9   1.1   1.4   2.3   2.2   2.9   3.9   3.8
  35.  *    .7   1.2   1.2   2.5   2.2   3.0   3.9   3.9
  40.  *    .7   1.3   1.3   2.6   2.5   3.1   3.9   3.7
  45.  *    .7   1.4   1.6   2.7   2.7   3.4   3.9   3.7
  50.  *    .9   1.4   1.7   3.2   3.2   3.6   3.8   3.7
  55.  *   1.0   1.8   2.2   3.4   3.6   3.7   3.9   3.5
  60.  *   1.5   2.0   2.4   3.7   3.8   3.8   3.7   3.5
  65.  *   2.0   2.0   2.5   3.7   3.9   3.7   3.7   3.4
  70.  *   2.2   1.9   2.6   3.5   3.6   3.7   3.5   3.3
  75.  *   2.2   1.9   2.4   3.0   3.1   3.4   3.2   3.2
  80.  *   2.1   1.6   1.9   2.7   2.8   3.0   3.0   2.9
  85.  *   2.2   1.3   1.4   2.2   2.2   2.9   2.9   2.8
  90.  *   1.9    .9   1.1   1.8   1.9   2.8   2.8   2.8
  95.  *   1.7    .8   1.0   1.6   1.9   2.9   2.9   2.9
 100.  *   1.6    .9    .9   1.3   1.9   2.9   2.9   2.9
 105.  *   1.5    .9    .9   1.4   2.0   3.0   3.0   3.1
 110.  *   1.6    .9   1.0   1.5   2.3   3.0   3.1   3.2
 115.  *   1.4   1.0   1.2   1.5   2.5   3.2   3.2   3.3
 120.  *   1.5   1.1   1.3   1.6   2.7   3.4   3.5   3.4
 125.  *   1.6   1.0   1.3   1.7   2.9   3.4   3.6   3.5
 130.  *   1.5   1.0   1.3   1.7   3.2   3.7   3.8   3.7
 135.  *   1.6   1.1   1.2   1.8   3.4   3.8   3.9   3.8
 140.  *   1.6   1.0   1.1   2.0   3.6   4.0   4.1   3.9
 145.  *   1.4    .9   1.1   1.9   3.7   4.2   4.2   4.2
 150.  *   1.3    .7   1.0   1.7   3.7   4.2   4.1   4.1
 155.  *   1.0    .5    .9   1.3   3.1   3.7   3.8   3.8
 160.  *    .9    .3    .5   1.0   2.7   3.1   3.2   3.2
 165.  *    .6    .1    .3    .5   1.8   2.3   2.5   2.3
 170.  *    .5    .0    .1    .3   1.3   1.6   1.7   1.6
 175.  *    .5    .0    .0    .1    .6   1.0   1.2    .9
 180.  *    .5    .0    .0    .0    .4    .6    .6    .6
 185.  *    .5    .0    .0    .0    .1    .3    .3    .3
 190.  *    .5    .0    .0    .0    .1    .2    .2    .2
 195.  *    .5    .0    .0    .0    .0    .1    .2    .1
 200.  *    .5    .0    .0    .0    .0    .1    .1    .1
 205.  *    .6    .0    .0    .0    .0    .1    .1    .1
1
                                                                                                                             PAGE  6
      JOB: Site 5 BD 8  AM 2030 - 5B8AM30.DAT                  RUN: Site 5 BD 8  AM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .6    .0    .0    .0    .0    .1    .1    .1
 215.  *    .6    .0    .0    .0    .0    .1    .1    .1
 220.  *    .6    .0    .0    .0    .0    .1    .1    .1
 225.  *    .6    .0    .0    .0    .0    .0    .1    .0
 230.  *    .5    .1    .0    .0    .0    .0    .0    .0
 235.  *    .4    .1    .1    .0    .0    .0    .0    .0
 240.  *    .3    .1    .1    .0    .0    .0    .0    .0
 245.  *    .3    .1    .1    .2    .1    .0    .0    .0
 250.  *    .2    .1    .2    .2    .2    .0    .0    .0
 255.  *    .1    .2    .2    .2    .5    .0    .0    .0
 260.  *    .1    .2    .3    .3    .6    .0    .0    .0
 265.  *    .1    .2    .4    .4   1.0    .0    .0    .0
 270.  *    .0    .3    .4    .4   1.1    .1    .0    .0
 275.  *    .0    .3    .3    .4   1.3    .1    .0    .0
 280.  *    .0    .3    .4    .4   1.5    .2    .1    .1
 285.  *    .0    .3    .4    .5   1.7    .2    .2    .1
 290.  *    .0    .4    .4    .4   1.8    .3    .2    .1
 295.  *    .0    .4    .4    .4   1.9    .3    .2    .1
 300.  *    .0    .4    .4    .4   2.0    .4    .2    .2
 305.  *    .0    .4    .4    .4   2.1    .5    .3    .2
 310.  *    .0    .4    .3    .3   2.0    .7    .4    .3
 315.  *    .0    .4    .3    .3   2.0    .8    .4    .4
 320.  *    .0    .4    .3    .3   2.0   1.0    .6    .5
 325.  *    .0    .4    .4    .3   2.2   1.4   1.0    .7
 330.  *    .0    .4    .4    .4   2.6   1.9   1.5   1.2
 335.  *    .1    .5    .4    .6   2.9   2.3   2.1   2.0
 340.  *    .1    .5    .5    .8   3.1   3.0   2.5   2.5
 345.  *    .2    .6    .7   1.2   3.5   3.1   3.2   3.1
 350.  *    .4    .8    .8   1.5   3.6   3.3   3.2   3.4
 355.  *    .5    .9   1.1   1.5   3.3   3.0   3.3   3.7
 360.  *    .6   1.0   1.1   1.8   3.1   2.9   3.2   3.6
 ------*------------------------------------------------
 MAX   *   2.2   2.0   2.6   3.7   3.9   4.2   4.2   4.2
 DEGR. *   70    65    70    60    65   145   145   145

 THE HIGHEST CONCENTRATION IS    5.10 PPM AT  180 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    4.90 PPM AT  175 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    4.80 PPM AT  175 DEGREES FROM REC2 .
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Site 5 BD 8  PM 2014 - 5B8PM14.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 BD 8  PM 2014                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    460511.4  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    413511.4  0.  56   30.
  2
NB        Rt16 thru AG    113. 2703.   181.  2500.      0.  36   3
       120        82       2.0 4135  102.2 1546 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     47011.4  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       120       106       2.0  470  102.2 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    235011.4  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    217011.4  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    165011.4  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       120        82       2.0 1650  102.2 1676 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     52011.4  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
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       120       106       2.0  520  102.2 1700 1 3
  1
SB        Rt16 deparAG    21.  2799.   357.  1826.    382511.4  0.  56   30.
  1
EB        Rt27 aprchAG  -320.  2645.  -111.  2740.    120011.4  0.  56   30.
  1
EB        Rt27 aprchAG  -111.  2740.    56.  2763.    120011.4  0.  68   30.
  2
EB        Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       120        94       2.0 1200  102.2 1706 1 3
  1
EB        Rt27 deparAG    67.  2763.   996.  3083.    331511.4  0.  56   30.
  1
WB        Rt27 aprchAG   981.  3134.   454.  2944.    223011.4  0.  56   30.
  1
WB        Rt27 aprchAG   454.  2944.    52.  2807.    223011.4  0.  68   30.
  2
WB        Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       120        90       2.0 2230  102.2 1648 1 3
  1
WB        Rt27 deparAG    50.  2805.   -90.  2772.     71511.4  0.  32   30.
  1
WB        Rt27 deparAG   -90.  2772.  -337.  2669.     71511.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 5 BD 8  PM 2014 - 5B8PM14.DAT                   RUN: Site 5 BD 8  PM 2014
      DATE: 05/07/2009   TIME: 04:11:18.09


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *          LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2      *     (FT)  (DEG)           (G/MI)  (FT) (FT)        (VEH)
      ------------------------*-----------------------------------------*-------------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.   340. AG  4605.  11.4    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.   342. AG  4135.  11.4    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    3349.6   -6959.3 *    *****   161. AG   562. 100.0    .0 36.0 3.15 517.7
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.   341. AG   470.  11.4    .0 44.0
       5. NB        Rt16 left *     88.0    2690.0     467.7    1596.1 *    1158.   161. AG   484. 100.0    .0 24.0 1.67  58.8
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.   341. AG  2350.  11.4    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.   160. AG  2170.  11.4    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.   161. AG  1650.  11.4    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0    -353.1    3915.5 *    1117.   341. AG   562. 100.0    .0 36.0 1.16  56.8
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.   162. AG   520.  11.4    .0 44.0
      11. SB        Rt16 left *     25.0    2864.0    -426.8    4219.4 *    1429.   342. AG   484. 100.0    .0 24.0 1.84  72.6
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.   161. AG  3825.  11.4    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.    66. AG  1200.  11.4    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.    82. AG  1200.  11.4    .0 68.0
      15. EB        Rt27 aprch*     -5.0    2754.0    -219.4    2726.3 *     216.   263. AG   859. 100.0    .0 48.0  .96  11.0
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.    71. AG  3315.  11.4    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.   250. AG  2230.  11.4    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.   251. AG  2230.  11.4    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    2379.0    3598.1 *    2386.    71. AG   822. 100.0    .0 48.0 1.56 121.2
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.   257. AG   715.  11.4    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.   247. AG   715.  11.4    .0 32.0
1
                                                                                                                     PAGE  2
      JOB: Site 5 BD 8  PM 2014 - 5B8PM14.DAT                   RUN: Site 5 BD 8  PM 2014
      DATE: 05/07/2009   TIME: 04:11:18.09

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*----------------------------------------------------------------------------------
       3. NB        Rt16 thru *     120       82        2.0       4135       1546     102.20      1        3
       5. NB        Rt16 left *     120      106        2.0        470       1700     102.20      1        3
       9. SB        Rt16 thru *     120       82        2.0       1650       1676     102.20      1        3
      11. SB        Rt16 left *     120      106        2.0        520       1700     102.20      1        3
      15. EB        Rt27 aprch*     120       94        2.0       1200       1706     102.20      1        3
      19. WB        Rt27 aprch*     120       90        2.0       2230       1648     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *         COORDINATES (FT)          *
         RECEPTOR             *      X           Y          Z      *
     -------------------------*-----------------------------------*
      1. SE MID S             *       207.0     2515.0       5.0   *
      2. SE 164 S             *       183.0     2590.0       5.0   *
      3. SE 82 S              *       154.0     2668.0       5.0   *
      4. SE CNR               *       140.0     2741.0       5.0   *
      5. SE 82 E              *       205.0     2774.0       5.0   *
      6. SE 164 E             *       283.0     2802.0       5.0   *
      7. SE MID E             *       356.0     2828.0       5.0   *
      8. NE MID E             *       323.0     2935.0       5.0   *
      9. NE 164 E             *       235.0     2907.0       5.0   *
     10. NE 82 E              *       157.0     2881.0       5.0   *
     11. NE CNR               *        95.0     2864.0       5.0   *
     12. NE 82 N              *        65.0     2927.0       5.0   *
     13. NE 164 N             *        40.0     3006.0       5.0   *
     14. NE MID N             *         8.0     3095.0       5.0   *
     15. NW MID N             *       -95.0     3048.0       5.0   *
     16. NW 164 N             *       -68.0     2971.0       5.0   *
     17. NW 82 N              *       -41.0     2894.0       5.0   *
     18. NW CNR               *       -31.0     2829.0       5.0   *
     19. NW 82 W              *       -91.0     2798.0       5.0   *
     20. NW 164 W             *      -165.0     2767.0       5.0   *
     21. NW MID W             *      -237.0     2736.0       5.0   *
     22. SW MID W             *      -218.0     2665.0       5.0   *
     23. SW 164 W             *      -153.0     2690.0       5.0   *
     24. SW 82 W              *       -77.0     2713.0       5.0   *
     25. SW CNR               *         6.0     2723.0       5.0   *
     26. SW 82 S              *        40.0     2651.0       5.0   *
     27. SW 164 S             *        68.0     2573.0       5.0   *
     28. SW MID S             *        91.0     2503.0       5.0   *
1
                                                                                                                     PAGE  3
      JOB: Site 5 BD 8  PM 2014 - 5B8PM14.DAT                   RUN: Site 5 BD 8  PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
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```
   0.  *   1.9   1.7   2.2   2.7   3.0   3.0   3.0    .0    .0    .0    .2    .3    .2    .2   4.9   5.0   5.2   4.1   2.1   1.3
   5.  *   1.4   1.6   2.0   2.5   3.0   3.0   3.0    .0    .0    .0    .0    .1    .1    .1   4.8   4.8   5.0   3.9   2.2   1.4
  10.  *   1.3   1.4   1.9   2.5   3.0   3.0   3.0    .1    .0    .0    .0    .0    .0    .0   4.5   4.6   4.8   3.7   2.1   1.5
  15.  *   1.2   1.4   1.8   2.6   3.1   3.1   3.1    .1    .1    .1    .0    .0    .0    .0   4.3   4.4   4.4   3.5   2.2   1.4
  20.  *   1.1   1.4   1.9   2.7   3.1   3.1   3.3    .1    .1    .1    .0    .0    .0    .0   4.0   4.2   4.2   3.4   2.1   1.3
  25.  *   1.3   1.4   2.0   3.0   3.3   3.3   3.4    .1    .1    .1    .0    .0    .0    .0   3.9   4.1   4.0   3.2   2.0   1.3
  30.  *   1.2   1.5   2.0   3.0   3.3   3.4   3.5    .1    .1    .1    .1    .0    .0    .0   3.8   3.8   3.9   3.1   1.9   1.3
  35.  *   1.2   1.4   2.1   3.2   3.5   3.6   3.6    .2    .1    .1    .1    .0    .0    .0   3.7   3.7   3.7   2.8   1.9   1.3
  40.  *   1.1   1.4   2.0   3.2   3.7   3.7   3.8    .2    .2    .2    .1    .0    .0    .0   3.5   3.6   3.7   2.5   1.6   1.3
  45.  *   1.1   1.5   2.0   3.4   3.8   3.9   4.0    .3    .3    .3    .2    .0    .0    .0   3.5   3.5   3.5   2.4   1.7   1.3
  50.  *    .9   1.3   2.1   3.4   4.0   4.0   4.1    .7    .6    .6    .4    .0    .0    .0   3.4   3.5   3.5   2.4   1.7   1.4
  55.  *    .9   1.2   2.0   3.6   4.1   4.3   4.2   1.1   1.1   1.2   1.0    .1    .0    .0   3.6   3.5   3.6   2.4   1.9   1.5
  60.  *    .7   1.0   1.8   3.4   4.0   4.0   4.1   1.9   1.9   1.8   1.5    .3    .1    .0   3.5   3.6   3.8   2.8   2.2   2.1
  65.  *    .5    .8   1.3   3.1   3.6   3.6   3.6   2.9   2.8   2.8   2.4    .7    .2    .1   3.7   3.7   4.2   3.2   2.8   3.0
  70.  *    .2    .5   1.0   2.3   3.0   3.0   2.9   4.0   3.9   3.8   3.5   1.1    .5    .2   3.7   4.1   4.6   3.6   3.1   3.4
  75.  *    .1    .2    .6   1.7   2.2   2.2   2.3   5.0   4.7   4.7   4.3   1.6    .8    .4   3.9   4.3   5.0   3.9   3.3   4.0
  80.  *    .0    .1    .3   1.1   1.4   1.5   1.5   5.4   5.3   5.3   4.8   2.0   1.0    .7   4.3   4.7   5.4   4.1   3.5   4.1
  85.  *    .0    .0    .1    .5    .8    .8    .8   5.6   5.4   5.4   4.9   2.2   1.3    .8   4.4   4.8   5.7   4.0   3.3   4.5
  90.  *    .0    .0    .1    .2    .4    .4    .4   5.6   5.5   5.4   5.0   2.4   1.6   1.0   4.5   5.0   5.7   3.8   2.9   4.6
  95.  *    .1    .0    .1    .1    .2    .2    .2   5.3   5.1   5.1   4.7   2.4   1.4   1.0   4.6   5.0   5.6   3.3   2.9   4.8
 100.  *    .1    .1    .1    .0    .1    .1    .1   5.1   5.0   4.8   4.3   2.4   1.5   1.1   4.7   5.0   5.3   2.8   3.0   4.9
 105.  *    .1    .1    .1    .0    .1    .1    .1   4.8   4.6   4.7   4.0   2.2   1.5   1.2   4.7   4.9   5.1   2.7   2.9   5.1
 110.  *    .1    .1    .2    .0    .1    .1    .1   4.7   4.4   4.3   3.8   2.2   1.4   1.1   4.7   4.9   4.9   2.7   3.4   5.2
 115.  *    .1    .1    .2    .0    .1    .1    .1   4.3   4.3   4.2   3.6   2.1   1.4   1.1   5.0   5.0   4.6   2.5   3.5   5.3
 120.  *    .1    .1    .2    .0    .1    .1    .1   4.1   4.0   4.0   3.4   2.0   1.4   1.1   4.9   5.0   4.4   2.9   3.9   5.2
 125.  *    .2    .2    .2    .0    .0    .0    .1   4.0   3.9   3.9   3.1   1.9   1.4   1.1   5.1   5.1   4.3   3.3   4.4   5.3
 130.  *    .2    .2    .4    .1    .0    .0    .0   3.9   3.9   3.9   2.9   1.8   1.3   1.0   5.2   5.0   4.1   3.4   4.6   5.2
 135.  *    .4    .4    .4    .2    .0    .0    .0   3.7   3.7   3.7   2.9   1.9   1.3    .9   5.3   5.1   4.6   3.8   4.9   5.2
 140.  *    .8    .8    .9    .5    .0    .0    .0   3.7   3.6   3.6   2.7   2.0   1.5   1.2   5.2   5.1   4.7   4.3   4.9   5.0
 145.  *   1.3   1.3   1.6   1.0    .1    .0    .0   3.7   3.7   3.7   3.2   2.4   1.8   1.7   5.5   5.5   4.8   4.9   4.7   4.8
 150.  *   2.4   2.2   2.6   1.6    .4    .1    .1   3.8   3.8   4.1   3.6   3.1   2.3   2.1   5.4   5.2   5.2   4.9   4.8   4.3
 155.  *   3.5   3.4   4.1   2.8    .8    .3    .2   4.1   4.3   4.9   4.4   3.7   3.0   2.9   5.2   5.3   4.8   4.8   4.3   4.1
 160.  *   4.8   4.8   5.3   3.9   1.4    .6    .3   4.2   4.6   5.5   5.1   4.4   3.6   3.5   4.4   4.5   4.4   4.4   3.8   3.8
 165.  *   5.9   5.9   6.4   4.8   1.8   1.1    .6   4.5   4.9   5.9   5.6   4.8   3.9   4.1   3.5   3.5   3.7   3.7   3.3   3.5
 170.  *   6.6   6.6   7.1   5.8   2.3   1.4    .8   4.7   5.3   6.2   5.8   4.8   4.1   4.2   2.6   2.7   2.8   3.0   2.9   3.1
 175.  *   7.0   6.8   7.4   5.9   2.6   1.6   1.0   4.7   5.4   6.4   5.6   4.4   4.1   4.3   1.7   1.9   2.2   2.5   2.6   3.1
 180.  *   7.0   6.9   7.2   5.9   2.9   1.8   1.3   5.1   5.5   6.4   5.2   4.0   3.9   4.2   1.2   1.4   1.6   2.2   2.4   3.0
 185.  *   6.5   6.5   6.8   5.4   2.8   1.9   1.3   5.2   5.6   6.3   4.4   3.5   3.5   3.8    .9   1.0   1.4   2.0   2.5   3.1
 190.  *   6.3   6.2   6.4   5.1   2.7   1.9   1.5   5.4   5.7   6.0   3.9   3.0   3.3   3.8    .6    .9   1.3   1.9   2.5   3.1
 195.  *   6.1   6.0   6.2   4.7   2.7   1.9   1.5   5.4   5.7   5.8   3.7   2.8   3.3   3.7    .6    .9   1.3   2.0   2.5   3.0
 200.  *   5.8   5.5   5.7   4.5   2.7   2.0   1.5   5.4   5.7   5.3   3.1   2.7   3.3   3.6    .5    .9   1.4   1.9   2.5   3.1
 205.  *   5.6   5.4   5.5   4.1   2.6   1.9   1.5   5.7   5.6   5.0   3.0   2.8   3.5   3.7    .4    .8   1.3   2.0   2.4   3.1
1
                                                                                                                  PAGE  4
      JOB: Site 5 BD 8  PM 2014 - 5B8PM14.DAT                  RUN: Site 5 BD 8  PM 2014

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *   5.3   5.2   5.4   3.8   2.6   1.9   1.5   5.5   5.6   4.8   2.8   2.9   3.5   3.4    .3    .7   1.3   2.0   2.6   3.1
 215.  *   5.2   4.9   5.2   3.5   2.4   1.8   1.5   5.7   5.4   4.5   2.8   3.1   3.4   3.2    .1    .5   1.0   2.1   2.6   3.1
 220.  *   4.9   4.7   4.9   3.3   2.4   1.7   1.4   5.7   5.1   4.1   2.9   3.3   3.3   3.1    .0    .3    .9   2.0   2.6   3.0
 225.  *   4.8   4.6   4.9   3.0   2.2   1.7   1.3   5.7   5.2   3.7   2.8   3.4   3.2   2.9    .0    .1    .8   2.1   2.6   2.9
 230.  *   4.7   4.6   4.7   2.7   2.1   1.6   1.3   5.6   4.9   3.7   2.9   3.4   3.1   2.8    .0    .1    .7   1.9   2.3   2.6
 235.  *   4.7   4.6   4.7   2.5   2.0   1.6   1.6   5.5   4.4   3.5   3.1   3.3   2.9   2.8    .0    .0    .5   1.8   2.2   2.5
 240.  *   4.7   4.6   4.8   2.5   2.2   1.6   1.6   5.0   4.1   3.1   2.8   3.2   2.9   2.9    .0    .0    .3   1.6   1.9   2.2
 245.  *   4.8   4.7   4.9   2.6   2.3   1.8   2.1   4.5   3.9   2.8   2.8   3.1   2.8   2.8    .0    .0    .1   1.0   1.5   1.8
 250.  *   4.8   4.7   4.9   3.0   2.5   2.4   2.4   3.8   3.2   2.6   2.7   3.0   2.8   2.8    .0    .0    .1    .8   1.1   1.5
 255.  *   4.7   4.7   5.0   3.0   2.6   2.7   2.8   3.0   2.3   2.3   2.5   2.9   2.8   2.9    .0    .0    .0    .6    .8   1.2
 260.  *   4.8   4.7   4.8   3.4   2.9   3.1   3.1   2.3   1.8   1.8   2.0   2.8   2.8   2.7    .0    .0    .0    .3    .5    .8
 265.  *   4.7   4.6   5.0   3.7   3.1   3.1   3.6   1.7   1.5   1.7   2.1   2.8   2.8   2.8    .0    .0    .0    .1    .2    .5
 270.  *   4.7   4.7   5.1   3.8   3.3   3.6   3.7   1.5   1.3   1.6   2.1   2.8   2.8   2.8    .0    .0    .0    .1    .1    .3
 275.  *   4.7   4.9   5.4   3.8   3.2   3.6   4.0   1.2   1.3   1.6   2.1   2.8   2.8   2.8    .0    .0    .0    .0    .0    .2
 280.  *   4.9   5.0   5.4   3.7   3.3   3.7   4.1   1.1   1.2   1.7   2.2   2.9   2.8   2.9    .0    .0    .0    .0    .0    .1
 285.  *   5.0   5.2   5.3   3.8   3.1   3.9   4.1   1.2   1.1   1.7   2.4   2.9   3.0   2.9    .0    .0    .0    .0    .0    .1
 290.  *   5.4   5.6   5.3   3.7   3.4   3.9   4.2   1.2   1.3   1.9   2.6   3.0   3.0   2.9    .0    .0    .1    .0    .0    .1
 295.  *   5.7   5.8   5.2   3.5   3.5   4.1   4.3   1.1   1.3   1.9   2.7   3.1   3.1   3.2    .0    .1    .1    .0    .0    .1
 300.  *   6.0   5.8   5.4   3.6   3.8   4.2   4.4   1.1   1.5   2.0   2.9   3.3   3.2   3.3    .0    .1    .1    .0    .0    .1
 305.  *   6.1   5.9   5.2   3.8   4.1   4.3   4.1   1.2   1.5   2.0   2.9   3.4   3.3   3.4    .0    .1    .1    .0    .0    .1
 310.  *   6.3   5.9   5.3   3.8   4.4   4.4   4.1   1.2   1.5   1.9   3.2   3.6   3.5   3.5    .0    .1    .2    .0    .0    .1
 315.  *   6.4   6.1   5.2   4.3   4.5   4.4   4.0   1.0   1.4   2.0   3.3   3.6   3.6   3.5    .1    .2    .2    .1    .0    .0
 320.  *   6.7   6.0   5.3   4.5   4.5   4.2   3.9    .9   1.2   1.9   3.4   3.9   3.6   3.6    .4    .5    .7    .1    .0    .0
 325.  *   6.9   5.9   5.5   4.8   4.7   4.1   3.8    .7   1.2   1.8   3.5   3.9   3.7   3.7    .7    .7    .9    .6    .0    .0
 330.  *   6.4   5.7   5.3   4.8   4.4   3.9   3.6    .6    .9   1.6   3.2   3.7   3.3   3.4   1.4   1.6   1.7   1.0    .2    .0
 335.  *   5.9   5.1   5.3   4.7   4.1   3.6   3.4    .2    .6   1.3   2.7   3.2   3.0   3.0   2.1   2.5   2.5   1.7    .4    .2
 340.  *   5.1   4.6   4.6   4.3   3.9   3.5   3.3    .1    .4    .9   2.2   2.6   2.4   2.5   3.1   3.4   3.4   2.5    .9    .3
 345.  *   4.0   3.9   3.8   3.7   3.6   3.3   3.1    .0    .2    .6   1.5   1.9   1.7   1.8   3.8   4.1   4.2   3.3   1.3    .6
 350.  *   3.2   2.9   3.3   3.1   3.3   3.0   3.0    .0    .0    .3   1.0   1.3   1.0   1.0   4.5   4.6   4.9   3.8   1.7    .9
 355.  *   2.2   2.1   2.5   2.9   3.0   3.0   3.0    .0    .0    .0    .5    .7    .7    .6   4.7   4.9   5.0   4.1   1.9   1.2
 360.  *   1.9   1.7   2.2   2.7   3.0   3.0   3.0    .0    .0    .0    .2    .3    .2    .2   4.9   5.0   5.2   4.1   2.1   1.3
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   7.0   6.9   7.4   5.9   4.7   4.4   4.4   5.7   5.7   6.4   5.8   4.8   4.1   4.3   5.5   5.5   5.7   4.9   4.9   5.3
 DEGR. *  175   180   175   175   325   310   300   205   190   180   170   170   170   175   145   145    85   145   135   115

1
                                                                                                                  PAGE  5
      JOB: Site 5 BD 8  PM 2014 - 5B8PM14.DAT                  RUN: Site 5 BD 8  PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
   0.  *    .9   2.4   4.0   5.2   4.1   4.0   4.5   4.8
   5.  *   1.0   2.7   4.1   4.9   3.8   3.6   4.4   4.9
  10.  *   1.1   3.0   4.0   4.8   3.3   3.5   4.6   5.3
```

```
  15.  *   1.1   3.2   4.0   4.7   3.0   3.5   4.5   5.1
  20.  *   1.1   3.3   4.0   4.5   3.1   3.6   5.0   5.3
  25.  *   1.2   3.4   4.0   4.5   3.0   3.7   5.0   5.3
  30.  *   1.3   3.5   3.9   4.6   3.2   4.1   5.2   5.2
  35.  *   1.3   3.4   4.1   4.5   3.4   4.3   5.1   5.0
  40.  *   1.4   3.6   4.2   4.7   3.5   4.5   5.4   5.0
  45.  *   1.7   3.7   4.3   4.7   4.0   4.8   5.3   5.0
  50.  *   1.8   3.7   4.3   5.2   4.6   5.1   5.2   4.9
  55.  *   2.5   4.0   4.8   5.5   5.1   5.3   5.2   4.7
  60.  *   3.1   4.6   5.0   5.8   5.5   5.2   5.0   4.7
  65.  *   4.3   4.3   5.1   6.0   5.6   5.2   4.8   4.4
  70.  *   5.2   3.8   4.6   5.6   5.4   5.0   4.4   4.3
  75.  *   6.0   3.4   3.9   5.3   4.6   4.5   4.3   4.0
  80.  *   6.2   2.7   3.3   4.4   4.0   4.2   4.0   3.9
  85.  *   6.2   2.2   2.5   3.4   3.4   4.0   3.8   3.8
  90.  *   6.0   1.6   2.0   2.8   3.1   3.8   3.8   3.8
  95.  *   5.8   1.5   1.9   2.5   2.8   3.8   3.8   3.8
 100.  *   5.4   1.2   1.7   2.1   2.8   3.8   3.9   3.8
 105.  *   5.0   1.4   1.6   2.2   3.1   3.9   4.0   4.1
 110.  *   4.7   1.3   1.5   2.3   3.2   4.1   4.1   4.1
 115.  *   4.6   1.5   1.5   2.3   3.6   4.2   4.4   4.3
 120.  *   4.2   1.6   1.7   2.5   3.6   4.3   4.6   4.5
 125.  *   4.0   1.5   1.7   2.6   4.0   4.6   4.7   4.7
 130.  *   3.6   1.5   1.9   2.6   4.3   4.9   5.0   4.9
 135.  *   3.5   1.3   1.8   2.5   4.4   5.0   5.1   5.0
 140.  *   3.0   1.3   1.7   2.4   4.6   5.2   5.3   5.1
 145.  *   2.6   1.1   1.5   2.3   4.8   5.4   5.5   5.5
 150.  *   2.2   1.0   1.4   2.1   4.7   5.5   5.3   5.3
 155.  *   1.7    .7   1.0   1.7   4.3   4.9   5.0   4.8
 160.  *   1.3    .5    .7   1.3   3.4   4.1   4.2   4.1
 165.  *    .9    .2    .5    .8   2.5   3.1   3.3   3.1
 170.  *    .7    .1    .1    .4   1.6   2.1   2.2   2.1
 175.  *    .5    .0    .0    .1    .8   1.3   1.3   1.1
 180.  *    .6    .0    .0    .0    .4    .7    .7    .7
 185.  *    .6    .0    .0    .0    .1    .3    .4    .3
 190.  *    .6    .1    .0    .0    .1    .2    .2    .2
 195.  *    .7    .1    .0    .0    .0    .2    .2    .2
 200.  *    .7    .1    .0    .0    .0    .1    .2    .1
 205.  *    .6    .1    .1    .0    .0    .1    .1    .1
1
                                                                                                                PAGE  6
      JOB: Site 5 BD 8  PM 2014 - 5B8PM14.DAT                   RUN: Site 5 BD 8  PM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *    .6    .1    .1    .1    .0    .1    .1    .1
 215.  *    .6    .1    .1    .1    .0    .1    .1    .1
 220.  *    .6    .1    .1    .1    .1    .1    .1    .1
 225.  *    .5    .2    .1    .1    .1    .1    .1    .1
 230.  *    .5    .2    .2    .2    .2    .0    .0    .0
 235.  *    .4    .3    .2    .3    .2    .0    .0    .0
 240.  *    .3    .3    .3    .4    .4    .0    .0    .0
 245.  *    .3    .4    .4    .7    .6    .0    .0    .0
 250.  *    .1    .4    .5   1.1   1.0    .0    .0    .0
 255.  *    .1    .5    .6   1.5   1.6    .0    .0    .0
 260.  *    .1    .6    .8   2.0   2.2    .2    .0    .0
 265.  *    .0    .6    .8   2.4   2.7    .2    .0    .0
 270.  *    .0    .6   1.0   2.9   3.2    .3    .0    .0
 275.  *    .0    .7   1.2   3.3   3.5    .6    .1    .0
 280.  *    .0    .7   1.3   3.6   3.6    .8    .3    .1
 285.  *    .0    .7   1.6   3.6   3.7   1.0    .4    .1
 290.  *    .0    .7   1.8   3.7   3.8   1.3    .5    .3
 295.  *    .0    .7   2.0   3.7   3.6   1.4    .6    .4
 300.  *    .0    .7   2.2   3.7   3.4   1.5    .8    .4
 305.  *    .0    .7   2.3   3.5   3.2   1.5    .9    .5
 310.  *    .0    .6   2.4   3.4   3.0   1.5   1.1    .7
 315.  *    .0    .6   2.5   3.2   2.7   1.5   1.2    .8
 320.  *    .0    .6   2.6   3.1   2.7   1.8   1.3   1.1
 325.  *    .0    .6   2.6   3.2   3.1   2.0   1.5   1.4
 330.  *    .0    .7   2.6   3.2   3.3   2.5   2.2   2.1
 335.  *    .0    .9   2.9   3.4   3.6   3.1   2.6   2.7
 340.  *    .2   1.1   2.9   3.7   4.2   3.6   3.3   3.3
 345.  *    .2   1.2   3.3   4.3   4.6   4.1   3.9   4.0
 350.  *    .5   1.6   3.5   4.7   4.8   4.2   4.3   4.6
 355.  *    .7   2.0   3.7   4.8   4.6   4.2   4.3   4.7
 360.  *    .9   2.4   4.0   5.2   4.1   4.0   4.5   4.8
 ------*------------------------------------------------
 MAX   *   6.2   4.6   5.1   6.0   5.6   5.5   5.5   5.5
 DEGR. *   80    60    65    65    65   150   145   145

 THE HIGHEST CONCENTRATION IS    7.40 PPM AT  175 DEGREES FROM REC3 .
 THE 2ND HIGHEST CONCENTRATION IS    7.00 PPM AT  175 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    6.90 PPM AT  180 DEGREES FROM REC2 .
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Site 5 BD 8  PM 2030 - 5B8PM30.DAT      60.0321.0.0000.000280.30480000    1
1
SE MID S                  207.     2515.       5.0
SE 164 S                  183.     2590.       5.0
SE 82 S                   154.     2668.       5.0
SE CNR                    140.     2741.       5.0
SE 82 E                   205.     2774.       5.0
SE 164 E                  283.     2802.       5.0
SE MID E                  356.     2828.       5.0
NE MID E                  323.     2935.       5.0
NE 164 E                  235.     2907.       5.0
NE 82 E                   157.     2881.       5.0
NE CNR                     95.     2864.       5.0
NE 82 N                    65.     2927.       5.0
NE 164 N                   40.     3006.       5.0
NE MID N                    8.     3095.       5.0
NW MID N                  -95.     3048.       5.0
NW 164 N                  -68.     2971.       5.0
NW 82 N                   -41.     2894.       5.0
NW CNR                    -31.     2829.       5.0
NW 82 W                   -91.     2798.       5.0
NW 164 W                 -165.     2767.       5.0
NW MID W                 -237.     2736.       5.0
SW MID W                 -218.     2665.       5.0
SW 164 W                 -153.     2690.       5.0
SW 82 W                   -77.     2713.       5.0
SW CNR                      6.     2723.       5.0
SW 82 S                    40.     2651.       5.0
SW 164 S                   68.     2573.       5.0
SW MID S                   91.     2503.       5.0
Site 5 BD 8  PM 2030                     21  1   0
  1
NB        Rt16 aprchAG   404.  1854.   192.  2439.    3700 9.2  0.  56   30.
  1
NB        Rt16 thru AG   200.  2443.    84.  2790.    3310 9.2  0.  56   30.
  2
NB        Rt16 thru AG   113.  2703.   181.  2500.      0.  36   3
       125         76       2.0 3310   84.1 1558 1 3
  1
NB        Rt16 left AG   176.  2437.    56.  2781.     390 9.2  0.  44   30.
  2
NB        Rt16 left AG    88.  2690.   155.  2497.      0.  24   2
       125       107       2.0  390   84.1 1700 1 3
  1
NB        Rt16 deparAG    85.  2793.  -247.  3736.    2100 9.2  0.  32   30.
  1
SB        Rt16 aprchAG  -294.  3720.   -67.  3082.    1900 9.2  0.  56   30.
  1
SB        Rt16 thru AG   -72.  3076.    21.  2801.    1460 9.2  0.  56   30.
  2
SB        Rt16 thru AG     2.  2856.   -60.  3041.      0.  36   3
       125        82       2.0 1460   84.1 1675 1 3
  1
SB        Rt16 left AG   -47.  3080.    41.  2815.     440 9.2  0.  44   30.
  2
SB        Rt16 left AG    25.  2864.   -34.  3041.      0.  24   2
```

```
       125       113       2.0  440   84.1 1700 1 3
  1
SB         Rt16 deparAG    21.  2799.   357.  1826.    3215 9.2  0.  56   30.
  1
EB         Rt27 aprchAG  -320.  2645.  -111.  2740.    1055 9.2  0.  56   30.
  1
EB         Rt27 aprchAG  -111.  2740.    56.  2763.    1055 9.2  0.  68   30.
  2
EB         Rt27 aprchAG    -5.  2754.   -98.  2742.      0.  48   4
       125       103       2.0 1055   84.1 1706 1 3
  1
EB         Rt27 deparAG    67.  2763.   996.  3083.    2550 9.2  0.  56   30.
  1
WB         Rt27 aprchAG   981.  3134.   454.  2944.    1815 9.2  0.  56   30.
  1
WB         Rt27 aprchAG   454.  2944.    52.  2807.    1815 9.2  0.  68   30.
  2
WB         Rt27 aprchAG   120.  2830.   320.  2898.      0.  48   4
       125        98       2.0 1815   84.1 1646 1 3
  1
WB         Rt27 deparAG    50.  2805.   -90.  2772.     605 9.2  0.  32   30.
  1
WB         Rt27 deparAG   -90.  2772.  -337.  2669.     605 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 5 BD 8  PM 2030 - 5B8PM30.DAT                  RUN: Site 5 BD 8  PM 2030
      DATE: 05/07/2009   TIME: 04:47:49.45


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*---------------------------------------------------------
       1. NB        Rt16 aprch*    404.0    1854.0     192.0    2439.0 *     622.    340. AG  3700.   9.2    .0 56.0
       2. NB        Rt16 thru *    200.0    2443.0      84.0    2790.0 *     366.    342. AG  3310.   9.2    .0 56.0
       3. NB        Rt16 thru *    113.0    2703.0    2028.1   -3014.2 *    6029.    161. AG   411. 100.0    .0 36.0 1.97 306.3
       4. NB        Rt16 left *    176.0    2437.0      56.0    2781.0 *     364.    341. AG   390.   9.2    .0 44.0
       5. NB        Rt16 left *     88.0    2690.0     164.2    2470.6 *     232.    161. AG   386. 100.0    .0 24.0 1.03  11.8
       6. NB        Rt16 depar*     85.0    2793.0    -247.0    3736.0 *    1000.    341. AG  2100.   9.2    .0 32.0
       7. SB        Rt16 aprch*   -294.0    3720.0     -67.0    3082.0 *     677.    160. AG  1900.   9.2    .0 56.0
       8. SB        Rt16 thru *    -72.0    3076.0      21.0    2801.0 *     290.    161. AG  1460.   9.2    .0 56.0
       9. SB        Rt16 thru *      2.0    2856.0     -84.3    3113.6 *     272.    341. AG   444. 100.0    .0 36.0  .93  13.8
      10. SB        Rt16 left *    -47.0    3080.0      41.0    2815.0 *     279.    162. AG   440.   9.2    .0 44.0
      11. SB        Rt16 left *     25.0    2864.0    -399.3    4136.8 *    1342.    342. AG   408. 100.0    .0 24.0 2.04  68.2
      12. SB        Rt16 depar*     21.0    2799.0     357.0    1826.0 *    1029.    161. AG  3215.   9.2    .0 56.0
      13. EB        Rt27 aprch*   -320.0    2645.0    -111.0    2740.0 *     230.     66. AG  1055.   9.2    .0 56.0
      14. EB        Rt27 aprch*   -111.0    2740.0      56.0    2763.0 *     169.     82. AG  1055.   9.2    .0 68.0
      15. EB        Rt27 aprch*     -5.0    2754.0    -408.7    2701.9 *     407.    263. AG   744. 100.0    .0 48.0 1.07  20.7
      16. EB        Rt27 depar*     67.0    2763.0     996.0    3083.0 *     983.     71. AG  2550.   9.2    .0 56.0
      17. WB        Rt27 aprch*    981.0    3134.0     454.0    2944.0 *     560.    250. AG  1815.   9.2    .0 56.0
      18. WB        Rt27 aprch*    454.0    2944.0      52.0    2807.0 *     425.    251. AG  1815.   9.2    .0 68.0
      19. WB        Rt27 aprch*    120.0    2830.0    1877.0    3427.4 *    1856.     71. AG   707. 100.0    .0 48.0 1.50  94.3
      20. WB        Rt27 depar*     50.0    2805.0     -90.0    2772.0 *     144.    257. AG   605.   9.2    .0 32.0
      21. WB        Rt27 depar*    -90.0    2772.0    -337.0    2669.0 *     268.    247. AG   605.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 5 BD 8  PM 2030 - 5B8PM30.DAT                  RUN: Site 5 BD 8  PM 2030
      DATE: 05/07/2009   TIME: 04:47:49.45

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE    SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        Rt16 thru *     125       76       2.0      3310       1558      84.10      1        3
       5. NB        Rt16 left *     125      107       2.0       390       1700      84.10      1        3
       9. SB        Rt16 thru *     125       82       2.0      1460       1675      84.10      1        3
      11. SB        Rt16 left *     125      113       2.0       440       1700      84.10      1        3
      15. EB        Rt27 aprch*     125      103       2.0      1055       1706      84.10      1        3
      19. WB        Rt27 aprch*     125       98       2.0      1815       1646      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SE MID S             *        207.0     2515.0       5.0   *
      2. SE 164 S             *        183.0     2590.0       5.0   *
      3. SE 82 S              *        154.0     2668.0       5.0   *
      4. SE CNR               *        140.0     2741.0       5.0   *
      5. SE 82 E              *        205.0     2774.0       5.0   *
      6. SE 164 E             *        283.0     2802.0       5.0   *
      7. SE MID E             *        356.0     2828.0       5.0   *
      8. NE MID E             *        323.0     2935.0       5.0   *
      9. NE 164 E             *        235.0     2907.0       5.0   *
     10. NE 82 E              *        157.0     2881.0       5.0   *
     11. NE CNR               *         95.0     2864.0       5.0   *
     12. NE 82 N              *         65.0     2927.0       5.0   *
     13. NE 164 N             *         40.0     3006.0       5.0   *
     14. NE MID N             *          8.0     3095.0       5.0   *
     15. NW MID N             *        -95.0     3048.0       5.0   *
     16. NW 164 N             *        -68.0     2971.0       5.0   *
     17. NW 82 N              *        -41.0     2894.0       5.0   *
     18. NW CNR               *        -31.0     2829.0       5.0   *
     19. NW 82 W              *        -91.0     2798.0       5.0   *
     20. NW 164 W             *       -165.0     2767.0       5.0   *
     21. NW MID W             *       -237.0     2736.0       5.0   *
     22. SW MID W             *       -218.0     2665.0       5.0   *
     23. SW 164 W             *       -153.0     2690.0       5.0   *
     24. SW 82 W              *        -77.0     2713.0       5.0   *
     25. SW CNR               *          6.0     2723.0       5.0   *
     26. SW 82 S              *         40.0     2651.0       5.0   *
     27. SW 164 S             *         68.0     2573.0       5.0   *
     28. SW MID S             *         91.0     2503.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 5 BD 8  PM 2030 - 5B8PM30.DAT                  RUN: Site 5 BD 8  PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
```

```
  0.  *   1.1   1.4   1.5   1.9   2.2   2.2   2.2    .0    .0    .0    .2    .2    .2    .2   2.6   3.2   3.8   2.9   1.3    .6
  5.  *   1.0   1.0   1.3   1.8   2.2   2.2   2.2    .0    .0    .0    .0    .1    .0    .1   2.7   3.3   3.6   3.0   1.3    .6
 10.  *    .9    .9   1.4   1.9   2.2   2.2   2.2    .0    .0    .0    .0    .0    .0    .0   2.7   3.5   3.5   2.9   1.5    .8
 15.  *    .9    .9   1.3   1.9   2.2   2.2   2.2    .0    .0    .0    .0    .0    .0    .0   2.8   3.3   3.3   2.7   1.6   1.0
 20.  *    .9   1.0   1.3   2.1   2.2   2.3   2.4    .1    .0    .0    .0    .0    .0    .0   2.8   3.3   3.2   2.6   1.5    .9
 25.  *    .9   1.0   1.4   2.2   2.4   2.4   2.5    .1    .1    .0    .0    .0    .0    .0   2.9   3.1   3.2   2.5   1.4    .8
 30.  *   1.0   1.0   1.5   2.2   2.4   2.4   2.6    .1    .1    .1    .0    .0    .0    .0   2.7   3.1   3.1   2.3   1.4    .9
 35.  *    .9   1.1   1.5   2.3   2.6   2.7   2.6    .2    .1    .1    .0    .0    .0    .0   2.7   2.8   2.9   2.2   1.3    .9
 40.  *    .9   1.1   1.7   2.4   2.6   2.7   2.7    .2    .2    .2    .0    .0    .0    .0   2.6   2.8   2.8   2.0   1.3   1.0
 45.  *    .8   1.0   1.6   2.6   2.9   2.9   2.9    .3    .3    .2    .2    .0    .0    .0   2.7   2.8   2.8   2.1   1.2   1.0
 50.  *    .7    .9   1.5   2.6   2.9   2.9   2.8    .5    .4    .4    .3    .0    .0    .0   2.7   2.7   2.8   1.8   1.3    .9
 55.  *    .7    .9   1.4   2.6   3.0   3.1   3.1    .9    .9    .8    .6    .1    .0    .0   2.6   2.7   2.9   1.9   1.3   1.1
 60.  *    .5    .7   1.2   2.5   2.9   2.9   3.0   1.5   1.4   1.5   1.3    .2    .1    .0   2.7   2.8   3.0   2.2   1.6   1.5
 65.  *    .3    .5   1.0   2.1   2.5   2.6   2.5   2.3   2.1   2.1   1.9    .4    .2    .1   2.8   3.0   3.2   2.4   2.1   2.0
 70.  *    .1    .4    .8   1.7   2.1   2.2   2.2   3.2   2.9   2.9   2.6    .9    .3    .1   2.9   3.1   3.7   2.9   2.3   2.6
 75.  *    .1    .1    .4   1.2   1.5   1.5   1.6   3.8   3.6   3.6   3.2   1.2    .7    .3   3.0   3.5   4.0   3.0   2.7   3.1
 80.  *    .0    .1    .2    .7   1.0   1.1   1.1   4.3   4.1   4.0   3.7   1.5    .8    .4   3.2   3.6   4.3   3.3   2.4   3.1
 85.  *    .0    .0    .1    .4    .5    .5    .5   4.5   4.3   4.3   3.9   1.7    .9    .7   3.4   3.7   4.4   2.9   2.4   3.4
 90.  *    .0    .0    .0    .2    .3    .3    .3   4.4   4.2   4.3   3.9   1.8   1.2    .8   3.5   3.9   4.4   2.7   2.3   3.6
 95.  *    .0    .0    .1    .0    .1    .1    .1   4.2   4.0   4.0   3.5   1.8   1.2    .8   3.6   4.0   4.2   2.2   2.2   3.8
100.  *    .1    .0    .1    .0    .1    .1    .1   3.9   3.7   3.7   3.3   1.8   1.2    .8   3.8   3.9   4.2   2.0   2.1   3.9
105.  *    .1    .1    .1    .0    .1    .1    .1   3.8   3.6   3.6   3.2   1.7   1.2   1.0   3.7   3.9   3.9   1.8   2.2   4.0
110.  *    .1    .1    .1    .0    .0    .0    .1   3.6   3.5   3.5   2.9   1.7   1.1    .9   3.8   3.9   3.9   1.9   2.4   3.9
115.  *    .1    .1    .1    .0    .0    .0    .1   3.5   3.4   3.3   2.7   1.6   1.1    .8   3.8   4.0   3.4   1.8   2.5   4.1
120.  *    .1    .1    .1    .0    .0    .0    .0   3.2   3.1   3.1   2.6   1.6   1.1    .8   3.9   3.9   3.2   1.8   3.0   4.1
125.  *    .1    .1    .1    .0    .0    .0    .0   3.1   3.0   3.0   2.4   1.5   1.1    .8   3.8   4.0   3.1   1.9   3.0   4.1
130.  *    .1    .1    .2    .0    .0    .0    .0   3.0   2.9   2.9   2.3   1.5   1.0    .8   3.8   3.8   3.2   2.2   3.3   4.0
135.  *    .3    .2    .3    .1    .0    .0    .0   2.9   2.9   2.9   2.1   1.4   1.0    .8   4.0   3.8   3.1   2.6   3.5   3.9
140.  *    .5    .5    .6    .2    .0    .0    .0   2.9   2.8   2.8   2.1   1.5   1.2    .9   4.1   3.8   3.3   2.8   3.6   3.7
145.  *    .8    .9    .9    .6    .1    .0    .0   2.9   2.8   2.9   2.3   1.9   1.3    .9   4.0   3.8   3.4   3.1   3.6   3.6
150.  *   1.5   1.5   1.6   1.0    .2    .1    .0   2.9   2.9   3.1   2.6   2.1   1.8   1.3   4.0   3.7   3.4   3.3   3.2   3.3
155.  *   2.2   2.1   2.5   1.7    .4    .2    .1   3.0   3.1   3.5   2.9   2.3   2.0   1.9   3.5   3.7   3.2   3.2   3.2   3.2
160.  *   2.9   2.9   3.3   2.5    .8    .4    .2   3.2   3.3   3.8   3.5   2.8   2.3   2.3   3.0   2.8   2.9   2.9   2.7   3.0
165.  *   3.5   3.5   4.0   3.1   1.1    .6    .4   3.3   3.5   4.3   3.6   3.0   2.6   2.4   2.4   2.2   2.4   2.5   2.5   2.8
170.  *   3.8   4.0   4.4   3.6   1.3    .8    .6   3.4   3.7   4.4   3.7   3.0   2.5   2.9   1.9   1.9   2.0   2.1   2.3   2.7
175.  *   4.0   4.2   4.7   3.9   1.6    .9    .6   3.5   3.8   4.5   3.8   2.9   2.6   2.9   1.0   1.3   1.3   1.7   2.1   2.6
180.  *   4.0   4.1   4.7   3.9   1.7   1.0    .7   3.6   3.9   4.5   3.3   2.5   2.7   2.8    .7   1.0   1.3   1.5   2.0   2.5
185.  *   3.8   4.0   4.5   3.7   1.8    .9    .8   3.7   4.1   4.5   2.9   2.2   2.5   2.9    .7    .9   1.1   1.6   2.1   2.5
190.  *   3.6   3.9   4.4   3.6   1.7   1.1    .7   3.9   4.1   4.4   2.7   2.2   2.6   2.7    .6    .7   1.1   1.5   2.0   2.6
195.  *   3.4   3.9   4.3   3.3   1.8   1.2    .8   3.8   4.3   4.1   2.3   1.9   2.6   2.9    .5    .8   1.0   1.6   1.9   2.6
200.  *   3.4   3.9   4.1   3.1   1.7   1.2    .9   4.0   4.1   3.8   2.3   2.1   2.6   2.9    .6    .7   1.0   1.6   1.9   2.7
205.  *   3.4   3.7   3.9   2.9   1.6   1.3    .9   4.2   4.3   3.7   2.0   2.2   2.9   2.8    .5    .7   1.1   1.6   2.2   2.7
1
                                                                                                                PAGE  4
      JOB: Site 5 BD 8  PM 2030 - 5B8PM30.DAT                  RUN: Site 5 BD 8  PM 2030

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *   3.3   3.5   3.8   2.7   1.6   1.2   1.0   4.3   4.2   3.5   1.9   2.2   2.7   2.7    .4    .7   1.1   1.7   2.2   2.8
215.  *   3.1   3.4   3.6   2.4   1.5   1.1   1.0   4.3   4.1   3.4   2.1   2.5   2.8   2.7    .4    .7   1.1   1.7   2.3   2.9
220.  *   3.1   3.4   3.6   2.3   1.4   1.1   1.0   4.4   3.9   3.0   2.0   2.6   2.9   2.7    .3    .6   1.1   1.8   2.3   3.0
225.  *   3.1   3.3   3.4   2.0   1.4   1.1   1.0   4.3   3.9   3.1   2.1   2.8   2.7   2.6    .2    .5   1.1   1.8   2.3   3.0
230.  *   3.1   3.2   3.4   1.8   1.3   1.1    .9   4.4   3.8   2.7   2.2   2.9   2.6   2.4    .2    .4   1.0   1.8   2.3   3.1
235.  *   3.2   3.3   3.3   1.9   1.3   1.2   1.0   4.1   3.6   2.7   2.3   2.8   2.4   2.4    .1    .3    .8   1.8   2.3   3.2
240.  *   3.2   3.2   3.3   1.7   1.4   1.3   1.1   3.8   3.2   2.6   2.4   2.7   2.4   2.4    .0    .2    .6   1.5   2.2   3.1
245.  *   3.4   3.4   3.4   2.0   1.5   1.4   1.4   3.5   3.0   2.3   2.5   2.6   2.4   2.4    .0    .1    .5   1.4   2.0   3.0
250.  *   3.4   3.4   3.5   2.1   1.9   1.6   1.8   3.1   2.6   2.0   2.4   2.6   2.3   2.3    .0    .1    .3   1.2   1.7   2.8
255.  *   3.4   3.4   3.5   2.5   2.0   2.0   2.0   2.5   2.0   1.6   1.9   2.5   2.2   2.1    .0    .0    .2    .9   1.4   2.4
260.  *   3.3   3.2   3.7   2.6   2.2   2.2   2.2   1.8   1.7   1.4   1.8   2.4   2.1   2.2    .0    .0    .1    .6   1.0   1.8
265.  *   3.3   3.3   3.7   2.9   2.3   2.4   2.6   1.4   1.3   1.1   1.6   2.4   2.1   2.2    .0    .0    .0    .4    .6   1.4
270.  *   3.4   3.4   4.0   3.1   2.2   2.6   3.0   1.2   1.1   1.1   1.7   2.1   2.0   2.1    .0    .0    .0    .2    .4    .9
275.  *   3.5   3.6   4.1   2.8   2.5   2.7   2.9    .9   1.1   1.3   1.7   2.3   2.1   2.0    .0    .0    .0    .1    .2    .6
280.  *   3.6   3.7   4.3   2.9   2.3   2.8   2.9    .8   1.0   1.2   1.7   2.3   2.2   2.0    .0    .0    .0    .0    .1    .4
285.  *   3.8   3.9   4.1   2.6   2.2   2.8   3.1    .8   1.0   1.4   1.9   2.3   2.2   1.9    .0    .0    .0    .0    .0    .2
290.  *   4.0   4.1   4.0   2.6   2.3   2.8   3.1    .7   1.0   1.2   2.0   2.3   2.3   1.8    .0    .0    .0    .0    .0    .1
295.  *   4.2   4.2   3.9   2.6   2.4   3.0   3.0    .6   1.1   1.2   2.1   2.4   2.3   1.8    .0    .0    .0    .0    .0    .1
300.  *   4.4   4.3   3.8   2.4   2.5   3.1   3.0    .7    .9   1.2   2.3   2.5   2.2   2.0    .0    .0    .0    .0    .0    .1
305.  *   4.5   4.3   3.7   2.4   2.7   3.1   2.8    .6    .8   1.4   2.3   2.6   2.4   2.0    .0    .0    .1    .0    .0    .1
310.  *   4.5   4.3   3.6   2.6   3.0   3.1   2.8    .5    .7   1.3   2.3   2.6   2.3   1.9    .0    .0    .1    .0    .0    .0
315.  *   4.5   4.2   3.4   2.8   3.1   2.9   2.8    .5    .7   1.3   2.5   2.6   2.2   2.1    .0    .1    .2    .0    .0    .0
320.  *   4.7   4.4   3.7   3.0   3.2   2.9   2.7    .4    .6   1.2   2.4   2.6   2.2   2.1    .1    .3    .2    .1    .0    .0
325.  *   4.8   4.3   3.5   3.3   3.3   2.8   2.6    .4    .6   1.1   2.3   2.6   2.2   2.1    .2    .4    .5    .3    .0    .0
330.  *   4.6   3.9   3.4   3.2   2.9   2.7   2.5    .3    .5    .9   2.1   2.3   2.0   2.0    .4    .7   1.0    .6    .1    .0
335.  *   4.2   3.4   3.2   3.0   2.9   2.6   2.3    .1    .4    .7   1.8   2.0   1.8   1.8    .9   1.3   1.6   1.0    .2    .0
340.  *   3.4   3.1   3.0   2.8   2.7   2.4   2.3    .1    .2    .6   1.3   1.5   1.4   1.4   1.2   1.8   2.2   1.5    .4    .1
345.  *   2.8   2.4   2.6   2.4   2.5   2.3   2.2    .0    .1    .3   1.0   1.1    .9   1.0   1.8   2.4   2.8   2.0    .6    .3
350.  *   2.2   1.9   2.2   2.2   2.3   2.2   2.2    .0    .0    .2    .7    .8    .7    .7   2.2   2.9   3.2   2.5    .9    .4
355.  *   1.5   1.4   1.6   1.9   2.2   2.2   2.2    .0    .0    .0    .3    .4    .3    .4   2.4   3.2   3.5   2.9   1.3    .5
360.  *   1.1   1.4   1.5   1.9   2.2   2.2   2.2    .0    .0    .0    .2    .2    .2    .2   2.6   3.2   3.8   2.9   1.3    .6
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   4.8   4.4   4.7   3.9   3.3   3.1   3.1   4.5   4.3   4.5   3.9   3.0   2.9   2.9   4.1   4.0   4.4   3.3   3.6   4.1
DEGR. *  325   320   175   175   325    55    55    85    85   175    85   165   220   185   140   115    85    80   140   115

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                                                                                                                PAGE  5
      JOB: Site 5 BD 8  PM 2030 - 5B8PM30.DAT                  RUN: Site 5 BD 8  PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
------*------------------------------------------------
  0.  *   1.1   2.3   2.8   3.9   3.1   2.7   2.9   3.4
  5.  *   1.2   2.5   2.9   3.9   2.7   2.5   3.0   3.5
 10.  *   1.2   2.5   3.0   3.8   2.5   2.4   3.1   3.7
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  15.  *   1.2   2.7   3.1   3.7   2.4   2.6   3.3   3.6
  20.  *   1.3   2.8   3.1   3.8   2.1   2.3   3.3   3.8
  25.  *   1.5   2.6   3.2   3.6   2.2   2.5   3.6   3.9
  30.  *   1.6   2.6   3.2   3.7   2.1   2.8   3.7   3.8
  35.  *   1.6   2.7   3.2   3.7   2.2   3.1   3.7   3.6
  40.  *   1.7   2.8   3.3   3.8   2.4   3.2   3.8   3.7
  45.  *   1.7   2.9   3.4   3.9   2.8   3.4   3.9   3.6
  50.  *   2.0   3.1   3.5   4.1   3.1   3.7   3.9   3.6
  55.  *   2.4   3.3   3.8   4.4   3.7   3.8   3.7   3.4
  60.  *   3.2   3.3   4.1   4.4   4.1   3.8   3.6   3.2
  65.  *   4.0   3.1   3.8   4.5   4.0   3.7   3.4   3.1
  70.  *   5.1   3.0   3.5   4.4   3.7   3.5   3.2   3.0
  75.  *   5.8   2.4   3.1   3.8   3.3   3.3   3.0   2.9
  80.  *   5.9   2.2   2.5   3.2   2.9   3.0   2.8   2.7
  85.  *   6.0   1.5   1.9   2.6   2.3   2.8   2.7   2.7
  90.  *   5.9   1.2   1.5   2.1   2.0   2.7   2.7   2.7
  95.  *   5.7   1.1   1.2   1.6   2.0   2.7   2.7   2.7
 100.  *   5.6    .9   1.0   1.6   2.0   2.7   2.7   2.7
 105.  *   5.3    .9   1.0   1.4   2.0   2.8   2.8   2.7
 110.  *   5.2    .9   1.0   1.5   2.2   2.9   2.9   2.7
 115.  *   4.9    .8   1.1   1.6   2.4   3.0   3.1   2.7
 120.  *   4.4    .8   1.1   1.6   2.5   3.1   3.1   2.8
 125.  *   4.1    .9    .9   1.6   2.7   3.3   3.2   2.8
 130.  *   3.9    .7   1.0   1.6   2.9   3.3   3.2   2.7
 135.  *   3.6    .7   1.1   1.7   3.1   3.5   3.2   2.9
 140.  *   3.5    .7    .9   1.5   3.1   3.6   3.4   2.9
 145.  *   3.4    .6    .8   1.3   3.1   3.5   3.3   2.9
 150.  *   3.2    .5    .7   1.2   3.0   3.3   3.2   3.0
 155.  *   3.2    .4    .5   1.0   2.6   3.0   2.9   2.7
 160.  *   2.9    .2    .4    .7   2.0   2.6   2.5   2.3
 165.  *   2.8    .1    .2    .5   1.6   1.8   1.8   1.8
 170.  *   2.8    .1    .1    .2   1.0   1.2   1.2   1.1
 175.  *   2.7    .0    .0    .1    .5    .8    .8    .8
 180.  *   2.7    .0    .0    .0    .2    .4    .5    .4
 185.  *   2.7    .0    .0    .0    .1    .2    .2    .2
 190.  *   2.7    .0    .0    .0    .0    .1    .2    .1
 195.  *   2.8    .0    .0    .0    .0    .1    .1    .1
 200.  *   2.8    .0    .0    .0    .0    .1    .1    .1
 205.  *   2.8    .1    .0    .0    .0    .1    .1    .1
1
                                                                                                                            PAGE  6
      JOB: Site 5 BD 8  PM 2030 - 5B8PM30.DAT                  RUN: Site 5 BD 8  PM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21 REC22 REC23 REC24 REC25 REC26 REC27 REC28
 ------*------------------------------------------------
 210.  *   2.9    .1    .0    .1    .0    .1    .1    .1
 215.  *   3.0    .1    .1    .1    .0    .1    .1    .1
 220.  *   3.2    .1    .1    .1    .0    .1    .1    .1
 225.  *   3.5    .1    .1    .1    .0    .0    .0    .0
 230.  *   3.8    .1    .1    .1    .1    .0    .0    .0
 235.  *   4.1    .2    .2    .3    .2    .0    .0    .0
 240.  *   4.1    .2    .3    .4    .4    .0    .0    .0
 245.  *   4.1    .3    .4    .8    .7    .0    .0    .0
 250.  *   4.1    .3    .6   1.1   1.0    .0    .0    .0
 255.  *   4.2    .4    .9   1.7   1.5    .1    .0    .0
 260.  *   4.0    .6   1.2   2.2   2.2    .2    .0    .0
 265.  *   3.8    .9   1.5   2.7   2.7    .4    .1    .0
 270.  *   3.5   1.1   1.9   3.2   3.2    .6    .1    .0
 275.  *   3.0   1.3   2.2   3.5   3.4    .8    .2    .1
 280.  *   2.5   1.5   2.5   3.7   3.5    .9    .4    .1
 285.  *   2.0   1.7   2.6   3.5   3.4   1.2    .6    .3
 290.  *   1.6   1.9   2.7   3.4   3.2   1.3    .8    .4
 295.  *   1.3   1.9   2.6   3.3   2.9   1.4    .8    .5
 300.  *   1.0   2.0   2.5   3.2   2.8   1.4    .9    .7
 305.  *   1.0   2.0   2.5   3.1   2.6   1.3    .9    .7
 310.  *    .9   2.0   2.4   2.9   2.5   1.2    .8    .6
 315.  *    .8   1.9   2.3   2.8   2.3   1.1   1.0    .7
 320.  *    .7   1.9   2.3   2.7   2.3   1.3    .9    .7
 325.  *    .6   1.9   2.3   2.6   2.3   1.5   1.3   1.1
 330.  *    .6   1.9   2.2   2.5   2.6   1.8   1.7   1.4
 335.  *    .6   1.9   2.2   2.7   2.7   2.0   2.0   1.8
 340.  *    .7   1.9   2.3   3.1   3.0   2.3   2.3   2.3
 345.  *    .8   2.0   2.4   3.2   3.1   2.6   2.7   2.8
 350.  *   1.0   2.1   2.6   3.6   3.5   2.8   2.7   3.0
 355.  *   1.2   2.3   2.8   3.8   3.4   2.8   3.1   3.5
 360.  *   1.1   2.3   2.8   3.9   3.1   2.7   2.9   3.4
 ------*------------------------------------------------
 MAX   *   6.0   3.3   4.1   4.5   4.1   3.8   3.9   3.9
 DEGR. *   85    60    60    65    60    55    45    25

 THE HIGHEST CONCENTRATION IS    6.00 PPM AT   85 DEGREES FROM REC21.
 THE 2ND HIGHEST CONCENTRATION IS    4.80 PPM AT  325 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    4.70 PPM AT  175 DEGREES FROM REC3 .
```

Site 6

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Site 6 Existing AM - 6EXAM.DAT          60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Existing AM                       34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.     78015.5   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.     68515.5   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       104        48       2.0  685  141.4 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.      9515.5   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.      9515.5   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       104        48       2.0   95  141.4 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.      9515.5   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    124515.5   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    124515.5   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    124515.5   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    124515.5   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    124515.5   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    124515.5   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.     48515.5   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.     48515.5   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.     48515.5   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.     48515.5   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.     48515.5   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.     21515.5   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       104        23       2.0  215  141.5 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     27015.5   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       104        84       2.0  270  141.5 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.     33015.5   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.     33015.5   0  44   30.
  1
WB         5 aprch   AG  3279.  1032.  3039.  1825.     67515.5   0  32   30.
  1
WB         5 left    AG  3038.  1827.  3012.  2029.     11515.5   0  32   30.
  2
WB         5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       104        89       2.0  115  141.5 1770 1 3
  1
WB         5 right   AG  3039.  1847.  3064.  1943.     56015.5   0  32   30.
  1
WB         5 right   AG  3064.  1943.  3110.  2007.     56015.5   0  32   30.
  2
WB         5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       104        69       2.0  560  141.5 1583 1 3
  1
WB         5 right   AG  3110.  2007.  3159.  2057.     56015.5   0  32   30.
  1
EB         5 depart  AG  2991.  2021.  3012.  1857.     36515.5   0  32   30.
  1
EB         5 depart  AG  3012.  1857.  3052.  1680.     36515.5   0  32   30.
  1
EB         5 depart  AG  3052.  1680.  3248.  1014.     36515.5   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 6 Existing AM - 6EXAM.DAT                       RUN: Site 6 Existing AM
      DATE: 05/09/2009   TIME: 12:20:37.03


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*---------------------------------------------------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.     89. AG   780.  15.5    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.     87. AG   685.  15.5    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2878.3    2015.1 *      90.    268. AG   350. 100.0    .0 24.0  .39   4.6
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.     97. AG    95.  15.5    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.    119. AG    95.  15.5    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2918.8    1962.9 *      25.    119. AG   175. 100.0    .0 12.0  .12   1.3
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.    141. AG    95.  15.5    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.     79. AG  1245.  15.5    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.     69. AG  1245.  15.5    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.     57. AG  1245.  15.5    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.     43. AG  1245.  15.5    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.     39. AG  1245.  15.5    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.     46. AG  1245.  15.5    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.    226. AG   485.  15.5    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.    220. AG   485.  15.5    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.    229. AG   485.  15.5    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.    240. AG   485.  15.5    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.    248. AG   485.  15.5    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.    258. AG   215.  15.5    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3046.2    2058.8 *      13.     78. AG   168. 100.0    .0 24.0  .08    .7
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.    258. AG   270.  15.5    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    3231.2    2091.7 *     200.     78. AG   307. 100.0    .0 12.0  .99  10.2
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.    266. AG   330.  15.5    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.    269. AG   330.  15.5    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.    343. AG   675.  15.5    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.    353. AG   115.  15.5    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3022.3    1947.2 *      57.    173. AG   325. 100.0    .0 12.0  .61   2.9
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.     15. AG   560.  15.5    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.     36. AG   560.  15.5    .0 32.0
      30. WB        5 left    *   3106.0    2001.0    2387.1    1024.1 *    1213.    216. AG   252. 100.0    .0 12.0 1.19  61.6
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.     44. AG   560.  15.5    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.    173. AG   365.  15.5    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.    167. AG   365.  15.5    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.    164. AG   365.  15.5    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 Existing AM - 6EXAM.DAT                       RUN: Site 6 Existing AM
      DATE: 05/09/2009   TIME: 12:20:37.03

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *     104       48       2.0       685       1770     141.40      1        3
       6. NB        2A rt     *     104       48       2.0        95       1583     141.40      1        3
      20. SB        2A thru   *     104       23       2.0       215       1770     141.50      1        3
      22. SB        2A left   *     104       84       2.0       270       1770     141.50      1        3
      27. WB        5 left    *     104       89       2.0       115       1770     141.50      1        3
      30. WB        5 left    *     104       69       2.0       560       1583     141.50      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      2594.0     1978.0        5.0   *
      2. SW 164 W             *      2757.0     1973.0        5.0   *
      3. SW 82 W              *      2839.0     1964.0        5.0   *
      4. SW CNR               *      2919.0     1936.0        5.0   *
      5. SW 82 S              *      2978.0     1874.0        5.0   *
      6. SW 164 S             *      3003.0     1794.0        5.0   *
      7. SW MID S             *      3021.0     1679.0        5.0   *
      8. SE MID S             *      3105.0     1694.0        5.0   *
      9. SE 164 S             *      3072.0     1811.0        5.0   *
     10. SE 82 S              *      3074.0     1891.0        5.0   *
     11. SE CNR               *      3109.0     1962.0        5.0   *
     12. SE 82 E              *      3164.0     2025.0        5.0   *
     13. SE 164 E             *      3242.0     2062.0        5.0   *
     14. SE MID E             *      3360.0     2134.0        5.0   *
     15. NE MID E             *      3286.0     2172.0        5.0   *
     16. NE 164 E             *      3153.0     2110.0        5.0   *
     17. NE 82 E              *      3074.0     2088.0        5.0   *
     18. N CNR                *      2994.0     2070.0        5.0   *
     19. NW 82 W              *      2912.0     2063.0        5.0   *
     20. NW 164 W             *      2829.0     2063.0        5.0   *
     21. NW  MID W            *      2704.0     2064.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 6 Existing AM - 6EXAM.DAT                       RUN: Site 6 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .5    .4    .3    .9    .5   1.0    .6    .3    .7   1.1   1.2   1.1    .9    .9    .0    .0    .0    .0    .0    .0
   5.  *    .5    .4    .3    .8    .5   1.1    .7    .3    .7   1.1   1.1   1.1    .7    .9    .0    .0    .0    .0    .0    .0
  10.  *    .5    .4    .3    .8    .6   1.2    .7    .2    .7    .9   1.0   1.1    .8   1.0    .0    .0    .0    .0    .0    .0
  15.  *    .5    .5    .4    .8    .6   1.1    .7    .2    .4    .9   1.0   1.2    .8   1.1    .0    .0    .0    .0    .0    .0
  20.  *    .5    .4    .4    .7    .7   1.2    .7    .2    .3    .8   1.2   1.2    .8   1.3    .0    .0    .0    .0    .0    .0
  25.  *    .5    .4    .5    .6    .8    .9    .7    .0    .3    .8   1.0   1.1    .9   1.1    .0    .0    .0    .0    .0    .0
  30.  *    .5    .4    .4    .5   1.1    .9    .6    .0    .3    .6    .8   1.2   1.0   1.3    .0    .0    .0    .0    .0    .0
  35.  *    .5    .5    .6    .5   1.0    .8    .4    .0    .3    .5    .8   1.2   1.3   1.3    .2    .0    .0    .0    .0    .0
  40.  *    .5    .4    .8    .6   1.1    .8    .4    .0    .2    .4    .9   1.5   1.3   1.2    .3    .0    .0    .0    .0    .0
  45.  *    .5    .5    .8    .8   1.4    .8    .4    .0    .1    .4    .7   1.4   1.2   1.0    .5    .1    .0    .0    .0    .0
  50.  *    .5    .6   1.0    .9   1.4    .4    .4    .0    .0    .3    .6   1.3   1.2    .8    .6    .2    .1    .0    .0    .0
  55.  *    .5    .7   1.0    .7   1.2    .3    .3    .0    .0    .2    .5   1.0    .8    .5    .7    .5    .1    .1    .0    .0
  60.  *    .6    .8   1.0   1.0   1.2    .4    .3    .0    .0    .0    .2    .8    .7    .5    .8    .5    .3    .2    .0    .0
  65.  *    .6    .9   1.0   1.0    .9    .4    .3    .0    .0    .0    .2    .6    .5    .2    .8    .6    .6    .5    .2    .0
  70.  *    .8    .8   1.1    .8    .8    .4    .3    .0    .0    .0    .0    .3    .3    .2    .9    .8    .6    .5    .3    .1
  75.  *    .8    .9   1.0    .7    .8    .4    .3    .0    .0    .0    .0    .2    .1    .1    .9    .7    .8    .6    .6    .1
  80.  *    .8    .8    .9    .8    .8    .4    .4    .0    .0    .0    .0    .2    .1    .0    .8    .8    .8   1.1    .6    .3
  85.  *    .7    .9    .8    .4    .7    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8    .8   1.0   1.3    .7    .5
  90.  *    .5    .6    .6    .5    .7    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.1   1.3    .8    .8
  95.  *    .5    .4    .3    .5    .7    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.1   1.4   1.4    .8    .8
 100.  *    .2    .3    .3    .4    .7    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.1   1.4   1.5    .9   1.0
 105.  *    .2    .1    .2    .4    .7    .4    .3    .0    .0    .0    .0    .0    .0    .0    .8   1.2   1.5   1.4   1.2   1.1
 110.  *    .1    .1    .1    .4    .8    .4    .3    .0    .0    .0    .0    .0    .0    .0    .7   1.2   1.6   1.3    .9   1.2
 115.  *    .1    .1    .1    .4    .9    .5    .3    .0    .0    .0    .0    .0    .0    .0    .7   1.2   1.4   1.3   1.0   1.1
 120.  *    .1    .1    .1    .4    .9    .5    .4    .0    .0    .0    .0    .0    .0    .0    .7   1.3   1.4   1.2   1.1   1.1
 125.  *    .2    .2    .2    .4    .8    .5    .4    .0    .0    .0    .0    .0    .0    .0    .7   1.3   1.3   1.2   1.1   1.1
 130.  *    .2    .2    .2    .3    .8    .5    .4    .0    .0    .0    .0    .0    .0    .0    .6   1.1   1.3   1.1   1.2    .9
 135.  *    .2    .2    .2    .4    .8    .5    .4    .0    .0    .0    .0    .0    .0    .0    .6   1.1   1.4   1.2   1.3   1.0
 140.  *    .1    .2    .2    .4    .8    .5    .4    .0    .0    .0    .0    .0    .0    .0    .7   1.1   1.3   1.2   1.2    .8
 145.  *    .1    .2    .2    .4    .9    .6    .4    .1    .1    .0    .0    .0    .0    .0    .8   1.1   1.4   1.0   1.4    .8
 150.  *    .1    .2    .3    .5   1.0    .6    .4    .1    .1    .0    .0    .0    .0    .0    .8   1.1   1.5   1.1   1.5    .7
 155.  *    .1    .1    .3    .4    .9    .6    .4    .2    .2    .1    .0    .0    .0    .0    .7   1.2   1.5   1.4   1.4    .7
 160.  *    .1    .1    .3    .3    .9    .5    .4    .4    .4    .1    .1    .0    .0    .0    .6   1.2   1.5   1.4   1.3    .6
 165.  *    .1    .1    .2    .3    .9    .4    .2    .5    .4    .2    .1    .0    .0    .0    .6   1.3   1.6   1.3   1.4    .5
 170.  *    .1    .1    .2    .3    .9    .3    .2    .5    .5    .3    .1    .1    .0    .0    .6   1.3   1.6   1.0   1.4    .5
 175.  *    .1    .1    .2    .2    .8    .3    .1    .6    .5    .3    .1    .1    .0    .0    .6   1.3   1.7   1.1   1.4    .5
 180.  *    .1    .1    .2    .3    .6    .0    .0    .6    .6    .3    .1    .1    .1    .0    .7   1.3   1.8   1.1   1.3    .5
 185.  *    .1    .1    .2    .3    .6    .0    .0    .5    .6    .4    .1    .1    .1    .0    .9   1.4   1.9    .9   1.3    .5
 190.  *    .1    .1    .2    .3    .7    .0    .0    .5    .6    .4    .1    .1    .1    .0    .9   1.5   1.9    .9   1.3    .5
 195.  *    .1    .1    .2    .3    .7    .0    .0    .5    .5    .4    .3    .2    .1    .1    .9   1.7   1.7   1.0   1.2    .5
 200.  *    .0    .1    .2    .3    .7    .1    .0    .5    .5    .5    .5    .2    .1    .1   1.1   1.7   1.7   1.0   1.1    .5
 205.  *    .0    .1    .1    .2    .7    .2    .0    .5    .6    .6    .6    .3    .2    .1   1.1   2.1   1.8   1.0   1.1    .5
1
                                                                                                                         PAGE  4
      JOB: Site 6 Existing AM - 6EXAM.DAT                      RUN: Site 6 Existing AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .1    .2    .6    .3    .0    .5    .5    .7    .6    .4    .2    .3   1.3   2.2   1.8   1.0   1.0    .6
 215.  *    .0    .0    .1    .1    .6    .4    .1    .4    .6    .8    .7    .6    .2    .2   1.3   2.1   1.6    .9   1.0    .5
 220.  *    .0    .0    .0    .1    .4    .5    .1    .5    .6    .9   1.0    .7    .3    .3   1.3   1.8   1.7   1.0    .8    .5
 225.  *    .0    .0    .0    .0    .3    .5    .2    .5    .7    .9   1.0    .8    .3    .5   1.3   1.7   1.4   1.0    .7    .5
 230.  *    .0    .0    .0    .0    .2    .6    .2    .5    .7   1.0   1.1   1.0    .4    .6   1.2   1.6   1.3   1.0    .7    .5
 235.  *    .0    .0    .0    .0    .1    .6    .2    .6    .7   1.0   1.0    .8    .4    .8   1.0   1.5   1.2   1.0    .6    .5
 240.  *    .0    .0    .0    .0    .0    .5    .3    .6    .7    .8   1.1    .8    .7   1.0   1.1   1.3   1.0   1.0    .6    .6
 245.  *    .0    .0    .0    .0    .0    .5    .2    .6    .7    .9   1.2    .8    .9   1.1    .7   1.0   1.0   1.0    .5    .5
 250.  *    .1    .0    .0    .0    .0    .5    .2    .6    .7    .9   1.1   1.0   1.0   1.4    .8   1.1    .9    .9    .7    .6
 255.  *    .1    .1    .1    .0    .0    .5    .2    .7    .7    .9   1.1   1.1   1.4   1.5    .5    .8    .8    .8    .6    .6
 260.  *    .2    .2    .1    .1    .0    .5    .2    .6    .7    .9   1.3   1.3   1.5   1.5    .3    .7    .6    .8    .6    .6
 265.  *    .3    .2    .2    .1    .0    .4    .2    .6    .7    .8   1.4   1.4   1.7   1.5    .1    .5    .5    .5    .6    .5
 270.  *    .5    .4    .3    .1    .1    .4    .2    .6    .7    .9   1.3   1.5   1.8   1.0    .0    .1    .4    .5    .5    .4
 275.  *    .6    .5    .4    .3    .1    .4    .2    .6    .7    .9   1.4   1.6   1.7   1.1    .0    .0    .1    .3    .2    .3
 280.  *    .6    .5    .4    .3    .1    .5    .2    .6    .7    .9   1.6   1.7   1.5    .9    .0    .0    .0    .3    .2    .2
 285.  *    .6    .6    .4    .3    .2    .5    .2    .6    .7   1.0   1.6   1.5   1.6    .9    .0    .0    .0    .0    .1    .1
 290.  *    .6    .6    .6    .4    .2    .5    .3    .7    .7   1.2   1.4   1.6   1.5    .8    .0    .0    .0    .0    .0    .0
 295.  *    .6    .5    .6    .3    .2    .5    .3    .8    .7   1.2   1.5   1.5   1.5    .8    .0    .0    .0    .0    .0    .0
 300.  *    .6    .5    .5    .3    .3    .5    .3    .8    .5   1.1   1.3   1.5   1.4    .8    .0    .0    .0    .0    .0    .0
 305.  *    .6    .5    .5    .3    .3    .5    .3    .8    .9   1.2   1.4   1.5   1.4    .7    .0    .0    .0    .0    .0    .0
 310.  *    .5    .5    .5    .5    .4    .5    .3    .8    .8   1.2   1.4   1.4   1.4    .7    .0    .0    .0    .0    .0    .0
 315.  *    .5    .5    .5    .5    .2    .5    .3    .7    .7   1.3   1.2   1.4   1.3    .8    .0    .0    .0    .0    .0    .0
 320.  *    .5    .5    .5    .5    .2    .6    .2    .8    .7   1.3   1.1   1.4   1.3    .8    .0    .0    .0    .0    .0    .0
 325.  *    .5    .4    .5    .7    .3    .6    .2    .8    .7   1.3   1.2   1.1   1.2    .8    .0    .0    .0    .0    .0    .0
 330.  *    .5    .4    .4    .6    .3    .6    .2    .7    .9   1.3   1.2   1.2   1.1    .8    .0    .0    .0    .0    .0    .0
 335.  *    .5    .4    .3    .7    .3    .6    .3    .7   1.1   1.1   1.3   1.2   1.0    .7    .0    .0    .0    .0    .0    .0
 340.  *    .5    .4    .3    .7    .3    .7    .3    .5    .9   1.3   1.2   1.2   1.0    .7    .0    .0    .0    .0    .0    .0
 345.  *    .5    .4    .3    .8    .3    .8    .4    .4    .9   1.1   1.3   1.2   1.0    .7    .0    .0    .0    .0    .0    .0
 350.  *    .5    .4    .3    .9    .4    .9    .4    .4    .8   1.1   1.4   1.1   1.0    .8    .0    .0    .0    .0    .0    .0
 355.  *    .5    .4    .3    .9    .6   1.0    .6    .4    .6   1.0   1.2   1.1    .9    .8    .0    .0    .0    .0    .0    .0
 360.  *    .5    .4    .3    .9    .5   1.0    .6    .3    .7   1.1   1.2   1.1    .9    .9    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .8    .9   1.1   1.0   1.4   1.2    .7    .8   1.1   1.3   1.6   1.7   1.8   1.5   1.3   2.2   1.9   1.5   1.5   1.2
 DEGR. *   70    65    70    60    45    10     5   295   335   315   280   280   270   255   220   210   185   100   150   110

1
                                                                                                                         PAGE  5
      JOB: Site 6 Existing AM - 6EXAM.DAT                      RUN: Site 6 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .0
  75.  *    .1
  80.  *    .2
  85.  *    .5
  90.  *    .5
  95.  *    .5
 100.  *    .7
 105.  *    .7
 110.  *    .7
 115.  *    .7
 120.  *    .6
 125.  *    .6
 130.  *    .7
 135.  *    .7
 140.  *    .6
 145.  *    .6
 150.  *    .6
 155.  *    .6
 160.  *    .6
 165.  *    .6
 170.  *    .6
 175.  *    .6
 180.  *    .6
 185.  *    .6
 190.  *    .6
 195.  *    .6
 200.  *    .6
 205.  *    .5
1
                                                                                                                             PAGE  6
      JOB: Site 6 Existing AM - 6EXAM.DAT                          RUN: Site 6 Existing AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .5
 225.  *    .5
 230.  *    .5
 235.  *    .5
 240.  *    .5
 245.  *    .5
 250.  *    .5
 255.  *    .5
 260.  *    .5
 265.  *    .4
 270.  *    .4
 275.  *    .2
 280.  *    .2
 285.  *    .1
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .7
 DEGR. *  100

 THE HIGHEST CONCENTRATION IS    2.20 PPM AT  210 DEGREES FROM REC16.
 THE 2ND HIGHEST CONCENTRATION IS    1.90 PPM AT  185 DEGREES FROM REC17.
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT  270 DEGREES FROM REC13.
```

```
Site 6 Existing PM - 6EXPM.DAT          60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Existing PM                       34  1   0
  1
NB         2A aprch  AG  2001.  2001.  2781.  2010.     34015.5   0  44   30.
  1
NB         2A thru   AG  2781.  2010.  2989.  2020.     29015.5   0  44   30.
  2
NB         2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
        94        38       2.0  290  141.4 1770 1 3
  1
NB         2A rt     AG  2716.  2000.  2889.  1980.      5015.5   0  32   30.
  1
NB         2A rt     AG  2889.  1980.  2957.  1942.      5015.5   0  32   30.
  2
NB         2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
        94        38       2.0   50  141.4 1583 1 3
  1
NB         2A rt     AG  2957.  1942.  3003.  1886.      5015.5   0  32   30.
  1
NB         2A depart AG  2991.  2022.  3120.  2046.     52015.5   0  44   30.
  1
NB         2A depart AG  3120.  2046.  3259.  2100.     52015.5   0  44   30.
  1
NB         2A depart AG  3259.  2100.  3389.  2185.     52015.5   0  44   30.
  1
NB         2A depart AG  3389.  2185.  3483.  2285.     52015.5   0  44   30.
  1
NB         2A depart AG  3483.  2285.  3678.  2522.     52015.5   0  44   30.
  1
NB         2A depart AG  3678.  2522.  3786.  2625.     52015.5   0  44   30.
  1
SB         2A aprch  AG  3770.  2644.  3666.  2543.     94015.5   0  44   30.
  1
SB         2A aprch  AG  3666.  2543.  3422.  2252.     94015.5   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.     94015.5   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.     94015.5   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.     94015.5   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.     56515.5   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
        94        12       2.0  565  141.5 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     37515.5   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
        94        72       2.0  375  141.5 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.     59015.5   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.     59015.5   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     25515.5   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      2515.5   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
        94        89       2.0   25  141.5 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     23015.5   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     23015.5   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
        94        69       2.0  230  141.5 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     23015.5   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     42515.5   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     42515.5   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     42515.5   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 6 Existing PM - 6EXPM.DAT                       RUN: Site 6 Existing PM
      DATE: 05/09/2009   TIME: 12:38:44.22


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*---------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG    340.  15.5    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG    290.  15.5    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2937.9    2017.7 *      30.   268. AG    307. 100.0    .0 24.0  .15   1.5
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG     50.  15.5    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG     50.  15.5    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2906.1    1970.0 *      10.   119. AG    153. 100.0    .0 12.0  .06    .5
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG     50.  15.5    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG    520.  15.5    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG    520.  15.5    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG    520.  15.5    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG    520.  15.5    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG    520.  15.5    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG    520.  15.5    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG    940.  15.5    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG    940.  15.5    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG    940.  15.5    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG    940.  15.5    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG    940.  15.5    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG    565.  15.5    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3051.1    2059.8 *      19.    78. AG     97. 100.0    .0 24.0  .19    .9
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    375.  15.5    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    3633.1    2179.6 *     611.    78. AG    291. 100.0    .0 12.0 1.11  31.1
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG    590.  15.5    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG    590.  15.5    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    255.  15.5    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     25.  15.5    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3029.1    1894.9 *     110.   173. AG    359. 100.0    .0 12.0 1.39   5.6
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    230.  15.5    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    230.  15.5    .0 32.0
      30. WB        5 right   *   3106.0    2001.0    3054.6    1931.1 *      87.   216. AG    279. 100.0    .0 12.0  .65   4.4
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    230.  15.5    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    425.  15.5    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    425.  15.5    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    425.  15.5    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 Existing PM - 6EXPM.DAT                       RUN: Site 6 Existing PM
      DATE: 05/09/2009   TIME: 12:38:44.22

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE      RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *      94       38       2.0       290       1770     141.40      1        3
       6. NB        2A rt     *      94       38       2.0        50       1583     141.40      1        3
      20. SB        2A thru   *      94       12       2.0       565       1770     141.50      1        3
      22. SB        2A left   *      94       72       2.0       375       1770     141.50      1        3
      27. WB        5 left    *      94       89       2.0        25       1770     141.50      1        3
      30. WB        5 right   *      94       69       2.0       230       1583     141.50      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      2594.0     1978.0        5.0   *
      2. SW 164 W             *      2757.0     1973.0        5.0   *
      3. SW 82 W              *      2839.0     1964.0        5.0   *
      4. SW CNR               *      2919.0     1936.0        5.0   *
      5. SW 82 S              *      2978.0     1874.0        5.0   *
      6. SW 164 S             *      3003.0     1794.0        5.0   *
      7. SW MID S             *      3021.0     1679.0        5.0   *
      8. SE MID S             *      3105.0     1694.0        5.0   *
      9. SE 164 S             *      3072.0     1811.0        5.0   *
     10. SE 82 S              *      3074.0     1891.0        5.0   *
     11. SE CNR               *      3109.0     1962.0        5.0   *
     12. SE 82 E              *      3164.0     2025.0        5.0   *
     13. SE 164 E             *      3242.0     2062.0        5.0   *
     14. SE MID E             *      3360.0     2134.0        5.0   *
     15. NE MID E             *      3286.0     2172.0        5.0   *
     16. NE 164 E             *      3153.0     2110.0        5.0   *
     17. NE 82 E              *      3074.0     2088.0        5.0   *
     18. N CNR                *      2994.0     2070.0        5.0   *
     19. NW 82 W              *      2912.0     2063.0        5.0   *
     20. NW 164 W             *      2829.0     2063.0        5.0   *
     21. NW  MID W            *      2704.0     2064.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 6 Existing PM - 6EXPM.DAT                       RUN: Site 6 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .4    .3    .3    .3    .4    .4    .4    .3    .3   1.0   1.0    .9   1.0    .5    .0    .0    .0    .0    .0    .0
   5.  *    .4    .3    .2    .3    .4    .8    .5    .2    .3   1.0   1.2    .9   1.1    .5    .0    .0    .0    .0    .0    .0
  10.  *    .4    .3    .2    .3    .6    .8    .6    .1    .2    .9   1.1    .9   1.2    .7    .0    .0    .0    .0    .0    .0
  15.  *    .4    .3    .2    .4    .8    .7    .6    .1    .2    .8    .9    .9   1.1    .7    .0    .0    .0    .0    .0    .0
  20.  *    .4    .3    .2    .4    .9    .8    .5    .1    .4    .7    .7    .9   1.2    .8    .1    .0    .0    .0    .0    .0
  25.  *    .4    .3    .3    .4   1.0    .8    .4    .1    .3    .6    .6   1.0   1.5    .8    .1    .0    .0    .0    .0    .0
  30.  *    .4    .4    .3    .5   1.2    .7    .4    .1    .2    .5    .7    .9   1.4    .9    .2    .0    .0    .0    .0    .0
  35.  *    .4    .4    .3    .5   1.2    .6    .4    .1    .2    .5    .7   1.1   1.3    .9    .3    .0    .0    .0    .0    .0
  40.  *    .4    .4    .2    .7   1.2    .5    .4    .1    .2    .5    .7   1.3   1.3    .8    .3    .2    .0    .0    .0    .0
  45.  *    .4    .4    .3    .7   1.1    .4    .4    .1    .2    .3    .7   1.2   1.4    .7    .6    .2    .0    .0    .0    .0
  50.  *    .4    .3    .4    .7   1.0    .3    .4    .1    .1    .2    .8   1.2   1.4    .6    .7    .3    .1    .1    .0    .0
  55.  *    .4    .4    .4    .8   1.0    .4    .4    .0    .1    .2    .6   1.2   1.3    .4    .9    .4    .3    .2    .0    .0
  60.  *    .4    .4    .6   1.0    .9    .4    .3    .0    .1    .2    .3    .9   1.2    .4    .9    .6    .5    .3    .1    .0
  65.  *    .5    .4    .7    .8    .9    .4    .3    .0    .1    .1    .2    .8    .7    .5    .8    .9    .7    .6    .3    .1
  70.  *    .5    .5    .8    .9    .7    .3    .2    .0    .0    .1    .2    .6    .7    .5   1.0   1.0    .8    .7    .4    .1
  75.  *    .5    .6    .7    .7    .7    .3    .2    .0    .0    .0    .1    .3    .6    .7   1.0   1.1   1.1   1.1    .6    .3
  80.  *    .4    .5    .6    .6    .4    .3    .3    .0    .0    .0    .1    .2    .4    .9   1.1   1.4   1.2   1.3    .8    .5
  85.  *    .3    .4    .5    .6    .4    .3    .3    .0    .0    .0    .0    .1    .2   1.0   1.0   1.4   1.3   1.3   1.0    .6
  90.  *    .4    .4    .5    .5    .3    .3    .3    .0    .0    .0    .0    .1    .1   1.1   1.2   1.4   1.4   1.6   1.0    .6
  95.  *    .3    .3    .5    .5    .3    .3    .3    .0    .0    .0    .0    .0    .1   1.2   1.1   1.5   1.4   1.7    .9    .8
 100.  *    .2    .1    .4    .4    .1    .3    .3    .0    .0    .0    .0    .0    .0   1.1   1.1   1.5   1.5   1.6    .9   1.2
 105.  *    .0    .1    .2    .3    .2    .3    .2    .0    .0    .0    .0    .0    .0   1.1   1.2   1.4   1.5   1.5   1.1   1.0
 110.  *    .0    .1    .1    .3    .2    .3    .3    .0    .0    .0    .0    .0    .0   1.1   1.2   1.3   1.3   1.2    .9    .9
 115.  *    .0    .0    .1    .2    .2    .3    .3    .0    .0    .0    .0    .0    .0   1.0   1.1   1.3   1.3   1.3   1.1    .7
 120.  *    .0    .0    .1    .2    .2    .3    .3    .0    .0    .0    .0    .0    .0   1.0   1.1   1.3   1.4   1.2   1.2    .7
 125.  *    .0    .0    .0    .2    .2    .3    .3    .0    .0    .0    .0    .0    .0   1.0   1.1   1.3   1.3   1.0   1.2    .8
 130.  *    .0    .0    .0    .2    .3    .3    .3    .0    .0    .0    .0    .0    .0    .9   1.1   1.2   1.3   1.0   1.1    .6
 135.  *    .0    .0    .0    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .9   1.0   1.2   1.3   1.1   1.1    .6
 140.  *    .0    .0    .0    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .9   1.0   1.2   1.3   1.0   1.1    .5
 145.  *    .0    .0    .0    .2    .3    .4    .3    .0    .0    .0    .0    .0    .0    .9   1.0   1.2   1.3   1.0   1.0    .4
 150.  *    .0    .0    .0    .3    .4    .4    .3    .0    .0    .0    .0    .0    .0    .9   1.0   1.2   1.3   1.0    .9    .4
 155.  *    .0    .0    .0    .3    .4    .4    .3    .1    .1    .0    .0    .0    .0    .9   1.0   1.2   1.3   1.1    .8    .4
 160.  *    .0    .0    .0    .1    .4    .4    .3    .2    .2    .0    .0    .0    .0    .9   1.0   1.2   1.3   1.2    .8    .4
 165.  *    .0    .0    .0    .0    .3    .3    .2    .2    .2    .2    .0    .0    .0    .8   1.0   1.2   1.4   1.1    .5    .4
 170.  *    .0    .0    .0    .0    .2    .2    .1    .3    .2    .2    .0    .0    .0    .8   1.0   1.2   1.4   1.0    .5    .4
 175.  *    .0    .0    .0    .0    .1    .2    .1    .3    .3    .2    .1    .0    .0    .8   1.0   1.1   1.5    .9    .4    .4
 180.  *    .0    .0    .0    .0    .0    .1    .0    .4    .4    .3    .2    .0    .0    .9   1.0   1.1   1.5    .9    .4    .4
 185.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .0    .0    .9   1.0   1.3   1.6    .7    .4    .4
 190.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .0    .0    .0    .9   1.0   1.4   1.5    .7    .4    .4
 195.  *    .0    .0    .0    .0    .0    .0    .0    .3    .3    .2    .1    .0    .0    .9   1.0   1.5   1.6    .8    .4    .4
 200.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .1    .0    .0    .9   1.2   1.5   1.7    .7    .4    .4
 205.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .1    .0    .0    .9   1.3   1.5   1.7    .7    .4    .4
1
                                                                                                                     PAGE  4
      JOB: Site 6 Existing PM - 6EXPM.DAT                     RUN: Site 6 Existing PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .2    .1    .0   1.0   1.2   1.5   1.6    .6    .4    .4
 215.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .4    .2    .0   1.0   1.2   1.5   1.5    .6    .5    .4
 220.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .3    .3    .1   1.0   1.4   1.6   1.5    .6    .5    .5
 225.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .4    .3    .2   1.2   1.4   1.4   1.4    .6    .5    .5
 230.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .6    .5    .2   1.2   1.3   1.2   1.2    .7    .4    .5
 235.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .8    .6    .2   1.6   1.2   1.3   1.1    .7    .5    .5
 240.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .3   1.0    .8    .3   1.9   1.1   1.2   1.0    .7    .5    .5
 245.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2    .9    .8    .4   1.7    .9    .9   1.1    .7    .7    .5
 250.  *    .0    .0    .0    .0    .0    .0    .0    .2    .2    .2   1.0    .6    .5   1.7    .7    .9   1.0    .6    .7    .6
 255.  *    .1    .0    .0    .0    .0    .0    .0    .3    .2    .3   1.0    .6    .8   1.6    .4    .9    .6    .7    .7    .6
 260.  *    .2    .2    .0    .0    .0    .0    .0    .2    .2    .3   1.1    .6   1.2   1.6    .4    .6    .5    .7    .6    .6
 265.  *    .2    .2    .2    .0    .0    .0    .0    .2    .2    .4   1.2    .9   1.2   1.5    .2    .3    .4    .5    .5    .5
 270.  *    .3    .2    .2    .2    .0    .0    .0    .2    .2    .4   1.2   1.1   1.3   1.1    .1    .2    .3    .5    .5    .5
 275.  *    .4    .4    .2    .2    .1    .0    .0    .2    .2    .6   1.2   1.0   1.5   1.0    .1    .1    .2    .2    .4    .4
 280.  *    .4    .4    .3    .2    .2    .0    .0    .2    .2    .6   1.3   1.1   1.3    .8    .1    .0    .2    .2    .3    .2
 285.  *    .4    .4    .3    .2    .2    .1    .0    .2    .3    .7   1.5   1.2   1.2    .7    .1    .0    .0    .2    .1    .1
 290.  *    .4    .4    .3    .3    .2    .1    .0    .2    .3    .7   1.4   1.0   1.3    .6    .0    .0    .0    .1    .1    .1
 295.  *    .4    .4    .3    .3    .2    .1    .0    .3    .3    .8   1.3   1.0   1.2    .6    .0    .0    .0    .0    .0    .0
 300.  *    .4    .4    .3    .2    .1    .1    .1    .3    .3    .8   1.1   1.0   1.2    .5    .0    .0    .0    .0    .0    .0
 305.  *    .4    .4    .4    .2    .1    .1    .1    .3    .3    .8   1.1   1.1   1.2    .5    .0    .0    .0    .0    .0    .0
 310.  *    .4    .4    .4    .2    .1    .1    .1    .3    .4   1.0   1.2   1.1   1.1    .6    .0    .0    .0    .0    .0    .0
 315.  *    .4    .4    .3    .2    .1    .1    .1    .2    .3   1.0   1.1    .9   1.1    .5    .0    .0    .0    .0    .0    .0
 320.  *    .4    .4    .3    .3    .1    .1    .1    .2    .2   1.0   1.1   1.0   1.0    .6    .0    .0    .0    .0    .0    .0
 325.  *    .4    .4    .3    .3    .1    .0    .0    .3    .4   1.0   1.1   1.0   1.0    .7    .0    .0    .0    .0    .0    .0
 330.  *    .4    .3    .3    .3    .0    .0    .0    .3    .4   1.0   1.1   1.0   1.0    .6    .0    .0    .0    .0    .0    .0
 335.  *    .4    .3    .3    .4    .2    .0    .0    .3    .5    .7   1.1   1.0   1.0    .6    .0    .0    .0    .0    .0    .0
 340.  *    .4    .3    .3    .4    .2    .2    .1    .3    .6    .9   1.1   1.0   1.0    .6    .0    .0    .0    .0    .0    .0
 345.  *    .4    .3    .3    .3    .2    .3    .2    .3    .6    .9   1.0    .9   1.0    .5    .0    .0    .0    .0    .0    .0
 350.  *    .4    .3    .3    .3    .3    .3    .2    .3    .5    .9   1.1    .9   1.0    .5    .0    .0    .0    .0    .0    .0
 355.  *    .4    .3    .3    .3    .4    .4    .2    .3    .5    .9   1.0   1.0   1.0    .5    .0    .0    .0    .0    .0    .0
 360.  *    .4    .3    .3    .3    .4    .4    .4    .3    .3   1.0   1.0    .9   1.0    .5    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .5    .6    .8   1.0   1.2    .8    .6    .4    .6   1.0   1.5   1.3   1.5   1.9   1.4   1.6   1.7   1.7   1.2   1.2
 DEGR. *   65    75    70    60    30     5    10   180   340     0   285    40   275   240   220   220   200    95   120   100

1
                                                                                                                     PAGE  5
      JOB: Site 6 Existing PM - 6EXPM.DAT                     RUN: Site 6 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .1
  75.  *    .2
  80.  *    .2
  85.  *    .4
  90.  *    .5
  95.  *    .6
 100.  *    .7
 105.  *    .6
 110.  *    .5
 115.  *    .6
 120.  *    .6
 125.  *    .4
 130.  *    .4
 135.  *    .4
 140.  *    .4
 145.  *    .4
 150.  *    .4
 155.  *    .4
 160.  *    .4
 165.  *    .4
 170.  *    .4
 175.  *    .4
 180.  *    .4
 185.  *    .4
 190.  *    .4
 195.  *    .4
 200.  *    .4
 205.  *    .4
1
                                                                                                                              PAGE  6
      JOB: Site 6 Existing PM - 6EXPM.DAT                          RUN: Site 6 Existing PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .4
 215.  *    .4
 220.  *    .4
 225.  *    .4
 230.  *    .4
 235.  *    .5
 240.  *    .5
 245.  *    .5
 250.  *    .5
 255.  *    .5
 260.  *    .5
 265.  *    .5
 270.  *    .4
 275.  *    .3
 280.  *    .2
 285.  *    .1
 290.  *    .1
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .7
 DEGR. *  100

 THE HIGHEST CONCENTRATION IS    1.90 PPM AT  240 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS    1.70 PPM AT  200 DEGREES FROM REC17.
 THE 3RD HIGHEST CONCENTRATION IS    1.70 PPM AT   95 DEGREES FROM REC18.
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Site 6 NoBld AM 2014 - 6NBAM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 NoBld AM 2014                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.    134111.4   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.    128211.4   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       121        43       2.0 1282  102.2 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.      5911.4   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.      5911.4   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       121        43       2.0   59  102.2 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.      5911.4   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    193111.4   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    193111.4   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    193111.4   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    193111.4   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    193111.4   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    193111.4   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.     68111.4   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.     68111.4   0  44   30.
```

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  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.     68111.4   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.     68111.4   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.     68111.4   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.     29311.4   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       121        17       2.0  293  102.2 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     32511.4   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       121        98       2.0  325  102.2 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.     34311.4   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.     34311.4   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     69911.4   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      5011.4   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       121       111       2.0   50  102.2 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     64911.4   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     64911.4   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       121        90       2.0  649  102.2 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     64911.4   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     38411.4   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     38411.4   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     38411.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 6 NoBld AM 2014 - 6NBAM14.DAT                   RUN: Site 6 NoBld AM 2014
      DATE: 05/10/2009   TIME: 16:03:52.91


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)         *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*---------------------------------------------------------
        1. NB        2A aprch *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG  1341.  11.4    .0 44.0
        2. NB        2A thru  *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG  1282.  11.4    .0 44.0
        3. NB        2A thru  *   2968.0    2019.0    2817.4    2012.5 *     151.   268. AG   195. 100.0    .0 24.0  .59   7.7
        4. NB        2A rt    *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG    59.  11.4    .0 32.0
        5. NB        2A rt    *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG    59.  11.4    .0 32.0
        6. NB        2A rt    *   2897.0    1975.0    2909.1    1968.3 *      14.   119. AG    97. 100.0    .0 12.0  .06    .7
        7. NB        2A rt    *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG    59.  11.4    .0 32.0
        8. NB        2A depart *  2991.0    2022.0    3120.0    2046.0 *     131.    79. AG  1931.  11.4    .0 44.0
        9. NB        2A depart *  3120.0    2046.0    3259.0    2100.0 *     149.    69. AG  1931.  11.4    .0 44.0
       10. NB        2A depart *  3259.0    2100.0    3389.0    2185.0 *     155.    57. AG  1931.  11.4    .0 44.0
       11. NB        2A depart *  3389.0    2185.0    3483.0    2285.0 *     137.    43. AG  1931.  11.4    .0 44.0
       12. NB        2A depart *  3483.0    2285.0    3678.0    2522.0 *     307.    39. AG  1931.  11.4    .0 44.0
       13. NB        2A depart *  3678.0    2522.0    3786.0    2625.0 *     149.    46. AG  1931.  11.4    .0 44.0
       14. SB        2A aprch *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG   681.  11.4    .0 44.0
       15. SB        2A aprch *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG   681.  11.4    .0 44.0
       16. SB        2A aprch *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG   681.  11.4    .0 44.0
       17. SB        2A aprch *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG   681.  11.4    .0 44.0
       18. SB        2A aprch *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG   681.  11.4    .0 44.0
       19. SB        2A thru  *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG   293.  11.4    .0 44.0
       20. SB        2A thru  *   3033.0    2056.0    3046.3    2058.8 *      14.    78. AG    77. 100.0    .0 24.0  .10    .7
       21. SB        2A left  *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG   325.  11.4    .0 32.0
       22. SB        2A left  *   3036.0    2049.0    3760.5    2207.5 *     742.    78. AG   222. 100.0    .0 12.0 1.17  37.7
       23. SB        2A depart *  3000.0    2046.0    2878.0    2037.0 *     122.   266. AG   343.  11.4    .0 44.0
       24. SB        2A depart *  2878.0    2037.0    2000.0    2028.0 *     878.   269. AG   343.  11.4    .0 44.0
       25. WB        5 aprch  *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG   699.  11.4    .0 32.0
       26. WB        5 left   *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG    50.  11.4    .0 32.0
       27. WB        5 left   *   3015.0    2004.0    3019.1    1972.4 *      32.   173. AG   251. 100.0    .0 12.0  .57   1.6
       28. WB        5 right  *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG   649.  11.4    .0 32.0
       29. WB        5 right  *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG   649.  11.4    .0 32.0
       30. WB        5 right  *   3106.0    2001.0    1090.4    -738.1 *    3401.   216. AG   204. 100.0    .0 12.0 1.84 172.8
       31. WB        5 right  *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG   649.  11.4    .0 32.0
       32. EB        5 depart *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG   384.  11.4    .0 32.0
       33. EB        5 depart *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG   384.  11.4    .0 32.0
       34. EB        5 depart *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG   384.  11.4    .0 32.0
1
                                                                                                                     PAGE  2
      JOB: Site 6 NoBld AM 2014 - 6NBAM14.DAT                   RUN: Site 6 NoBld AM 2014
      DATE: 05/10/2009   TIME: 16:03:52.91

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)     (SEC)     (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
        3. NB        2A thru  *     121       43       2.0      1282       1770     102.20      1        3
        6. NB        2A rt    *     121       43       2.0        59       1583     102.20      1        3
       20. SB        2A thru  *     121       17       2.0       293       1770     102.20      1        3
       22. SB        2A left  *     121       98       2.0       325       1770     102.20      1        3
       27. WB        5 left   *     121      111       2.0        50       1770     102.20      1        3
       30. WB        5 right  *     121       90       2.0       649       1583     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X          Y          Z         *
     -------------------------*--------------------------------------*
        1. SW MID W           *      2594.0     1978.0        5.0    *
        2. SW 164 W           *      2757.0     1973.0        5.0    *
        3. SW 82 W            *      2839.0     1964.0        5.0    *
        4. SW CNR             *      2919.0     1936.0        5.0    *
        5. SW 82 S            *      2978.0     1874.0        5.0    *
        6. SW 164 S           *      3003.0     1794.0        5.0    *
        7. SW MID S           *      3021.0     1679.0        5.0    *
        8. SE MID S           *      3105.0     1694.0        5.0    *
        9. SE 164 S           *      3072.0     1811.0        5.0    *
       10. SE 82 S            *      3074.0     1891.0        5.0    *
       11. SE CNR             *      3109.0     1962.0        5.0    *
       12. SE 82 E            *      3164.0     2025.0        5.0    *
       13. SE 164 E           *      3242.0     2062.0        5.0    *
       14. SE MID E           *      3360.0     2134.0        5.0    *
       15. NE MID E           *      3286.0     2172.0        5.0    *
       16. NE 164 E           *      3153.0     2110.0        5.0    *
       17. NE 82 E            *      3074.0     2088.0        5.0    *
       18. N CNR              *      2994.0     2070.0        5.0    *
       19. NW 82 W            *      2912.0     2063.0        5.0    *
       20. NW 164 W           *      2829.0     2063.0        5.0    *
       21. NW  MID W          *      2704.0     2064.0        5.0    *
1
                                                                                                                     PAGE  3
      JOB: Site 6 NoBld AM 2014 - 6NBAM14.DAT                   RUN: Site 6 NoBld AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)*  REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9 REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .6    .5    .7    .4    .4    .7    .5    .4    .5    .8   1.0   1.1   1.3   1.0    .0    .0    .0    .0    .0    .0
   5.  *    .6    .5    .7    .5    .4    .8    .6    .4    .6    .9   1.0   1.2   1.3   1.0    .0    .0    .0    .0    .0    .0
  10.  *    .6    .6    .7    .5    .4    .9    .5    .2    .5    .9    .9   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0
  15.  *    .5    .5    .7    .4    .5    .9    .6    .2    .4    .7    .9   1.2   1.3   1.2    .0    .0    .0    .0    .0    .0
  20.  *    .5    .5    .7    .4    .5    .8    .5    .2    .4    .7   1.0   1.1   1.4   1.3    .0    .0    .0    .0    .0    .0
  25.  *    .6    .5    .7    .5    .6    .8    .5    .2    .3    .7    .9   1.1   1.3   1.3    .0    .0    .0    .0    .0    .0
  30.  *    .6    .5    .7    .4    .7    .7    .4    .2    .3    .7    .8   1.2   1.6   1.4    .0    .0    .0    .0    .0    .0
  35.  *    .6    .6    .7    .5    .7    .7    .3    .1    .4    .6    .8   1.3   1.8   1.3    .2    .0    .0    .0    .0    .0
  40.  *    .6    .7    .9    .5    .9    .7    .3    .1    .4    .6    .9   1.6   1.9   1.3    .4    .0    .0    .0    .0    .0
  45.  *    .6    .7    .9    .7   1.2    .8    .3    .1    .3    .5    .9   1.6   1.9   1.1    .6    .1    .0    .0    .0    .0
  50.  *    .6    .7   1.1    .7   1.3    .5    .3    .1    .1    .5    .7   1.5   1.8   1.1    .6    .3    .1    .0    .0    .0
  55.  *    .7    .8    .9   1.0   1.1    .3    .3    .0    .1    .4    .7   1.4   1.4    .8    .7    .6    .1    .1    .0    .0
  60.  *    .7    .9    .9    .8   1.1    .3    .2    .0    .1    .2    .4   1.2   1.2    .7    .9    .6    .4    .2    .2    .0
  65.  *    .9   1.0   1.0    .9    .9    .3    .2    .0    .1    .1    .4   1.0   1.0    .5    .9    .7    .6    .7    .2    .1
  70.  *   1.0   1.0   1.0    .8    .8    .3    .2    .0    .0    .1    .3    .6    .8    .7   1.1   1.0    .7    .8    .5    .1
  75.  *    .9   1.1    .9    .7    .8    .3    .2    .0    .0    .1    .1    .5    .5    .7   1.1   1.1   1.1    .9    .6    .3
  80.  *   1.0    .9    .7    .5    .7    .3    .2    .0    .0    .0    .1    .4    .4    .8   1.1   1.3   1.1   1.1    .7    .5
  85.  *    .8    .9    .6    .4    .6    .3    .3    .0    .0    .0    .0    .1    .2    .8   1.1   1.2   1.1   1.2    .8    .7
  90.  *    .6    .6    .4    .3    .6    .3    .3    .0    .0    .0    .0    .1    .1    .9   1.1   1.4   1.3   1.2    .8    .7
  95.  *    .5    .5    .1    .4    .6    .3    .2    .0    .0    .0    .0    .0    .1    .9   1.2   1.4   1.3   1.3    .8    .9
 100.  *    .3    .3    .1    .4    .6    .3    .2    .0    .0    .0    .0    .0    .0    .9   1.2   1.4   1.4   1.3    .8   1.0
 105.  *    .2    .1    .1    .4    .6    .3    .2    .0    .0    .0    .0    .0    .0    .9   1.1   1.3   1.3   1.1    .8    .9
 110.  *    .2    .1    .1    .4    .6    .3    .2    .0    .0    .0    .0    .0    .0    .8   1.0   1.4   1.4   1.1    .9   1.1
 115.  *    .1    .1    .1    .4    .7    .3    .3    .0    .0    .0    .0    .0    .0    .8   1.0   1.4   1.3   1.2   1.0   1.0
 120.  *    .1    .1    .1    .2    .7    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.0   1.2   1.3   1.1    .9   1.0
 125.  *    .1    .1    .1    .2    .6    .4    .3    .0    .0    .0    .0    .0    .0    .7   1.0   1.2   1.3   1.0   1.0    .9
 130.  *    .1    .2    .2    .3    .6    .4    .3    .0    .0    .0    .0    .0    .0    .7   1.0   1.2   1.2   1.0   1.0    .9
 135.  *    .1    .2    .2    .3    .6    .4    .3    .0    .0    .0    .0    .0    .0    .7   1.0   1.1   1.2   1.0   1.1    .9
 140.  *    .1    .2    .2    .3    .7    .4    .4    .0    .0    .0    .0    .0    .0    .7   1.1   1.1   1.2    .9    .9   1.0
 145.  *    .1    .2    .2    .3    .7    .4    .4    .1    .0    .0    .0    .0    .0    .7   1.1   1.1   1.2    .9   1.0   1.0
 150.  *    .1    .1    .2    .3    .7    .5    .4    .1    .1    .0    .0    .0    .0    .7   1.1   1.2   1.3   1.0   1.0   1.0
 155.  *    .1    .1    .2    .3    .7    .4    .3    .2    .1    .1    .0    .0    .0    .7   1.1   1.2   1.3   1.1   1.0    .9
 160.  *    .1    .1    .1    .3    .8    .4    .2    .2    .2    .1    .0    .0    .0    .6   1.1   1.2   1.3   1.3   1.0    .8
 165.  *    .1    .1    .1    .3    .7    .3    .2    .4    .4    .1    .1    .0    .0    .6   1.0   1.3   1.4   1.1   1.0    .8
 170.  *    .1    .1    .1    .2    .6    .3    .2    .4    .4    .2    .1    .0    .0    .6   1.0   1.2   1.5   1.1    .9    .8
 175.  *    .1    .1    .1    .2    .6    .2    .1    .4    .4    .3    .1    .1    .0    .6   1.1   1.3   1.5   1.1    .9    .8
 180.  *    .1    .1    .1    .2    .5    .0    .0    .5    .4    .2    .1    .1    .0    .7   1.2   1.3   1.5   1.0    .9    .8
 185.  *    .1    .1    .2    .2    .5    .0    .0    .4    .5    .2    .1    .1    .1    .7   1.2   1.5   1.6    .9   1.0    .7
 190.  *    .1    .1    .2    .2    .5    .0    .0    .4    .4    .3    .1    .1    .1    .7   1.1   1.4   1.4    .9   1.0    .7
 195.  *    .1    .1    .2    .2    .6    .0    .0    .4    .4    .3    .2    .1    .1    .7   1.2   1.5   1.5    .8   1.0    .7
 200.  *    .1    .1    .2    .3    .6    .1    .0    .4    .4    .4    .3    .2    .1    .7   1.3   1.6   1.5    .9   1.0    .6
 205.  *    .1    .1    .2    .3    .6    .2    .0    .4    .5    .5    .4    .3    .2    .8   1.3   1.7   1.5    .9   1.0    .7
1
                                                                                                                         PAGE   4
      JOB: Site 6 NoBld AM 2014 - 6NBAM14.DAT                   RUN: Site 6 NoBld AM 2014

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)*  REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9 REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .1    .1    .1    .2    .6    .3    .1    .5    .5    .7    .5    .3    .2    .9   1.4   1.9   1.6    .9    .9    .7
 215.  *    .0    .1    .1    .2    .5    .4    .1    .5    .5    .8    .6    .6    .2   1.0   1.4   1.7   1.5    .8   1.0    .5
 220.  *    .0    .0    .1    .1    .4    .4    .2    .5    .6    .7    .7    .7    .3   1.1   1.6   1.5   1.3    .8   1.0    .5
 225.  *    .0    .0    .0    .1    .3    .5    .2    .5    .6    .8    .8    .7    .4   1.3   1.4   1.4   1.2    .8   1.0    .5
 230.  *    .0    .0    .0    .0    .2    .5    .2    .5    .6    .8    .8    .7    .4   1.5   1.2   1.5   1.1    .9   1.0    .5
 235.  *    .0    .0    .0    .0    .1    .5    .2    .5    .6    .7    .8    .6    .5   1.7   1.1   1.5    .9    .9    .9    .6
 240.  *    .0    .0    .0    .0    .0    .4    .2    .5    .6    .6    .8    .6    .6   1.8   1.0   1.1    .9    .9    .9    .6
 245.  *    .1    .0    .0    .0    .0    .4    .2    .5    .6    .6    .8    .6    .8   2.0    .9   1.1   1.1    .9    .9    .7
 250.  *    .1    .1    .0    .0    .0    .4    .2    .5    .5    .7    .8    .8   1.0   2.2    .8   1.0    .8    .9    .8    .6
 255.  *    .2    .1    .1    .0    .0    .4    .2    .3    .5    .7    .9   1.2   1.4   2.2    .6    .6    .8    .8    .8    .6
 260.  *    .3    .2    .1    .1    .0    .4    .2    .3    .5    .7    .9   1.2   1.4   2.0    .3    .6    .5    .8    .7    .6
 265.  *    .4    .3    .2    .1    .0    .4    .2    .4    .5    .8   1.2   1.2   1.7   1.9    .1    .3    .5    .6    .6    .5
 270.  *    .6    .5    .3    .2    .1    .3    .2    .4    .5    .7   1.0   1.3   1.8   1.5    .1    .1    .3    .6    .4    .4
 275.  *    .7    .6    .5    .2    .1    .4    .2    .4    .6    .7   1.0   1.3   1.7   1.3    .0    .1    .1    .4    .3    .3
 280.  *    .8    .6    .5    .3    .1    .4    .2    .4    .6    .7   1.2   1.6   1.5   1.2    .0    .0    .0    .1    .2    .2
 285.  *    .8    .7    .6    .4    .2    .4    .3    .5    .6    .9   1.2   1.6   1.5   1.1    .0    .0    .0    .0    .1    .2
 290.  *    .8    .7    .6    .4    .2    .4    .3    .6    .5    .9   1.3   1.4   1.4    .9    .0    .0    .0    .0    .0    .0
 295.  *    .7    .7    .5    .5    .1    .4    .3    .6    .5    .9   1.1   1.4   1.4    .9    .0    .0    .0    .0    .0    .0
 300.  *    .7    .6    .6    .5    .2    .4    .3    .6    .6    .9   1.1   1.4   1.4    .9    .0    .0    .0    .0    .0    .0
 305.  *    .7    .6    .5    .5    .3    .4    .3    .6    .7    .8   1.2   1.3   1.3    .9    .0    .0    .0    .0    .0    .0
 310.  *    .7    .6    .5    .6    .3    .4    .3    .6    .7    .8   1.1   1.4   1.3    .8    .0    .0    .0    .0    .0    .0
 315.  *    .6    .6    .4    .5    .2    .6    .3    .5    .7   1.0   1.0   1.3   1.3    .9    .0    .0    .0    .0    .0    .0
 320.  *    .6    .5    .6    .4    .2    .5    .3    .7    .6   1.0   1.0   1.2   1.2    .9    .0    .0    .0    .0    .0    .0
 325.  *    .6    .5    .6    .5    .3    .5    .2    .7    .6   1.0   1.1   1.2   1.2    .9    .0    .0    .0    .0    .0    .0
 330.  *    .6    .5    .5    .5    .4    .5    .4    .6    .6    .8   1.1   1.2   1.2    .9    .0    .0    .0    .0    .0    .0
 335.  *    .6    .5    .6    .5    .4    .5    .4    .4    .7    .9   1.1   1.2   1.2    .9    .0    .0    .0    .0    .0    .0
 340.  *    .5    .5    .6    .5    .2    .5    .4    .4    .6    .9   1.0   1.2   1.2    .8    .0    .0    .0    .0    .0    .0
 345.  *    .6    .5    .6    .6    .2    .6    .5    .3    .4   1.0   1.0   1.1   1.3    .9    .0    .0    .0    .0    .0    .0
 350.  *    .6    .5    .7    .6    .2    .9    .4    .3    .5    .9   1.2   1.1   1.3    .9    .0    .0    .0    .0    .0    .0
 355.  *    .6    .5    .7    .5    .4    .9    .4    .4    .5    .9   1.1   1.1   1.3    .9    .0    .0    .0    .0    .0    .0
 360.  *    .6    .5    .7    .4    .4    .7    .5    .4    .5    .8   1.0   1.1   1.3   1.0    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.0   1.1   1.1   1.0   1.3    .9    .6    .7    .7   1.0   1.3   1.6   1.9   2.2   1.6   1.9   1.6   1.3   1.1   1.1
 DEGR. *    70    75    50    55    50    10     5   320   305   315   290   280    40   250   220   210   185   160   135   110

1
                                                                                                                         PAGE   5
      JOB: Site 6 NoBld AM 2014 - 6NBAM14.DAT                   RUN: Site 6 NoBld AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .1
  75.  *    .1
  80.  *    .2
  85.  *    .6
  90.  *    .6
  95.  *    .6
 100.  *    .7
 105.  *    .9
 110.  *    .7
 115.  *    .6
 120.  *    .7
 125.  *    .7
 130.  *    .6
 135.  *    .6
 140.  *    .6
 145.  *    .5
 150.  *    .5
 155.  *    .5
 160.  *    .5
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                PAGE  6
      JOB: Site 6 NoBld AM 2014 - 6NBAM14.DAT                   RUN: Site 6 NoBld AM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .4
 220.  *    .4
 225.  *    .5
 230.  *    .5
 235.  *    .6
 240.  *    .6
 245.  *    .6
 250.  *    .6
 255.  *    .6
 260.  *    .5
 265.  *    .5
 270.  *    .3
 275.  *    .2
 280.  *    .2
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .9
 DEGR. *  105

 THE HIGHEST CONCENTRATION IS    2.20 PPM AT  250 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS    1.90 PPM AT   40 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    1.90 PPM AT  210 DEGREES FROM REC16.
```

```
Site 6 NoBld AM 2030 - 6NBAM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 NoBld AM 2030                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.    1495 9.2   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.    1400 9.2   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       102        50       2.0 1400   84.1 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.      95 9.2   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.      95 9.2   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       102        50       2.0   95   84.1 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.      95 9.2   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    2050 9.2   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    2050 9.2   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    2050 9.2   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    2050 9.2   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    2050 9.2   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    2050 9.2   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.     675 9.2   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.     675 9.2   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.     675 9.2   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.     675 9.2   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.     675 9.2   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.     305 9.2   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       102        19       2.0  305   84.1 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     370 9.2   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       102        75       2.0  370   84.1 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.     370 9.2   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.     370 9.2   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     715 9.2   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      65 9.2   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       102        92       2.0   65   84.1 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     650 9.2   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     650 9.2   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       102        67       2.0  650   84.1 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     650 9.2   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     465 9.2   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     465 9.2   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     465 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 6 NoBld AM 2030 - 6NBAM30.DAT                   RUN: Site 6 NoBld AM 2030
      DATE: 05/10/2009   TIME: 16:34:32.48


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG   1495.   9.2    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG   1400.   9.2    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2764.1    2010.2 *     204.   268. AG    221. 100.0    .0 24.0  .84  10.4
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG     95.   9.2    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG     95.   9.2    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2919.7    1962.4 *      26.   119. AG    111. 100.0    .0 12.0  .13   1.3
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG     95.   9.2    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG   2050.   9.2    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG   2050.   9.2    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG   2050.   9.2    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG   2050.   9.2    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG   2050.   9.2    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG   2050.   9.2    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG    675.   9.2    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG    675.   9.2    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG    675.   9.2    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG    675.   9.2    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG    675.   9.2    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG    305.   9.2    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3048.4    2059.3 *      16.    78. AG     84. 100.0    .0 24.0  .11    .8
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    370.   9.2    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    3232.5    2092.0 *     201.    78. AG    166. 100.0    .0 12.0  .93  10.2
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG    370.   9.2    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG    370.   9.2    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    715.   9.2    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     65.   9.2    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3019.5    1968.9 *      35.   173. AG    203. 100.0    .0 12.0  .63   1.8
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    650.   9.2    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    650.   9.2    .0 32.0
      30. WB        5 right   *   3106.0    2001.0    1893.4     353.2 *    2046.   216. AG    148. 100.0    .0 12.0 1.35 103.9
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    650.   9.2    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    465.   9.2    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    465.   9.2    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    465.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 NoBld AM 2030 - 6NBAM30.DAT                   RUN: Site 6 NoBld AM 2030
      DATE: 05/10/2009   TIME: 16:34:32.48

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)     (SEC)     (VPH)      (VPH)    (gm/hr)
      ------------------------*---------------------------------------------------------------------------------
       3. NB        2A thru   *     102       50       2.0      1400       1770      84.10      1        3
       6. NB        2A rt     *     102       50       2.0        95       1583      84.10      1        3
      20. SB        2A thru   *     102       19       2.0       305       1770      84.10      1        3
      22. SB        2A left   *     102       75       2.0       370       1770      84.10      1        3
      27. WB        5 left    *     102       92       2.0        65       1770      84.10      1        3
      30. WB        5 right   *     102       67       2.0       650       1583      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      2594.0     1978.0        5.0   *
      2. SW 164 W             *      2757.0     1973.0        5.0   *
      3. SW 82 W              *      2839.0     1964.0        5.0   *
      4. SW CNR               *      2919.0     1936.0        5.0   *
      5. SW 82 S              *      2978.0     1874.0        5.0   *
      6. SW 164 S             *      3003.0     1794.0        5.0   *
      7. SW MID S             *      3021.0     1679.0        5.0   *
      8. SE MID S             *      3105.0     1694.0        5.0   *
      9. SE 164 S             *      3072.0     1811.0        5.0   *
     10. SE 82 S              *      3074.0     1891.0        5.0   *
     11. SE CNR               *      3109.0     1962.0        5.0   *
     12. SE 82 E              *      3164.0     2025.0        5.0   *
     13. SE 164 E             *      3242.0     2062.0        5.0   *
     14. SE MID E             *      3360.0     2134.0        5.0   *
     15. NE MID E             *      3286.0     2172.0        5.0   *
     16. NE 164 E             *      3153.0     2110.0        5.0   *
     17. NE 82 E              *      3074.0     2088.0        5.0   *
     18. N CNR                *      2994.0     2070.0        5.0   *
     19. NW 82 W              *      2912.0     2063.0        5.0   *
     20. NW 164 W             *      2829.0     2063.0        5.0   *
     21. NW  MID W            *      2704.0     2064.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 6 NoBld AM 2030 - 6NBAM30.DAT                   RUN: Site 6 NoBld AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
WIND ANGLE RANGE:   0.-360.

WIND   * CONCENTRATION
ANGLE *      (PPM)
(DEGR)*  REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9 REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *    .5    .6    .8    .6    .4    .6    .4    .2    .4    .7    .7    .9    .8    .8    .0    .0    .0    .0    .0    .0
  5.  *    .5    .7    .8    .6    .4    .6    .4    .1    .4    .8    .7    .9    .7    .8    .0    .0    .0    .0    .0    .0
 10.  *    .5    .6    .8    .6    .3    .7    .4    .1    .4    .7    .7    .9    .8    .9    .0    .0    .0    .0    .0    .0
 15.  *    .5    .8    .7    .5    .3    .8    .4    .1    .4    .7    .7    .8    .7    .9    .0    .0    .0    .0    .0    .0
 20.  *    .5    .8    .7    .4    .5    .7    .4    .1    .2    .5    .7    .9    .8   1.1    .0    .0    .0    .0    .0    .0
 25.  *    .5    .8    .7    .5    .6    .7    .3    .0    .2    .5    .8    .9    .9   1.1    .0    .0    .0    .0    .0    .0
 30.  *    .5    .9    .7    .5    .7    .7    .2    .0    .2    .4    .6   1.0   1.0   1.3    .0    .0    .0    .0    .0    .0
 35.  *    .5    .9    .7    .3    .5    .5    .2    .0    .2    .3    .7   1.0   1.1   1.2    .1    .0    .0    .0    .0    .0
 40.  *    .6   1.0    .7    .5    .6    .5    .2    .0    .2    .4    .7   1.2   1.1   1.2    .3    .0    .0    .0    .0    .0
 45.  *    .6   1.0    .7    .5    .7    .5    .2    .0    .1    .3    .6   1.2   1.0   1.0    .4    .1    .0    .0    .0    .0
 50.  *    .6   1.0    .8    .6    .9    .2    .2    .0    .0    .3    .6   1.1   1.0    .8    .6    .1    .1    .0    .0    .0
 55.  *    .6   1.0    .8    .6    .7    .2    .2    .0    .0    .1    .4    .9    .8    .5    .7    .4    .1    .1    .0    .0
 60.  *    .7    .9    .8    .7    .7    .2    .2    .0    .0    .0    .2    .8    .7    .5    .7    .5    .3    .1    .0    .0
 65.  *    .8   1.1    .9    .8    .5    .2    .2    .0    .0    .0    .2    .5    .5    .2    .7    .5    .5    .4    .0    .0
 70.  *    .8   1.1    .7    .6    .5    .2    .2    .0    .0    .0    .0    .3    .3    .2    .7    .7    .5    .4    .2    .0
 75.  *    .9   1.0    .8    .5    .5    .2    .2    .0    .0    .0    .0    .2    .1    .1    .7    .7    .5    .5    .4    .1
 80.  *    .8   1.0    .6    .4    .5    .2    .2    .0    .0    .0    .0    .2    .1    .0    .8    .7    .7    .7    .5    .3
 85.  *    .7    .6    .6    .2    .5    .2    .3    .0    .0    .0    .0    .0    .0    .0    .8    .8    .8    .9    .6    .4
 90.  *    .5    .5    .4    .2    .5    .2    .3    .0    .0    .0    .0    .0    .0    .0    .8    .8    .9   1.0    .5    .6
 95.  *    .4    .3    .2    .2    .5    .2    .2    .0    .0    .0    .0    .0    .0    .0    .8    .8    .9   1.0    .5    .7
100.  *    .3    .3    .1    .2    .5    .2    .2    .0    .0    .0    .0    .0    .0    .0    .8    .8   1.1   1.1    .6    .9
105.  *    .2    .1    .1    .2    .5    .2    .2    .0    .0    .0    .0    .0    .0    .0    .7    .9   1.1   1.1    .8    .7
110.  *    .2    .1    .1    .2    .5    .3    .2    .0    .0    .0    .0    .0    .0    .0    .7    .9   1.1   1.0    .6    .9
115.  *    .1    .1    .1    .2    .5    .3    .2    .0    .0    .0    .0    .0    .0    .0    .7    .9   1.1   1.0    .7   1.0
120.  *    .1    .1    .1    .1    .6    .4    .2    .0    .0    .0    .0    .0    .0    .0    .7    .9   1.1   1.0    .9   1.0
125.  *    .1    .1    .1    .1    .5    .4    .2    .0    .0    .0    .0    .0    .0    .0    .6    .9   1.0    .9    .8    .9
130.  *    .1    .1    .1    .1    .5    .4    .2    .0    .0    .0    .0    .0    .0    .0    .6    .9   1.0    .9   1.1    .9
135.  *    .1    .1    .2    .2    .5    .4    .2    .0    .0    .0    .0    .0    .0    .0    .6    .9   1.1    .9   1.1    .9
140.  *    .1    .1    .2    .2    .5    .4    .3    .0    .0    .0    .0    .0    .0    .0    .6    .9   1.0    .7    .9    .9
145.  *    .1    .1    .2    .2    .6    .4    .3    .0    .0    .0    .0    .0    .0    .0    .6    .9   1.0    .8   1.0   1.0
150.  *    .1    .1    .2    .2    .6    .5    .3    .1    .1    .0    .0    .0    .0    .0    .6    .9   1.1    .8   1.1   1.0
155.  *    .1    .1    .1    .2    .6    .4    .2    .1    .1    .1    .0    .0    .0    .0    .6    .9   1.0    .8   1.0   1.0
160.  *    .1    .1    .1    .2    .6    .3    .2    .2    .2    .1    .0    .0    .0    .0    .6    .9   1.0    .8   1.0    .9
165.  *    .1    .1    .1    .2    .5    .3    .2    .3    .3    .1    .0    .0    .0    .0    .6    .9   1.1    .9   1.0    .9
170.  *    .1    .1    .1    .1    .5    .3    .1    .4    .3    .1    .1    .0    .0    .0    .6   1.0   1.2    .9    .9    .9
175.  *    .1    .1    .1    .1    .3    .1    .0    .4    .4    .2    .1    .0    .0    .0    .6   1.0   1.2    .9    .9    .9
180.  *    .1    .1    .1    .1    .4    .0    .0    .4    .4    .2    .1    .1    .0    .0    .6   1.1   1.3    .8    .9    .9
185.  *    .1    .1    .1    .2    .4    .0    .0    .4    .4    .1    .1    .1    .0    .0    .7   1.2   1.2    .7    .9    .9
190.  *    .1    .1    .1    .2    .4    .0    .0    .4    .4    .2    .1    .1    .0    .0    .7   1.2   1.1    .8    .9    .9
195.  *    .1    .1    .1    .2    .4    .0    .0    .4    .3    .3    .1    .1    .0    .0    .6   1.2   1.1    .8    .9    .9
200.  *    .1    .1    .1    .2    .4    .1    .0    .3    .3    .4    .3    .2    .0    .0    .7   1.1   1.2    .8    .9    .9
205.  *    .0    .1    .1    .2    .4    .1    .0    .3    .3    .4    .3    .1    .1    .0    .9   1.2   1.2    .7    .9    .9
1
                                                                                                                    PAGE   4
     JOB: Site 6 NoBld AM 2030 - 6NBAM30.DAT                   RUN: Site 6 NoBld AM 2030

WIND   * CONCENTRATION
ANGLE *      (PPM)
(DEGR)*  REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9 REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .1    .1    .1    .4    .2    .0    .3    .4    .5    .4    .2    .1    .2    .9   1.5   1.2    .7    .9    .9
215.  *    .0    .0    .1    .1    .4    .2    .1    .3    .4    .4    .4    .3    .1    .2   1.0   1.3   1.2    .8    .9    .7
220.  *    .0    .0    .0    .1    .3    .3    .1    .4    .5    .6    .5    .4    .2    .2   1.0   1.3   1.3    .8    .8    .7
225.  *    .0    .0    .0    .0    .2    .3    .1    .4    .5    .6    .6    .5    .2    .4   1.2   1.2   1.1    .8    .8    .8
230.  *    .0    .0    .0    .0    .1    .3    .2    .4    .5    .6    .7    .5    .3    .4   1.0   1.2    .9    .8    .9    .6
235.  *    .0    .0    .0    .0    .1    .3    .2    .4    .5    .5    .6    .5    .3    .7    .9   1.2   1.0    .8   1.0    .7
240.  *    .0    .0    .0    .0    .0    .3    .2    .4    .5    .5    .6    .5    .4    .9    .9   1.0   1.0    .9   1.0    .7
245.  *    .1    .0    .0    .0    .0    .3    .2    .4    .5    .5    .6    .5    .4   1.0    .7    .9    .9    .9   1.0    .7
250.  *    .1    .1    .0    .0    .0    .3    .1    .3    .5    .5    .6    .8    .9   1.2    .8    .8    .7   1.0    .9    .7
255.  *    .2    .1    .1    .0    .0    .3    .1    .3    .5    .6    .6    .8   1.2   1.4    .5    .6    .7    .9    .8    .6
260.  *    .2    .2    .1    .1    .0    .3    .1    .3    .5    .6    .8   1.1   1.3   1.5    .2    .5    .5    .8    .7    .5
265.  *    .3    .3    .2    .1    .0    .3    .1    .4    .5    .7    .9   1.2   1.4   1.4    .1    .3    .3    .7    .5    .5
270.  *    .5    .4    .3    .2    .1    .2    .1    .4    .5    .6    .9   1.1   1.5   1.1    .0    .2    .3    .5    .4    .3
275.  *    .6    .5    .4    .2    .1    .2    .1    .4    .6    .6   1.0   1.2   1.4    .9    .0    .1    .1    .4    .2    .3
280.  *    .7    .6    .6    .3    .1    .3    .1    .4    .5    .7   1.1   1.3   1.2    .8    .0    .0    .0    .1    .2    .2
285.  *    .7    .6    .6    .5    .1    .3    .1    .5    .4    .8   1.2   1.3   1.3    .8    .0    .0    .0    .0    .0    .0
290.  *    .7    .6    .6    .5    .1    .3    .2    .5    .4    .8   1.1   1.2   1.1    .7    .0    .0    .0    .0    .0    .0
295.  *    .7    .6    .7    .6    .2    .3    .2    .5    .5    .9   1.0   1.2   1.1    .7    .0    .0    .0    .0    .0    .0
300.  *    .6    .6    .6    .5    .3    .3    .2    .5    .5    .9   1.0   1.1   1.0    .7    .0    .0    .0    .0    .0    .0
305.  *    .6    .6    .8    .6    .3    .4    .2    .5    .6    .8    .9   1.2   1.0    .7    .0    .0    .0    .0    .0    .0
310.  *    .6    .5    .8    .7    .4    .4    .2    .6    .4    .8    .8   1.0   1.0    .7    .0    .0    .0    .0    .0    .0
315.  *    .6    .5    .7    .6    .3    .5    .2    .5    .6    .8    .9   1.0   1.0    .7    .0    .0    .0    .0    .0    .0
320.  *    .6    .5    .8    .6    .3    .4    .3    .6    .5    .9    .9   1.0   1.0    .8    .0    .0    .0    .0    .0    .0
325.  *    .5    .5    .9    .6    .3    .4    .2    .6    .5    .9    .9    .9    .9    .8    .0    .0    .0    .0    .0    .0
330.  *    .5    .5    .8    .6    .3    .4    .3    .6    .5    .8    .9   1.0    .9    .8    .0    .0    .0    .0    .0    .0
335.  *    .5    .5    .8    .6    .3    .4    .3    .4    .6    .6    .9    .9    .9    .7    .0    .0    .0    .0    .0    .0
340.  *    .5    .5    .8    .7    .3    .4    .3    .2    .5    .7    .9    .9    .9    .7    .0    .0    .0    .0    .0    .0
345.  *    .5    .5    .8    .7    .2    .5    .4    .3    .3    .8    .8    .9    .8    .7    .0    .0    .0    .0    .0    .0
350.  *    .5    .6    .8    .6    .2    .7    .3    .3    .3    .7    .9    .9    .9    .7    .0    .0    .0    .0    .0    .0
355.  *    .5    .6    .8    .6    .4    .8    .2    .2    .4    .7    .8    .9    .9    .7    .0    .0    .0    .0    .0    .0
360.  *    .5    .6    .8    .6    .4    .6    .4    .2    .4    .7    .7    .9    .8    .8    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *    .9   1.1    .9    .8    .9    .8    .4    .6    .6    .9   1.2   1.3   1.5   1.5   1.2   1.5   1.3   1.1   1.1   1.0
DEGR. *   75    65    65    65    50    15     0   310   275   295   285   280   270   260   225   210   220   100   130   115

1
                                                                                                                    PAGE   5
     JOB: Site 6 NoBld AM 2030 - 6NBAM30.DAT                   RUN: Site 6 NoBld AM 2030

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND   * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .0
  75.  *    .0
  80.  *    .1
  85.  *    .4
  90.  *    .5
  95.  *    .6
 100.  *    .7
 105.  *    .8
 110.  *    .7
 115.  *    .8
 120.  *    .8
 125.  *    .8
 130.  *    .7
 135.  *    .7
 140.  *    .7
 145.  *    .6
 150.  *    .6
 155.  *    .5
 160.  *    .5
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .4
1
                                                                                                                            PAGE  6
      JOB: Site 6 NoBld AM 2030 - 6NBAM30.DAT                    RUN: Site 6 NoBld AM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .4
 215.  *    .4
 220.  *    .4
 225.  *    .4
 230.  *    .4
 235.  *    .4
 240.  *    .5
 245.  *    .5
 250.  *    .6
 255.  *    .5
 260.  *    .5
 265.  *    .4
 270.  *    .3
 275.  *    .2
 280.  *    .2
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .8
 DEGR. *  105

 THE HIGHEST CONCENTRATION IS    1.50 PPM AT  260 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS    1.50 PPM AT  210 DEGREES FROM REC16.
 THE 3RD HIGHEST CONCENTRATION IS    1.50 PPM AT  270 DEGREES FROM REC13.
```

```
Site 6 NoBld PM 2014 - 6NBPM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 NoBld PM 2014                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.     58111.4   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.     58111.4   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       121        48       2.0  581  102.2 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.      8311.4   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.      8311.4   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       121        48       2.0   83  102.2 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.      8311.4   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.     93111.4   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.     93111.4   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.     93111.4   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.     93111.4   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.     93111.4   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.     93111.4   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.    179011.4   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.    179011.4   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.    179011.4   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.    179011.4   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.    179011.4   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.    105611.4   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       121        17       2.0 1056  102.2 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     73411.4   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       121        93       2.0  734  102.2 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.    110011.4   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.    110011.4   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     47711.4   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      4411.4   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       121       111       2.0   44  102.2 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     43311.4   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     43311.4   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       121        86       2.0  433  102.2 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     43311.4   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     81711.4   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     81711.4   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     81711.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 6 NoBld PM 2014 - 6NBPM14.DAT                  RUN: Site 6 NoBld PM 2014
      DATE: 05/10/2009   TIME: 16:08:15.24


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. NB        2A aprch  *  2001.0    2001.0    2781.0    2010.0 *     780.    89. AG    581.  11.4    .0 44.0
       2. NB        2A thru   *  2781.0    2010.0    2989.0    2020.0 *     208.    87. AG    581.  11.4    .0 44.0
       3. NB        2A thru   *  2968.0    2019.0    2892.0    2015.7 *      76.   268. AG    217. 100.0    .0 24.0  .29   3.9
       4. NB        2A rt     *  2716.0    2000.0    2889.0    1980.0 *     174.    97. AG     83.  11.4    .0 32.0
       5. NB        2A rt     *  2889.0    1980.0    2957.0    1942.0 *      78.   119. AG     83.  11.4    .0 32.0
       6. NB        2A rt     *  2897.0    1975.0    2916.1    1964.4 *      22.   119. AG    109. 100.0    .0 12.0  .09   1.1
       7. NB        2A rt     *  2957.0    1942.0    3003.0    1886.0 *      72.   141. AG     83.  11.4    .0 32.0
       8. NB        2A depart *  2991.0    2022.0    3120.0    2046.0 *     131.    79. AG    931.  11.4    .0 44.0
       9. NB        2A depart *  3120.0    2046.0    3259.0    2100.0 *     149.    69. AG    931.  11.4    .0 44.0
      10. NB        2A depart *  3259.0    2100.0    3389.0    2185.0 *     155.    57. AG    931.  11.4    .0 44.0
      11. NB        2A depart *  3389.0    2185.0    3483.0    2285.0 *     137.    43. AG    931.  11.4    .0 44.0
      12. NB        2A depart *  3483.0    2285.0    3678.0    2522.0 *     307.    39. AG    931.  11.4    .0 44.0
      13. NB        2A depart *  3678.0    2522.0    3786.0    2625.0 *     149.    46. AG    931.  11.4    .0 44.0
      14. SB        2A aprch  *  3770.0    2644.0    3666.0    2543.0 *     145.   226. AG   1790.  11.4    .0 44.0
      15. SB        2A aprch  *  3666.0    2543.0    3422.0    2252.0 *     380.   220. AG   1790.  11.4    .0 44.0
      16. SB        2A aprch  *  3422.0    2252.0    3332.0    2173.0 *     120.   229. AG   1790.  11.4    .0 44.0
      17. SB        2A aprch  *  3332.0    2173.0    3236.0    2117.0 *     111.   240. AG   1790.  11.4    .0 44.0
      18. SB        2A aprch  *  3236.0    2117.0    3138.0    2078.0 *     105.   248. AG   1790.  11.4    .0 44.0
      19. SB        2A thru   *  3138.0    2078.0    3001.0    2050.0 *     140.   258. AG   1056.  11.4    .0 44.0
      20. SB        2A thru   *  3033.0    2056.0    3081.0    2066.2 *      49.    78. AG     77. 100.0    .0 24.0  .36   2.5
      21. SB        2A left   *  3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    734.  11.4    .0 32.0
      22. SB        2A left   *  3036.0    2049.0    7269.3    2975.0 *    4333.    78. AG    211. 100.0    .0 12.0 2.09 220.1
      23. SB        2A depart *  3000.0    2046.0    2878.0    2037.0 *     122.   266. AG   1100.  11.4    .0 44.0
      24. SB        2A depart *  2878.0    2037.0    2000.0    2028.0 *     878.   269. AG   1100.  11.4    .0 44.0
      25. WB        5 aprch   *  3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    477.  11.4    .0 32.0
      26. WB        5 left    *  3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     44.  11.4    .0 32.0
      27. WB        5 left    *  3015.0    2004.0    3018.5    1977.0 *      27.   173. AG    251. 100.0    .0 12.0  .51   1.4
      28. WB        5 right   *  3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    433.  11.4    .0 32.0
      29. WB        5 right   *  3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    433.  11.4    .0 32.0
      30. WB        5 right   *  3106.0    2001.0    2760.0    1530.8 *     584.   216. AG    195. 100.0    .0 12.0 1.07  29.7
      31. WB        5 right   *  3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    433.  11.4    .0 32.0
      32. EB        5 depart  *  2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    817.  11.4    .0 32.0
      33. EB        5 depart  *  3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    817.  11.4    .0 32.0
      34. EB        5 depart  *  3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    817.  11.4    .0 32.0
1
                                                                                                                        PAGE  2
      JOB: Site 6 NoBld PM 2014 - 6NBPM14.DAT                  RUN: Site 6 NoBld PM 2014
      DATE: 05/10/2009   TIME: 16:08:15.24

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *     121       48       2.0       581       1770     102.20      1        3
       6. NB        2A rt     *     121       48       2.0        83       1583     102.20      1        3
      20. SB        2A thru   *     121       17       2.0      1056       1770     102.20      1        3
      22. SB        2A left   *     121       93       2.0       734       1770     102.20      1        3
      27. WB        5 left    *     121      111       2.0        44       1770     102.20      1        3
      30. WB        5 right   *     121       86       2.0       433       1583     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X          Y          Z         *
     -------------------------*--------------------------------------*
      1. SW MID W             *      2594.0     1978.0       5.0     *
      2. SW 164 W             *      2757.0     1973.0       5.0     *
      3. SW 82 W              *      2839.0     1964.0       5.0     *
      4. SW CNR               *      2919.0     1936.0       5.0     *
      5. SW 82 S              *      2978.0     1874.0       5.0     *
      6. SW 164 S             *      3003.0     1794.0       5.0     *
      7. SW MID S             *      3021.0     1679.0       5.0     *
      8. SE MID S             *      3105.0     1694.0       5.0     *
      9. SE 164 S             *      3072.0     1811.0       5.0     *
     10. SE 82 S              *      3074.0     1891.0       5.0     *
     11. SE CNR               *      3109.0     1962.0       5.0     *
     12. SE 82 E              *      3164.0     2025.0       5.0     *
     13. SE 164 E             *      3242.0     2062.0       5.0     *
     14. SE MID E             *      3360.0     2134.0       5.0     *
     15. NE MID E             *      3286.0     2172.0       5.0     *
     16. NE 164 E             *      3153.0     2110.0       5.0     *
     17. NE 82 E              *      3074.0     2088.0       5.0     *
     18. N CNR                *      2994.0     2070.0       5.0     *
     19. NW 82 W              *      2912.0     2063.0       5.0     *
     20. NW 164 W             *      2829.0     2063.0       5.0     *
     21. NW  MID W            *      2704.0     2064.0       5.0     *
1
                                                                                                                        PAGE  3
      JOB: Site 6 NoBld PM 2014 - 6NBPM14.DAT                  RUN: Site 6 NoBld PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
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WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   .5    .4    .3    .6    .4    .8    .5    .2    .6    .9   1.1   1.1   1.3    .8    .0    .0    .0    .0    .0    .0
  5.  *   .5    .4    .3    .6    .5   1.0    .7    .2    .6    .9   1.1   1.1   1.2   1.0    .1    .0    .0    .0    .0    .0
 10.  *   .5    .4    .3    .5    .6   1.2    .6    .1    .4   1.0   1.0   1.0   1.3   1.0    .1    .0    .0    .0    .0    .0
 15.  *   .5    .3    .4    .5    .7   1.1    .6    .1    .3    .8   1.0   1.0   1.2   1.0    .1    .0    .0    .0    .0    .0
 20.  *   .5    .4    .5    .4    .8   1.1    .6    .1    .4    .7    .9   1.1   1.3   1.0    .1    .1    .0    .0    .0    .0
 25.  *   .5    .4    .4    .4    .9   1.0    .5    .2    .3    .5    .7   1.1   1.4   1.3    .1    .1    .0    .0    .0    .0
 30.  *   .5    .4    .5    .6    .8    .8    .5    .2    .5    .6    .8   1.1   1.4   1.2    .3    .1    .0    .0    .0    .0
 35.  *   .5    .4    .5    .7    .9    .9    .6    .2    .3    .7    .9   1.4   1.4   1.0    .3    .1    .0    .0    .0    .0
 40.  *   .5    .4    .6    .8   1.2    .7    .6    .1    .2    .6   1.0   1.3   1.8   1.0    .6    .2    .0    .0    .0    .0
 45.  *   .5    .4    .6    .7   1.1    .7    .5    .1    .2    .6    .8   1.4   1.7    .8    .7    .3    .1    .1    .0    .0
 50.  *   .5    .5    .7    .9   1.3    .5    .5    .1    .1    .4    .8   1.3   1.5    .9   1.0    .4    .2    .2    .0    .0
 55.  *   .5    .5    .9    .9   1.2    .6    .4    .1    .2    .3    .9   1.2   1.2    .5   1.2    .6    .5    .2    .2    .0
 60.  *   .5    .8   1.0   1.1   1.0    .6    .4    .1    .2    .2    .6   1.1   1.2    .5   1.1    .9    .6    .5    .3    .1
 65.  *   .6    .7   1.0   1.0    .9    .6    .4    .1    .2    .2    .3    .8    .9    .6   1.5   1.1    .9    .8    .4    .2
 70.  *   .6    .8   1.1    .9    .9    .5    .4    .1    .1    .2    .3    .7    .7    .6   1.4   1.4   1.2   1.1    .6    .4
 75.  *   .6    .8   1.1    .6    .9    .5    .5    .1    .1    .2    .2    .5    .6    .8   1.4   1.5   1.3   1.5    .9    .5
 80.  *   .7    .5    .9    .4    .8    .5    .4    .0    .1    .1    .2    .3    .4    .9   1.5   1.7   1.5   1.4   1.2    .7
 85.  *   .6    .6    .7    .3    .8    .4    .3    .0    .0    .1    .1    .2    .3   1.0   1.6   1.7   1.6   1.8   1.3    .9
 90.  *   .3    .4    .3    .4    .7    .4    .3    .0    .0    .0    .1    .1    .2   1.0   1.6   1.7   1.7   1.7   1.2   1.1
 95.  *   .4    .4    .3    .3    .7    .4    .4    .0    .0    .0    .0    .1    .1    .9   1.4   1.7   1.7   1.6   1.3   1.1
100.  *   .2    .2    .2    .3    .8    .4    .4    .0    .0    .0    .0    .0    .0    .9   1.3   1.7   1.6   1.7    .9    .9
105.  *   .1    .1    .2    .3    .8    .4    .4    .0    .0    .0    .0    .0    .0    .8   1.3   1.7   1.5   1.7   1.0   1.1
110.  *   .1    .1    .2    .3    .7    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.3   1.4   1.5   1.5   1.2   1.1
115.  *   .1    .1    .2    .3    .6    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.3   1.3   1.5   1.4   1.2   1.0
120.  *   .1    .1    .2    .3    .7    .4    .4    .0    .0    .0    .0    .0    .0    .7   1.2   1.3   1.6   1.4   1.2   1.1
125.  *   .1    .1    .2    .4    .8    .4    .4    .0    .0    .0    .0    .0    .0    .7   1.1   1.3   1.4   1.4   1.2   1.0
130.  *   .1    .1    .2    .4    .8    .5    .4    .0    .0    .0    .0    .0    .0    .7   1.1   1.3   1.3   1.2   1.3   1.1
135.  *   .1    .1    .2    .5    .8    .5    .4    .0    .0    .0    .0    .0    .0    .6   1.2   1.2   1.3   1.1   1.1   1.0
140.  *   .1    .2    .3    .4    .8    .7    .4    .0    .0    .0    .0    .0    .0    .6   1.1   1.2   1.4   1.0   1.1    .9
145.  *   .1    .2    .3    .5    .9    .7    .5    .0    .0    .0    .0    .0    .0    .6   1.2   1.3   1.4   1.0   1.2    .7
150.  *   .1    .2    .2    .5    .9    .6    .4    .1    .1    .0    .0    .0    .0    .6   1.1   1.2   1.4   1.1   1.2    .7
155.  *   .0    .1    .2    .5    .8    .6    .4    .2    .2    .0    .0    .0    .0    .6   1.1   1.3   1.4   1.0   1.5    .7
160.  *   .0    .1    .2    .5    .8    .6    .4    .2    .2    .2    .0    .0    .0    .6   1.1   1.3   1.4   1.2   1.5    .7
165.  *   .0    .1    .1    .3    .8    .5    .3    .3    .3    .2    .0    .0    .0    .6   1.1   1.3   1.4   1.4   1.2    .6
170.  *   .0    .1    .1    .3    .7    .4    .2    .4    .3    .2    .2    .0    .0    .6   1.0   1.3   1.6   1.5   1.1    .6
175.  *   .0    .1    .1    .2    .6    .2    .1    .4    .5    .3    .2    .0    .0    .6   1.1   1.3   1.8   1.4   1.1    .6
180.  *   .0    .1    .1    .2    .6    .2    .1    .4    .4    .3    .2    .1    .0    .6   1.1   1.3   1.8   1.2   1.1    .6
185.  *   .0    .0    .1    .2    .5    .0    .0    .4    .4    .3    .2    .2    .0    .6   1.1   1.5   1.6   1.1   1.0    .6
190.  *   .0    .0    .1    .2    .5    .0    .0    .4    .4    .3    .3    .2    .1    .6   1.2   1.5   1.8   1.0   1.0    .6
195.  *   .0    .0    .1    .2    .5    .0    .0    .4    .5    .2    .2    .0    .0    .6   1.3   1.7   1.8   1.0   1.0    .5
200.  *   .0    .0    .0    .1    .5    .0    .0    .4    .4    .4    .3    .1    .0    .6   1.5   1.8   1.8    .9    .9    .5
205.  *   .0    .0    .0    .1    .5    .1    .0    .4    .4    .5    .4    .2    .0    .7   1.5   1.8   1.8    .9    .8    .5
1
                                                                                                               PAGE  4
     JOB: Site 6 NoBld PM 2014 - 6NBPM14.DAT                    RUN: Site 6 NoBld PM 2014

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *   .0    .0    .0    .1    .4    .1    .0    .4    .4    .5    .5    .3    .1    .7   1.6   1.7   1.7    .9    .9    .5
215.  *   .0    .0    .0    .0    .3    .2    .0    .4    .5    .4    .6    .3    .1    .8   1.6   1.9   1.7    .8    .8    .5
220.  *   .0    .0    .0    .0    .3    .2    .0    .4    .5    .5    .7    .3    .2   1.0   1.6   1.9   1.7    .9    .8    .6
225.  *   .0    .0    .0    .0    .2    .3    .0    .4    .5    .5    .7    .6    .2   1.0   1.6   1.8   1.6   1.0    .8    .7
230.  *   .0    .0    .0    .0    .1    .3    .0    .4    .6    .7    .8    .6    .2   1.1   1.6   1.6   1.7   1.0    .7    .7
235.  *   .0    .0    .0    .0    .1    .4    .1    .4    .6    .8    .9    .7    .3   1.3   1.4   1.5   1.3   1.1    .7    .7
240.  *   .0    .0    .0    .0    .0    .4    .1    .4    .6    .8    .8    .6    .3   1.5   1.5   1.6   1.3   1.1    .8    .6
245.  *   .0    .0    .0    .0    .0    .4    .1    .5    .6    .8    .8    .7    .4   1.5   1.3   1.5   1.3    .9    .9    .8
250.  *   .0    .0    .0    .0    .0    .4    .1    .5    .6    .7    .7    .6    .6   1.8    .8   1.3   1.2   1.1    .8    .8
255.  *   .1    .1    .0    .0    .0    .4    .2    .5    .6    .7    .7    .7   1.0   1.8    .6   1.1   1.1    .9    .9    .8
260.  *   .2    .2    .2    .0    .0    .4    .2    .5    .6    .7    .8    .9   1.0   1.8    .5    .8    .9   1.0    .9    .8
265.  *   .3    .2    .2    .2    .0    .3    .2    .5    .5    .5    .7   1.3   1.2   1.7    .2    .3    .7    .8    .8    .7
270.  *   .4    .4    .2    .2    .0    .3    .2    .4    .5    .7   1.0   1.2   1.5   1.4    .2    .2    .6    .6    .6    .6
275.  *   .5    .4    .4    .2    .1    .3    .2    .5    .5    .9   1.1   1.1   1.4   1.1    .1    .2    .3    .5    .5    .5
280.  *   .6    .5    .4    .3    .2    .4    .2    .5    .6    .9   1.3   1.2   1.5   1.1    .1    .0    .2    .2    .3    .3
285.  *   .6    .6    .5    .3    .2    .4    .2    .5    .6    .9   1.2   1.1   1.4   1.0    .1    .0    .1    .2    .2    .2
290.  *   .6    .5    .5    .3    .2    .5    .3    .6    .7    .8   1.2   1.3   1.4    .9    .1    .0    .1    .1    .1    .1
295.  *   .6    .5    .5    .4    .2    .5    .3    .6    .6   1.0   1.2   1.2   1.3    .7    .1    .0    .0    .1    .0    .1
300.  *   .6    .5    .5    .4    .2    .5    .3    .6    .6   1.0   1.2   1.1   1.1    .7    .0    .0    .0    .0    .0    .0
305.  *   .5    .5    .5    .3    .1    .4    .3    .6    .6   1.0   1.1   1.1   1.1    .8    .0    .0    .0    .0    .0    .0
310.  *   .5    .5    .4    .3    .2    .4    .3    .6    .6   1.1   1.0   1.0   1.1    .8    .0    .0    .0    .0    .0    .0
315.  *   .5    .5    .4    .4    .2    .4    .3    .6    .5    .9   1.1   1.1   1.1    .7    .0    .0    .0    .0    .0    .0
320.  *   .5    .5    .3    .4    .3    .4    .3    .6    .7   1.0   1.0   1.1   1.1    .8    .0    .0    .0    .0    .0    .0
325.  *   .5    .4    .3    .3    .4    .4    .3    .5    .6   1.0   1.0   1.1   1.1    .7    .0    .0    .0    .0    .0    .0
330.  *   .5    .4    .3    .5    .4    .5    .3    .5    .6    .9   1.0   1.1   1.1    .8    .0    .0    .0    .0    .0    .0
335.  *   .5    .4    .3    .5    .3    .5    .2    .4    .6   1.0   1.2   1.1   1.2    .7    .0    .0    .0    .0    .0    .0
340.  *   .5    .4    .3    .5    .3    .7    .3    .4    .4    .7   1.1   1.1   1.1    .8    .0    .0    .0    .0    .0    .0
345.  *   .5    .4    .3    .6    .4    .7    .4    .3    .5    .8   1.1   1.1   1.1    .8    .0    .0    .0    .0    .0    .0
350.  *   .5    .4    .3    .5    .4    .7    .5    .2    .7    .9   1.0   1.0   1.2    .7    .0    .0    .0    .0    .0    .0
355.  *   .5    .4    .3    .5    .4    .9    .5    .2    .6    .9    .8   1.1   1.1    .7    .0    .0    .0    .0    .0    .0
360.  *   .5    .4    .3    .6    .4    .8    .5    .2    .6    .9   1.1   1.1   1.3    .8    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   .7    .8   1.1   1.1   1.3   1.2    .7    .6    .7   1.1   1.3   1.4   1.8   1.8   1.6   1.9   1.8   1.8   1.5   1.1
DEGR. *  80    70    70    60    50    10     5   290   320   310   280    35    40   250    85   220   175    85   155    90

1
                                                                                                               PAGE  5
     JOB: Site 6 NoBld PM 2014 - 6NBPM14.DAT                    RUN: Site 6 NoBld PM 2014

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .1
  70.  *    .2
  75.  *    .3
  80.  *    .3
  85.  *    .5
  90.  *    .8
  95.  *    .8
 100.  *    .8
 105.  *   1.0
 110.  *    .9
 115.  *    .9
 120.  *    .8
 125.  *    .8
 130.  *    .8
 135.  *    .6
 140.  *    .6
 145.  *    .6
 150.  *    .6
 155.  *    .6
 160.  *    .6
 165.  *    .6
 170.  *    .6
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                              PAGE  6
      JOB: Site 6 NoBld PM 2014 - 6NBPM14.DAT                    RUN: Site 6 NoBld PM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .6
 225.  *    .6
 230.  *    .7
 235.  *    .7
 240.  *    .7
 245.  *    .7
 250.  *    .8
 255.  *    .8
 260.  *    .8
 265.  *    .6
 270.  *    .5
 275.  *    .4
 280.  *    .2
 285.  *    .1
 290.  *    .1
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.0
 DEGR. *  105

 THE HIGHEST CONCENTRATION IS    1.90 PPM AT  220 DEGREES FROM REC16.
 THE 2ND HIGHEST CONCENTRATION IS    1.80 PPM AT  250 DEGREES FROM REC14.
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT  175 DEGREES FROM REC17.
```

```
Site 6 NoBld PM 2030 - 6NBPM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 NoBld PM 2030                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.     655 9.2   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.     535 9.2   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       121        73       2.0  535   84.1 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.     120 9.2   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.     120 9.2   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       121        73       2.0  120   84.1 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.     120 9.2   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.     980 9.2   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.     980 9.2   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.     980 9.2   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.     980 9.2   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.     980 9.2   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.     980 9.2   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.    1950 9.2   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.    1950 9.2   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.    1950 9.2   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.    1950 9.2   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.    1950 9.2   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.    1205 9.2   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       121        19       2.0 1205   84.1 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     745 9.2   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       121        71       2.0  745   84.1 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.    1270 9.2   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.    1270 9.2   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     510 9.2   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      65 9.2   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       121       110       2.0   65   84.1 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     445 9.2   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     445 9.2   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       121        62       2.0  445   84.1 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     445 9.2   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     865 9.2   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     865 9.2   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     865 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                 PAGE  1

      JOB: Site 6 NoBld PM 2030 - 6NBPM30.DAT                  RUN: Site 6 NoBld PM 2030
      DATE: 05/10/2009   TIME: 16:20:16.19


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG    655.   9.2    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG    535.   9.2    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2861.5    2014.4 *     107.   268. AG    272. 100.0    .0 24.0  .42   5.4
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG    120.   9.2    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG    120.   9.2    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2938.9    1951.8 *      48.   119. AG    136. 100.0    .0 12.0  .21   2.4
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG    120.   9.2    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG    980.   9.2    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG    980.   9.2    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG    980.   9.2    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG    980.   9.2    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG    980.   9.2    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG    980.   9.2    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG   1950.   9.2    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG   1950.   9.2    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG   1950.   9.2    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG   1950.   9.2    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG   1950.   9.2    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG   1205.   9.2    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3094.2    2068.9 *      63.    78. AG     71. 100.0    .0 24.0  .42   3.2
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    745.   9.2    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    4156.9    2294.2 *    1147.    78. AG    132. 100.0    .0 12.0 1.11  58.3
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG   1270.   9.2    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG   1270.   9.2    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    510.   9.2    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     65.   9.2    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3020.4    1962.3 *      42.   173. AG    205. 100.0    .0 12.0  .64   2.1
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    445.   9.2    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    445.   9.2    .0 32.0
      30. WB        5 right   *   3106.0    2001.0    3016.6    1879.5 *     151.   216. AG    116. 100.0    .0 12.0  .62   7.7
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    445.   9.2    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    865.   9.2    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    865.   9.2    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    865.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 NoBld PM 2030 - 6NBPM30.DAT                  RUN: Site 6 NoBld PM 2030
      DATE: 05/10/2009   TIME: 16:20:16.19

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *     121       73       2.0       535       1770      84.10      1        3
       6. NB        2A rt     *     121       73       2.0       120       1583      84.10      1        3
      20. SB        2A thru   *     121       19       2.0      1205       1770      84.10      1        3
      22. SB        2A left   *     121       71       2.0       745       1770      84.10      1        3
      27. WB        5 left    *     121      110       2.0        65       1770      84.10      1        3
      30. WB        5 right   *     121       62       2.0       445       1583      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      2594.0     1978.0       5.0    *
      2. SW 164 W             *      2757.0     1973.0       5.0    *
      3. SW 82 W              *      2839.0     1964.0       5.0    *
      4. SW CNR               *      2919.0     1936.0       5.0    *
      5. SW 82 S              *      2978.0     1874.0       5.0    *
      6. SW 164 S             *      3003.0     1794.0       5.0    *
      7. SW MID S             *      3021.0     1679.0       5.0    *
      8. SE MID S             *      3105.0     1694.0       5.0    *
      9. SE 164 S             *      3072.0     1811.0       5.0    *
     10. SE 82 S              *      3074.0     1891.0       5.0    *
     11. SE CNR               *      3109.0     1962.0       5.0    *
     12. SE 82 E              *      3164.0     2025.0       5.0    *
     13. SE 164 E             *      3242.0     2062.0       5.0    *
     14. SE MID E             *      3360.0     2134.0       5.0    *
     15. NE MID E             *      3286.0     2172.0       5.0    *
     16. NE 164 E             *      3153.0     2110.0       5.0    *
     17. NE 82 E              *      3074.0     2088.0       5.0    *
     18. N CNR                *      2994.0     2070.0       5.0    *
     19. NW 82 W              *      2912.0     2063.0       5.0    *
     20. NW 164 W             *      2829.0     2063.0       5.0    *
     21. NW  MID W            *      2704.0     2064.0       5.0    *
1
                                                                                                                 PAGE  3
      JOB: Site 6 NoBld PM 2030 - 6NBPM30.DAT                  RUN: Site 6 NoBld PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *    .4    .4    .3    .8    .3    .5    .3    .0    .4    .8    .6    .8    .7    .7    .0    .0    .0    .0    .0    .0
  5.  *    .4    .4    .4    .9    .5    .4    .3    .0    .3    .8    .9    .7    .9    .9    .0    .0    .0    .0    .0    .0
 10.  *    .4    .3    .4    .9    .5    .5    .4    .1    .2    .6    .9    .9    .9    .9    .1    .0    .0    .0    .0    .0
 15.  *    .4    .3    .4    .8    .5    .6    .4    .1    .3    .6    .6    .9    .9    .9    .1    .0    .0    .0    .0    .0
 20.  *    .4    .3    .5    .8    .6    .8    .5    .1    .2    .6    .5    .9   1.0   1.0    .1    .0    .0    .0    .0    .0
 25.  *    .4    .3    .5    .7    .6    .7    .5    .1    .2    .4    .5    .9   1.2   1.0    .1    .1    .0    .0    .0    .0
 30.  *    .4    .4    .6    .8    .7    .7    .4    .2    .2    .4    .6   1.0   1.2   1.1    .3    .1    .0    .0    .0    .0
 35.  *    .4    .4    .7    .8    .8    .6    .4    .2    .2    .5    .7   1.2   1.1   1.0    .3    .1    .0    .0    .0    .0
 40.  *    .5    .4    .8    .8    .7    .6    .4    .1    .2    .5    .6   1.2   1.1    .9    .4    .2    .0    .0    .0    .0
 45.  *    .5    .4    .7    .9    .7    .5    .4    .1    .2    .5    .7   1.1   1.2    .8    .6    .2    .1    .1    .0    .0
 50.  *    .5    .6    .7   1.0    .7    .4    .4    .1    .1    .2    .8   1.0   1.1    .5    .9    .4    .2    .2    .0    .0
 55.  *    .5    .5    .9    .9    .5    .4    .4    .0    .1    .1    .7    .9   1.0    .4    .9    .5    .3    .2    .1    .0
 60.  *    .5    .6    .9    .8    .6    .4    .3    .0    .1    .1    .2    .9    .9    .4   1.1    .7    .6    .3    .2    .0
 65.  *    .5    .6    .9    .8    .6    .4    .3    .0    .1    .1    .1    .5    .4    .4   1.2    .9    .7    .6    .3    .1
 70.  *    .6    .6    .9    .6    .6    .4    .3    .0    .0    .1    .1    .4    .4    .3   1.2   1.0   1.0    .8    .5    .1
 75.  *    .6    .6    .8    .4    .6    .4    .4    .0    .0    .1    .1    .2    .4    .4   1.2   1.1   1.0   1.0    .6    .2
 80.  *    .6    .5    .5    .4    .4    .4    .3    .0    .0    .0    .1    .1    .2    .5   1.0   1.3   1.1   1.2    .8    .4
 85.  *    .5    .5    .4    .3    .4    .4    .3    .0    .0    .0    .0    .1    .2    .5   1.3   1.3   1.2   1.3   1.0    .7
 90.  *    .4    .3    .5    .2    .4    .3    .3    .0    .0    .0    .0    .1    .1    .6   1.3   1.3   1.4   1.4   1.1    .7
 95.  *    .3    .1    .3    .2    .4    .3    .3    .0    .0    .0    .0    .0    .1    .6   1.1   1.2   1.4   1.4   1.1    .9
100.  *    .1    .1    .3    .2    .3    .3    .4    .0    .0    .0    .0    .0    .0    .5   1.1   1.4   1.2   1.4    .8   1.0
105.  *    .0    .0    .2    .2    .3    .4    .3    .0    .0    .0    .0    .0    .0    .5   1.1   1.4   1.2   1.3    .9   1.1
110.  *    .0    .0    .2    .2    .2    .4    .3    .0    .0    .0    .0    .0    .0    .5   1.1   1.2   1.2   1.1   1.0   1.0
115.  *    .0    .0    .1    .2    .2    .4    .3    .0    .0    .0    .0    .0    .0    .5   1.1   1.1   1.4   1.1   1.1   1.1
120.  *    .0    .0    .0    .1    .2    .4    .3    .0    .0    .0    .0    .0    .0    .5   1.0   1.1   1.3   1.0   1.2   1.1
125.  *    .0    .0    .0    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .4   1.0   1.1   1.2   1.2   1.2   1.0
130.  *    .0    .0    .0    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .4   1.0   1.0   1.2   1.0   1.1   1.0
135.  *    .0    .0    .1    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .4   1.0   1.0   1.2    .9   1.2   1.0
140.  *    .0    .0    .0    .2    .3    .5    .4    .0    .0    .0    .0    .0    .0    .4   1.0   1.0   1.2    .9   1.2    .9
145.  *    .0    .0    .1    .2    .3    .5    .4    .0    .0    .0    .0    .0    .0    .4   1.0   1.0   1.2    .9   1.0    .8
150.  *    .0    .0    .1    .3    .4    .5    .4    .1    .1    .0    .0    .0    .0    .4   1.0   1.0   1.1    .9   1.1    .6
155.  *    .0    .0    .1    .3    .4    .5    .4    .2    .2    .0    .0    .0    .0    .4   1.0   1.0   1.2    .9   1.1    .6
160.  *    .0    .0    .0    .3    .4    .4    .3    .2    .2    .1    .0    .0    .0    .4   1.0   1.0   1.3   1.0   1.2    .5
165.  *    .0    .0    .0    .1    .3    .4    .2    .3    .2    .2    .0    .0    .0    .4   1.0   1.0   1.3   1.2   1.1    .6
170.  *    .0    .0    .0    .0    .3    .3    .1    .3    .3    .2    .1    .0    .0    .4   1.0   1.0   1.3   1.2   1.1    .5
175.  *    .0    .0    .0    .0    .2    .2    .1    .4    .3    .2    .2    .0    .0    .4   1.0   1.0   1.4    .8   1.1    .5
180.  *    .0    .0    .0    .0    .0    .2    .1    .4    .4    .3    .2    .1    .0    .4   1.0   1.0   1.3    .8   1.1    .5
185.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .1    .0    .4   1.0   1.1   1.3   1.0   1.1    .5
190.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .3    .0    .0    .4   1.0   1.1   1.4    .8   1.1    .5
195.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .0    .0    .4   1.2   1.3   1.5    .7   1.0    .5
200.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .1    .0    .0    .4   1.2   1.4   1.5    .7   1.0    .5
205.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .0    .0    .4   1.2   1.3   1.4    .8   1.0    .5
1
                                                                                                                   PAGE  4
     JOB: Site 6 NoBld PM 2030 - 6NBPM30.DAT                   RUN: Site 6 NoBld PM 2030

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .3    .1    .0    .4   1.2   1.2   1.4    .8   1.0    .5
215.  *    .0    .0    .0    .0    .0    .0    .0    .4    .3    .2    .3    .1    .0    .5   1.3   1.2   1.4    .9    .9    .5
220.  *    .0    .0    .0    .0    .0    .0    .0    .3    .3    .2    .2    .1    .0    .6   1.2   1.3   1.5    .9    .9    .6
225.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .2    .4    .1    .1    .6   1.1   1.3   1.5    .9    .9    .6
230.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .2    .5    .4    .1    .7   1.2   1.3   1.3   1.0    .9    .7
235.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .2    .5    .4    .2    .9   1.2   1.2   1.2   1.1    .8    .6
240.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .5    .4    .2   1.0    .9   1.3   1.2   1.1    .8    .6
245.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .5    .4    .3   1.0    .9   1.2   1.3   1.1    .8    .6
250.  *    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .5    .7    .7   1.3    .8   1.1   1.1   1.1    .9    .8
255.  *    .1    .0    .0    .0    .0    .0    .0    .3    .3    .3    .5    .7    .9   1.3    .6   1.0   1.1   1.0    .8    .8
260.  *    .2    .2    .2    .0    .0    .0    .0    .3    .3    .3    .6    .7   1.0   1.5    .3    .8    .8   1.0    .7    .7
265.  *    .3    .2    .2    .1    .0    .0    .0    .2    .3    .3    .8    .8   1.2   1.2    .2    .4    .7    .7    .7    .6
270.  *    .4    .4    .2    .2    .0    .0    .0    .2    .3    .4    .8   1.0   1.2   1.2    .2    .2    .4    .6    .6    .6
275.  *    .4    .4    .3    .2    .1    .0    .0    .2    .3    .5    .8   1.0   1.3    .9    .1    .2    .3    .4    .5    .5
280.  *    .6    .4    .4    .3    .2    .1    .0    .2    .4    .6    .9   1.2   1.2    .9    .1    .0    .2    .2    .3    .3
285.  *    .6    .5    .4    .3    .2    .1    .0    .2    .4    .6   1.0   1.2   1.0    .7    .1    .0    .1    .2    .2    .2
290.  *    .6    .5    .4    .3    .2    .1    .0    .3    .3    .6   1.1   1.0   1.0    .7    .1    .0    .0    .1    .1    .1
295.  *    .6    .5    .3    .3    .2    .1    .1    .5    .3    .6    .9   1.0   1.1    .7    .0    .0    .0    .0    .0    .1
300.  *    .5    .5    .4    .4    .1    .1    .1    .5    .4    .6    .7   1.0   1.0    .7    .0    .0    .0    .0    .0    .0
305.  *    .5    .5    .4    .4    .1    .1    .1    .5    .5    .7    .8    .9   1.0    .7    .0    .0    .0    .0    .0    .0
310.  *    .5    .5    .4    .5    .2    .1    .1    .5    .4    .8    .8    .9   1.0    .7    .0    .0    .0    .0    .0    .0
315.  *    .5    .4    .4    .5    .3    .1    .1    .5    .4    .7    .7   1.0   1.0    .7    .0    .0    .0    .0    .0    .0
320.  *    .5    .4    .3    .5    .3    .2    .1    .3    .4    .7    .7    .9    .9    .7    .0    .0    .0    .0    .0    .0
325.  *    .4    .4    .3    .5    .5    .2    .1    .4    .5    .7    .7    .9    .9    .7    .0    .0    .0    .0    .0    .0
330.  *    .4    .4    .3    .7    .6    .2    .1    .3    .5    .8    .7    .9    .8    .7    .0    .0    .0    .0    .0    .0
335.  *    .4    .4    .3    .8    .5    .1    .1    .4    .5    .8    .8    .9    .9    .7    .0    .0    .0    .0    .0    .0
340.  *    .4    .4    .3    .8    .4    .4    .2    .3    .4    .6    .8    .8    .9    .7    .0    .0    .0    .0    .0    .0
345.  *    .4    .4    .3    .9    .3    .4    .2    .1    .3    .6    .7    .9    .9    .8    .0    .0    .0    .0    .0    .0
350.  *    .4    .4    .3    .8    .4    .4    .3    .2    .5    .7    .7    .8    .9    .7    .0    .0    .0    .0    .0    .0
355.  *    .4    .4    .3    .8    .3    .3    .3    .0    .4    .8    .6    .8    .9    .7    .0    .0    .0    .0    .0    .0
360.  *    .4    .4    .3    .8    .3    .5    .3    .0    .4    .8    .6    .8    .7    .7    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *    .6    .6    .9   1.0    .8    .8    .5    .5    .5    .8   1.1   1.2   1.3   1.5   1.3   1.4   1.5   1.4   1.2   1.1
DEGR. *   70    50    60    50    35    20    20   295   305     0   290   280   275   260    85   100   195    90   120   105

1
                                                                                                                   PAGE  5
     JOB: Site 6 NoBld PM 2030 - 6NBPM30.DAT                   RUN: Site 6 NoBld PM 2030

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .1
  75.  *    .2
  80.  *    .2
  85.  *    .5
  90.  *    .6
  95.  *    .7
 100.  *    .8
 105.  *    .7
 110.  *    .6
 115.  *    .6
 120.  *    .7
 125.  *    .7
 130.  *    .5
 135.  *    .5
 140.  *    .5
 145.  *    .5
 150.  *    .5
 155.  *    .4
 160.  *    .4
 165.  *    .4
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .4
 200.  *    .4
 205.  *    .5
1
                                                                                                                             PAGE  6
      JOB: Site 6 NoBld PM 2030 - 6NBPM30.DAT                  RUN: Site 6 NoBld PM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .5
 225.  *    .5
 230.  *    .5
 235.  *    .6
 240.  *    .7
 245.  *    .7
 250.  *    .7
 255.  *    .7
 260.  *    .6
 265.  *    .6
 270.  *    .5
 275.  *    .4
 280.  *    .2
 285.  *    .1
 290.  *    .1
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .8
 DEGR. *  100

 THE HIGHEST CONCENTRATION IS    1.50 PPM AT  195 DEGREES FROM REC17.
 THE 2ND HIGHEST CONCENTRATION IS    1.50 PPM AT  260 DEGREES FROM REC14.
 THE 3RD HIGHEST CONCENTRATION IS    1.40 PPM AT  100 DEGREES FROM REC16.
```

```
Site 6 Opt1/2AM 2014 - 6B1AM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt1/2AM 2014                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.    168411.4   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.    158511.4   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       120        62       2.0 1585  102.2 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.      9911.4   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.      9911.4   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       120        62       2.0   99  102.2 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.      9911.4   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    227011.4   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    227011.4   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    227011.4   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    227011.4   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    227011.4   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    227011.4   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.     73311.4   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.     73311.4   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.     73311.4   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.     73311.4   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.     73311.4   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.     33211.4   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       120        30       2.0  332  102.2 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     40111.4   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       120        91       2.0  401  102.2 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.     39811.4   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.     39811.4   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     75111.4   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      6611.4   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       120        97       2.0   66  102.2 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     68511.4   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     68511.4   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       120        64       2.0  685  102.2 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     68511.4   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     50011.4   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     50011.4   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     50011.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 6 Opt1/2AM 2014 - 6B1AM14.DAT                   RUN: Site 6 Opt1/2AM 2014
      DATE: 05/10/2009   TIME: 16:25:28.94


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH     EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
        1. NB        2A aprch *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG   1684.  11.4    .0 44.0
        2. NB        2A thru  *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG   1585.  11.4    .0 44.0
        3. NB        2A thru  *   2968.0    2019.0    2570.5    2001.8 *     398.   268. AG    283. 100.0    .0 24.0  .99  20.2
        4. NB        2A rt    *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG     99.  11.4    .0 32.0
        5. NB        2A rt    *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG     99.  11.4    .0 32.0
        6. NB        2A rt    *   2897.0    1975.0    2926.4    1958.7 *      34.   119. AG    142. 100.0    .0 12.0  .14   1.7
        7. NB        2A rt    *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG     99.  11.4    .0 32.0
        8. NB        2A depart *  2991.0    2022.0    3120.0    2046.0 *     131.    79. AG   2270.  11.4    .0 44.0
        9. NB        2A depart *  3120.0    2046.0    3259.0    2100.0 *     149.    69. AG   2270.  11.4    .0 44.0
       10. NB        2A depart *  3259.0    2100.0    3389.0    2185.0 *     155.    57. AG   2270.  11.4    .0 44.0
       11. NB        2A depart *  3389.0    2185.0    3483.0    2285.0 *     137.    43. AG   2270.  11.4    .0 44.0
       12. NB        2A depart *  3483.0    2285.0    3678.0    2522.0 *     307.    39. AG   2270.  11.4    .0 44.0
       13. NB        2A depart *  3678.0    2522.0    3786.0    2625.0 *     149.    46. AG   2270.  11.4    .0 44.0
       14. SB        2A aprch *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG    733.  11.4    .0 44.0
       15. SB        2A aprch *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG    733.  11.4    .0 44.0
       16. SB        2A aprch *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG    733.  11.4    .0 44.0
       17. SB        2A aprch *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG    733.  11.4    .0 44.0
       18. SB        2A aprch *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG    733.  11.4    .0 44.0
       19. SB        2A thru  *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG    332.  11.4    .0 44.0
       20. SB        2A thru  *   3033.0    2056.0    3059.6    2061.6 *      27.    78. AG    137. 100.0    .0 24.0  .13   1.4
       21. SB        2A left  *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    401.  11.4    .0 32.0
       22. SB        2A left  *   3036.0    2049.0    3647.5    2182.8 *     626.    78. AG    208. 100.0    .0 12.0 1.09  31.8
       23. SB        2A depart *  3000.0    2046.0    2878.0    2037.0 *     122.   266. AG    398.  11.4    .0 44.0
       24. SB        2A depart *  2878.0    2037.0    2000.0    2028.0 *     878.   269. AG    398.  11.4    .0 44.0
       25. WB        5 aprch  *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    751.  11.4    .0 32.0
       26. WB        5 left   *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     66.  11.4    .0 32.0
       27. WB        5 left   *   3015.0    2004.0    3019.5    1969.3 *      35.   173. AG    222. 100.0    .0 12.0  .24   1.8
       28. WB        5 right  *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    685.  11.4    .0 32.0
       29. WB        5 right  *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    685.  11.4    .0 32.0
       30. WB        5 right  *   3106.0    2001.0    2888.5    1705.4 *     367.   216. AG    146. 100.0    .0 12.0 1.00  18.6
       31. WB        5 right  *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    685.  11.4    .0 32.0
       32. EB        5 depart *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    500.  11.4    .0 32.0
       33. EB        5 depart *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    500.  11.4    .0 32.0
       34. EB        5 depart *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    500.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 Opt1/2AM 2014 - 6B1AM14.DAT                   RUN: Site 6 Opt1/2AM 2014
      DATE: 05/10/2009   TIME: 16:25:28.94

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
        3. NB        2A thru  *     120       62       2.0      1585       1770     102.20      1        3
        6. NB        2A rt    *     120       62       2.0        99       1583     102.20      1        3
       20. SB        2A thru  *     120       30       2.0       332       1770     102.20      1        3
       22. SB        2A left  *     120       91       2.0       401       1770     102.20      1        3
       27. WB        5 left   *     120       97       2.0        66       1770     102.20      1        3
       30. WB        5 right  *     120       64       2.0       685       1583     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)         *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
       1. SW MID W            *      2594.0     1978.0       5.0   *
       2. SW 164 W            *      2757.0     1973.0       5.0   *
       3. SW 82 W             *      2839.0     1964.0       5.0   *
       4. SW CNR              *      2919.0     1936.0       5.0   *
       5. SW 82 S             *      2978.0     1874.0       5.0   *
       6. SW 164 S            *      3003.0     1794.0       5.0   *
       7. SW MID S            *      3021.0     1679.0       5.0   *
       8. SE MID S            *      3105.0     1694.0       5.0   *
       9. SE 164 S            *      3072.0     1811.0       5.0   *
      10. SE 82 S             *      3074.0     1891.0       5.0   *
      11. SE CNR              *      3109.0     1962.0       5.0   *
      12. SE 82 E             *      3164.0     2025.0       5.0   *
      13. SE 164 E            *      3242.0     2062.0       5.0   *
      14. SE MID E            *      3360.0     2134.0       5.0   *
      15. NE MID E            *      3286.0     2172.0       5.0   *
      16. NE 164 E            *      3153.0     2110.0       5.0   *
      17. NE 82 E             *      3074.0     2088.0       5.0   *
      18. N CNR               *      2994.0     2070.0       5.0   *
      19. NW 82 W             *      2912.0     2063.0       5.0   *
      20. NW 164 W            *      2829.0     2063.0       5.0   *
      21. NW  MID W           *      2704.0     2064.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 6 Opt1/2AM 2014 - 6B1AM14.DAT                   RUN: Site 6 Opt1/2AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
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WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   1.5   1.2   1.0   1.0    .4    .8    .4    .4    .5    .8   1.0   1.3   1.4   1.1    .0    .0    .0    .0    .0    .0
  5.  *   1.5   1.2   1.0    .9    .5    .7    .5    .3    .5    .8   1.0   1.3   1.5   1.1    .0    .0    .0    .0    .0    .0
 10.  *   1.5   1.3   1.0    .9    .5    .9    .7    .2    .5    .8    .9   1.3   1.4   1.2    .0    .0    .0    .0    .0    .0
 15.  *   1.5   1.2   1.0    .9    .6   1.0    .7    .2    .4    .8   1.0   1.4   1.5   1.5    .0    .0    .0    .0    .0    .0
 20.  *   1.5   1.2   1.0    .9    .6    .9    .7    .3    .3    .6    .9   1.3   1.5   1.6    .0    .0    .0    .0    .0    .0
 25.  *   1.5   1.2    .9    .7    .8    .8    .6    .3    .3    .6   1.0   1.3   1.6   1.6    .0    .0    .0    .0    .0    .0
 30.  *   1.5   1.2    .9    .6    .8    .8    .7    .3    .3    .8    .9   1.4   1.9   1.6    .1    .0    .0    .0    .0    .0
 35.  *   1.5   1.3    .9    .8    .7    .8    .8    .3    .4    .6   1.0   1.5   1.9   1.5    .2    .0    .0    .0    .0    .0
 40.  *   1.6   1.3   1.0    .6   1.1    .9    .6    .2    .4    .7   1.1   1.6   2.0   1.6    .4    .1    .0    .0    .0    .0
 45.  *   1.7   1.4   1.0    .8   1.2    .8    .5    .1    .3    .6   1.1   1.8   2.1   1.3    .6    .1    .1    .0    .0    .0
 50.  *   1.7   1.4   1.2   1.0   1.3    .8    .5    .0    .2    .6    .9   1.7   2.1   1.1    .7    .4    .1    .1    .0    .0
 55.  *   1.8   1.3   1.3   1.1   1.2    .4    .3    .0    .1    .4    .8   1.5   1.6    .8    .9    .6    .3    .1    .1    .0
 60.  *   1.8   1.6   1.3   1.0    .9    .4    .3    .0    .1    .2    .6   1.4   1.4    .7   1.0    .6    .4    .3    .1    .1
 65.  *   1.9   1.7   1.5    .9    .9    .4    .3    .0    .0    .1    .4    .9   1.1    .6   1.1    .7    .6    .6    .2    .2
 70.  *   2.0   1.5   1.3    .9    .7    .4    .3    .0    .0    .1    .2    .7    .9    .6   1.1   1.1   1.0    .7    .4    .2
 75.  *   2.1   1.4   1.1    .7    .5    .4    .3    .0    .0    .0    .1    .4    .5    .6   1.2   1.0   1.1   1.1    .6    .4
 80.  *   1.9   1.1    .9    .5    .5    .4    .4    .0    .0    .0    .1    .4    .4    .7   1.2   1.2   1.3   1.2    .6    .5
 85.  *   1.6    .9    .7    .3    .5    .4    .4    .0    .0    .0    .0    .1    .3    .8   1.2   1.5   1.3   1.4   1.0    .8
 90.  *   1.3    .6    .6    .2    .5    .4    .4    .0    .0    .0    .0    .1    .1    .8   1.2   1.4   1.2   1.6   1.2   1.0
 95.  *    .8    .5    .3    .3    .5    .4    .4    .0    .0    .0    .0    .0    .1    .8   1.2   1.5   1.4   1.5   1.0   1.1
100.  *    .6    .3    .2    .3    .5    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.4   1.5   1.4   1.4   1.0   1.0
105.  *    .3    .1    .2    .3    .5    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.3   1.4   1.4   1.5    .9   1.2
110.  *    .3    .1    .1    .3    .6    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.2   1.4   1.5   1.3   1.0   1.1
115.  *    .0    .1    .1    .3    .6    .4    .3    .0    .0    .0    .0    .0    .0    .7   1.2   1.4   1.4   1.3   1.2   1.2
120.  *    .0    .1    .1    .3    .6    .4    .4    .0    .0    .0    .0    .0    .0    .7   1.2   1.3   1.3   1.3   1.1   1.3
125.  *    .0    .1    .1    .2    .6    .4    .4    .0    .0    .0    .0    .0    .0    .7   1.2   1.3   1.3   1.3   1.3   1.2
130.  *    .0    .2    .2    .2    .6    .4    .4    .0    .0    .0    .0    .0    .0    .6   1.2   1.3   1.3   1.2   1.3   1.1
135.  *    .0    .2    .2    .3    .5    .4    .4    .0    .0    .0    .0    .0    .0    .6   1.2   1.3   1.3   1.1   1.4   1.1
140.  *    .0    .2    .2    .3    .7    .4    .4    .0    .0    .0    .0    .0    .0    .6   1.1   1.3   1.3   1.0   1.3   1.2
145.  *    .0    .2    .2    .3    .7    .5    .4    .1    .1    .0    .0    .0    .0    .6   1.1   1.3   1.2   1.1   1.4   1.2
150.  *    .0    .0    .2    .3    .7    .5    .4    .1    .1    .0    .0    .0    .0    .6   1.1   1.2   1.3   1.0   1.3   1.2
155.  *    .0    .0    .2    .3    .7    .5    .4    .2    .2    .1    .0    .0    .0    .6   1.1   1.2   1.5   1.2   1.3   1.2
160.  *    .0    .0    .1    .3    .7    .5    .3    .3    .3    .1    .0    .0    .0    .6   1.1   1.3   1.3   1.3   1.2   1.2
165.  *    .0    .0    .1    .2    .6    .3    .2    .4    .4    .1    .1    .0    .0    .6   1.1   1.4   1.5   1.3   1.2   1.1
170.  *    .0    .0    .0    .1    .6    .3    .2    .4    .4    .3    .1    .0    .0    .6   1.1   1.4   1.5   1.1   1.4   1.0
175.  *    .0    .0    .0    .1    .5    .3    .1    .5    .4    .3    .1    .1    .0    .6   1.1   1.5   1.5   1.0   1.3   1.0
180.  *    .0    .0    .0    .1    .3    .0    .0    .5    .6    .3    .1    .1    .0    .6   1.2   1.3   1.6   1.1   1.3   1.0
185.  *    .0    .0    .0    .1    .3    .0    .0    .5    .5    .4    .1    .1    .1    .6   1.2   1.3   1.6   1.0   1.2   1.0
190.  *    .0    .0    .0    .1    .3    .0    .0    .5    .5    .4    .1    .1    .1    .6   1.1   1.5   1.6    .8   1.1   1.0
195.  *    .0    .0    .0    .0    .3    .0    .0    .4    .4    .3    .2    .1    .1    .6   1.2   1.5   1.6    .9   1.0   1.0
200.  *    .0    .0    .0    .0    .3    .0    .0    .4    .4    .3    .4    .1    .1    .7   1.2   1.8   1.7    .9   1.0   1.0
205.  *    .0    .0    .0    .0    .3    .0    .0    .4    .4    .3    .4    .2    .1    .7   1.3   1.8   1.7    .7   1.0   1.0
1
                                                                                                                   PAGE  4
     JOB: Site 6 Opt1/2AM 2014 - 6B1AM14.DAT                  RUN: Site 6 Opt1/2AM 2014

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .2    .0    .0    .4    .4    .5    .4    .1    .0    .8   1.5   1.8   1.6    .9   1.0   1.0
215.  *    .0    .0    .0    .0    .2    .1    .0    .4    .4    .5    .3    .4    .1    .8   1.4   1.7   1.7   1.0   1.1   1.1
220.  *    .0    .0    .0    .0    .1    .1    .0    .4    .4    .5    .5    .4    .1    .9   1.5   1.4   1.6   1.0   1.1   1.3
225.  *    .0    .0    .0    .0    .1    .1    .0    .4    .4    .5    .5    .5    .2   1.2   1.4   1.4   1.4   1.1   1.2   1.2
230.  *    .0    .0    .0    .0    .0    .1    .0    .4    .3    .5    .6    .6    .2   1.3   1.3   1.5   1.4   1.1   1.3   1.3
235.  *    .0    .0    .0    .0    .0    .2    .0    .4    .4    .7    .7    .5    .3   1.6   1.1   1.3   1.2   1.2   1.3   1.2
240.  *    .0    .0    .0    .0    .0    .2    .0    .4    .4    .6    .7    .5    .5   1.9   1.1   1.3   1.5   1.3   1.4   1.3
245.  *    .1    .0    .0    .0    .0    .2    .0    .4    .4    .7    .8    .6    .9   2.2   1.1   1.2   1.3   1.3   1.3   1.3
250.  *    .1    .1    .0    .0    .0    .2    .0    .4    .4    .7    .8    .9   1.3   2.5    .8   1.1   1.2   1.5   1.5   1.2
255.  *    .2    .2    .2    .0    .0    .3    .0    .5    .4    .6   1.0   1.3   1.6   2.5    .8    .9   1.3   1.3   1.3   1.1
260.  *    .3    .3    .3    .1    .0    .3    .0    .4    .4    .6    .9   1.3   1.7   2.4    .5    .7   1.1   1.1   1.2   1.0
265.  *    .5    .6    .5    .2    .1    .3    .0    .4    .5    .7   1.1   1.7   2.0   2.1    .2    .5    .8   1.0   1.0    .8
270.  *    .7    .9    .8    .3    .1    .2    .0    .4    .5    .7   1.2   1.7   2.2   1.9    .2    .3    .5    .7    .7    .7
275.  *    .9   1.1    .9    .6    .2    .3    .0    .5    .5    .7   1.5   1.6   1.9   1.5    .0    .2    .2    .6    .4    .4
280.  *   1.0   1.3   1.0    .8    .3    .3    .1    .6    .6   1.0   1.6   1.9   1.7   1.3    .0    .0    .2    .2    .3    .2
285.  *   1.1   1.4   1.2    .8    .3    .3    .2    .6    .6   1.0   1.4   1.7   1.5   1.2    .0    .0    .0    .0    .2    .2
290.  *   1.1   1.4   1.3    .9    .5    .5    .2    .6    .6   1.0   1.4   1.8   1.6   1.1    .0    .0    .0    .0    .0    .0
295.  *   1.1   1.5   1.2    .9    .6    .5    .2    .7    .6   1.0   1.2   1.5   1.5   1.0    .0    .0    .0    .0    .0    .0
300.  *   1.2   1.5   1.2    .9    .7    .4    .3    .7    .7   1.1   1.2   1.5   1.4   1.0    .0    .0    .0    .0    .0    .0
305.  *   1.1   1.4   1.2    .8    .5    .5    .3    .7    .8   1.0   1.1   1.5   1.4   1.0    .0    .0    .0    .0    .0    .0
310.  *   1.2   1.4   1.2   1.0    .5    .6    .3    .7    .9    .9   1.2   1.5   1.4    .9    .0    .0    .0    .0    .0    .0
315.  *   1.3   1.4   1.2   1.0    .6    .6    .3    .8    .7   1.1   1.0   1.4   1.4   1.0    .0    .0    .0    .0    .0    .0
320.  *   1.2   1.3   1.0    .9    .5    .6    .3    .7    .7    .9   1.0   1.4   1.4   1.0    .0    .0    .0    .0    .0    .0
325.  *   1.3   1.2   1.1    .9    .5    .5    .4    .7    .5   1.0   1.1   1.6   1.4   1.0    .0    .0    .0    .0    .0    .0
330.  *   1.3   1.2   1.1    .9    .4    .5    .3    .7    .6   1.0   1.1   1.3   1.4   1.0    .0    .0    .0    .0    .0    .0
335.  *   1.4   1.2   1.0    .9    .4    .5    .3    .6    .6    .8   1.2   1.3   1.4   1.0    .0    .0    .0    .0    .0    .0
340.  *   1.4   1.2   1.0    .9    .4    .5    .3    .6    .6    .8   1.1   1.3   1.3   1.0    .0    .0    .0    .0    .0    .0
345.  *   1.4   1.2   1.0    .9    .4    .6    .4    .3    .4    .9   1.1   1.2   1.4   1.0    .0    .0    .0    .0    .0    .0
350.  *   1.5   1.2   1.0    .9    .5    .8    .5    .3    .3    .9   1.3   1.2   1.5   1.0    .0    .0    .0    .0    .0    .0
355.  *   1.5   1.2   1.0   1.0    .4    .8    .5    .4    .5    .9   1.2   1.2   1.4   1.1    .0    .0    .0    .0    .0    .0
360.  *   1.5   1.2   1.0   1.0    .4    .8    .4    .4    .5    .8   1.0   1.3   1.4   1.1    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   2.1   1.7   1.5   1.1   1.3   1.0    .8    .8    .9   1.1   1.6   1.9   2.2   2.5   1.5   1.8   1.7   1.6   1.5   1.3
DEGR. *   75    65    65    55    50    15    35   315   310   300   280   280   270   250   210   200   200    90   250   120

1
                                                                                                                   PAGE  5
     JOB: Site 6 Opt1/2AM 2014 - 6B1AM14.DAT                  RUN: Site 6 Opt1/2AM 2014

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .1
  75.  *    .1
  80.  *    .6
  85.  *    .6
  90.  *    .8
  95.  *    .9
 100.  *   1.1
 105.  *   1.1
 110.  *   1.2
 115.  *   1.3
 120.  *   1.2
 125.  *   1.3
 130.  *   1.3
 135.  *   1.2
 140.  *   1.3
 145.  *   1.1
 150.  *   1.0
 155.  *   1.0
 160.  *   1.0
 165.  *   1.0
 170.  *   1.0
 175.  *   1.0
 180.  *   1.0
 185.  *   1.0
 190.  *   1.0
 195.  *   1.0
 200.  *   1.0
 205.  *   1.0
1
                                                                                                                             PAGE  6
      JOB: Site 6 Opt1/2AM 2014 - 6B1AM14.DAT                    RUN: Site 6 Opt1/2AM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   1.0
 215.  *   1.0
 220.  *   1.1
 225.  *   1.2
 230.  *   1.2
 235.  *   1.1
 240.  *   1.1
 245.  *   1.0
 250.  *    .9
 255.  *    .9
 260.  *    .7
 265.  *    .7
 270.  *    .5
 275.  *    .3
 280.  *    .2
 285.  *    .2
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.3
 DEGR. *  115

 THE HIGHEST CONCENTRATION IS    2.50 PPM AT  250 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS    2.20 PPM AT  270 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    2.10 PPM AT   75 DEGREES FROM REC1 .
```

```
Site 6 Opt1/2AM 2030 - 6B1AM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt1/2AM 2030                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.    1680 9.2   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.    1570 9.2   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       120        64       2.0 1570   84.1 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.     110 9.2   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.     110 9.2   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       120        64       2.0  110   84.1 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.     110 9.2   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    2285 9.2   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    2285 9.2   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    2285 9.2   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    2285 9.2   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    2285 9.2   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    2285 9.2   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.     815 9.2   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.     815 9.2   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.     815 9.2   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.     815 9.2   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.     815 9.2   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.     350 9.2   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       120        29       2.0  350   84.1 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     465 9.2   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       120        89       2.0  465   84.1 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.     420 9.2   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.     420 9.2   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     785 9.2   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      70 9.2   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       120        99       2.0   70   84.1 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     715 9.2   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     715 9.2   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       120        64       2.0  715   84.1 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     715 9.2   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     575 9.2   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     575 9.2   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     575 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 6 Opt1/2AM 2030 - 6B1AM30.DAT                   RUN: Site 6 Opt1/2AM 2030
      DATE: 05/10/2009   TIME: 16:40:43.56


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG   1680.   9.2    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG   1570.   9.2    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2378.9    1993.5 *     590.   268. AG    241. 100.0    .0 24.0 1.02  30.0
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG    110.   9.2    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG    110.   9.2    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2930.7    1956.4 *      38.   119. AG    120. 100.0    .0 12.0  .16   2.0
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG    110.   9.2    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG   2285.   9.2    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG   2285.   9.2    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG   2285.   9.2    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG   2285.   9.2    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG   2285.   9.2    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG   2285.   9.2    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG    815.   9.2    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG    815.   9.2    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG    815.   9.2    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG    815.   9.2    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG    815.   9.2    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG    350.   9.2    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3060.1    2061.7 *      28.    78. AG    109. 100.0    .0 24.0  .14   1.4
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    465.   9.2    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    4012.0    2262.5 *     999.    78. AG    167. 100.0    .0 12.0 1.17  50.8
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG    420.   9.2    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG    420.   9.2    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    785.   9.2    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     70.   9.2    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3019.9    1966.4 *      38.   173. AG    186. 100.0    .0 12.0  .28   1.9
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    715.   9.2    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    715.   9.2    .0 32.0
      30. WB        5 right   *   3106.0    2001.0    2703.9    1454.6 *     678.   216. AG    120. 100.0    .0 12.0 1.04  34.5
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    715.   9.2    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    575.   9.2    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    575.   9.2    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    575.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 Opt1/2AM 2030 - 6B1AM30.DAT                   RUN: Site 6 Opt1/2AM 2030
      DATE: 05/10/2009   TIME: 16:40:43.56

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *     120       64       2.0      1570       1770      84.10      1        3
       6. NB        2A rt     *     120       64       2.0       110       1583      84.10      1        3
      20. SB        2A thru   *     120       29       2.0       350       1770      84.10      1        3
      22. SB        2A left   *     120       89       2.0       465       1770      84.10      1        3
      27. WB        5 left    *     120       99       2.0        70       1770      84.10      1        3
      30. WB        5 right   *     120       64       2.0       715       1583      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      2594.0     1978.0       5.0    *
      2. SW 164 W             *      2757.0     1973.0       5.0    *
      3. SW 82 W              *      2839.0     1964.0       5.0    *
      4. SW CNR               *      2919.0     1936.0       5.0    *
      5. SW 82 S              *      2978.0     1874.0       5.0    *
      6. SW 164 S             *      3003.0     1794.0       5.0    *
      7. SW MID S             *      3021.0     1679.0       5.0    *
      8. SE MID S             *      3105.0     1694.0       5.0    *
      9. SE 164 S             *      3072.0     1811.0       5.0    *
     10. SE 82 S              *      3074.0     1891.0       5.0    *
     11. SE CNR               *      3109.0     1962.0       5.0    *
     12. SE 82 E              *      3164.0     2025.0       5.0    *
     13. SE 164 E             *      3242.0     2062.0       5.0    *
     14. SE MID E             *      3360.0     2134.0       5.0    *
     15. NE MID E             *      3286.0     2172.0       5.0    *
     16. NE 164 E             *      3153.0     2110.0       5.0    *
     17. NE 82 E              *      3074.0     2088.0       5.0    *
     18. N CNR                *      2994.0     2070.0       5.0    *
     19. NW 82 W              *      2912.0     2063.0       5.0    *
     20. NW 164 W             *      2829.0     2063.0       5.0    *
     21. NW  MID W            *      2704.0     2064.0       5.0    *
1
                                                                                                                 PAGE  3
      JOB: Site 6 Opt1/2AM 2030 - 6B1AM30.DAT                   RUN: Site 6 Opt1/2AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   1.3   1.0    .8    .7    .4    .5    .4    .2    .4    .7    .8   1.0   1.2    .9    .0    .0    .0    .0    .0    .0
  5.  *   1.3   1.0    .8    .7    .4    .5    .5    .2    .5    .8    .7   1.0   1.1    .9    .0    .0    .0    .0    .0    .0
 10.  *   1.3   1.1    .8    .8    .4    .7    .5    .2    .5    .8    .9   1.0   1.1   1.0    .0    .0    .0    .0    .0    .0
 15.  *   1.3   1.0    .8    .7    .4    .8    .7    .2    .4    .6    .9    .9   1.2   1.1    .0    .0    .0    .0    .0    .0
 20.  *   1.2   1.0    .7    .6    .6    .9    .5    .2    .2    .5    .9    .9   1.1   1.3    .0    .0    .0    .0    .0    .0
 25.  *   1.3   1.0    .7    .7    .6    .8    .5    .2    .2    .6    .9    .9   1.2   1.3    .0    .0    .0    .0    .0    .0
 30.  *   1.3   1.0    .7    .6    .8    .7    .5    .2    .3    .6    .8   1.1   1.5   1.3    .0    .0    .0    .0    .0    .0
 35.  *   1.3   1.0    .7    .5    .7    .6    .4    .1    .3    .4    .8   1.3   1.7   1.3    .2    .0    .0    .0    .0    .0
 40.  *   1.3   1.2    .9    .6    .7    .8    .4    .1    .4    .4    .9   1.5   1.8   1.2    .4    .0    .0    .0    .0    .0
 45.  *   1.4   1.2   1.0    .8    .7    .7    .3    .1    .3    .4    .8   1.5   1.7   1.1    .5    .1    .0    .0    .0    .0
 50.  *   1.5   1.1   1.0    .7    .9    .4    .3    .1    .1    .4    .7   1.4   1.6    .9    .6    .3    .1    .0    .0    .0
 55.  *   1.5   1.2   1.0   1.0    .8    .4    .3    .1    .1    .3    .7   1.2   1.3    .8    .7    .5    .1    .1    .0    .0
 60.  *   1.6   1.3   1.0    .8    .8    .4    .2    .0    .1    .1    .4   1.0   1.1    .7    .9    .6    .4    .2    .1    .0
 65.  *   1.7   1.3    .9    .8    .7    .4    .2    .0    .1    .1    .4    .9    .9    .5    .8    .7    .6    .5    .2    .1
 70.  *   1.8   1.2   1.2    .8    .6    .3    .2    .0    .0    .1    .2    .6    .7    .6   1.0   1.0    .7    .7    .3    .1
 75.  *   1.6   1.2   1.0    .6    .6    .3    .2    .0    .0    .1    .1    .4    .4    .6   1.1    .9    .9    .7    .6    .2
 80.  *   1.5   1.0    .6    .5    .5    .4    .2    .0    .0    .0    .1    .4    .4    .7   1.0   1.1    .9   1.2    .6    .5
 85.  *   1.3    .9    .6    .3    .5    .4    .3    .0    .0    .0    .0    .1    .2    .7   1.1   1.2   1.0   1.2    .7    .6
 90.  *   1.0    .6    .5    .2    .4    .4    .3    .0    .0    .0    .0    .1    .1    .7   1.0   1.3   1.1   1.2    .8    .7
 95.  *    .7    .3    .2    .2    .4    .4    .3    .0    .0    .0    .0    .0    .1    .7   1.1   1.3   1.2   1.2    .8    .7
100.  *    .4    .3    .2    .3    .4    .4    .2    .0    .0    .0    .0    .0    .0    .7   1.1   1.3   1.2   1.2    .8    .9
105.  *    .2    .1    .2    .3    .4    .4    .2    .0    .0    .0    .0    .0    .0    .7   1.0   1.2   1.2   1.1    .8    .9
110.  *    .2    .1    .1    .3    .5    .4    .2    .0    .0    .0    .0    .0    .0    .6    .9   1.3   1.2   1.2    .8    .9
115.  *    .0    .1    .1    .2    .5    .4    .2    .0    .0    .0    .0    .0    .0    .6    .9   1.2   1.2   1.1    .6   1.0
120.  *    .0    .1    .1    .2    .5    .4    .2    .0    .0    .0    .0    .0    .0    .6    .9   1.1   1.2   1.0    .9   1.1
125.  *    .0    .1    .1    .2    .5    .4    .3    .0    .0    .0    .0    .0    .0    .5    .9   1.1   1.1   1.0   1.1    .9
130.  *    .0    .1    .2    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .5    .9   1.0   1.0    .9   1.1   1.0
135.  *    .0    .2    .2    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .5    .9   1.0   1.1    .9   1.1   1.0
140.  *    .0    .2    .2    .3    .4    .4    .4    .0    .0    .0    .0    .0    .0    .5    .9   1.0   1.1    .8   1.0    .9
145.  *    .0    .1    .2    .3    .5    .5    .4    .1    .0    .0    .0    .0    .0    .5   1.0   1.0   1.1    .9   1.0   1.0
150.  *    .0    .1    .2    .3    .5    .5    .4    .1    .1    .0    .0    .0    .0    .5   1.0   1.0   1.1    .9   1.1   1.0
155.  *    .0    .1    .2    .2    .6    .5    .3    .1    .1    .1    .0    .0    .0    .5   1.0   1.1   1.1   1.1   1.1   1.0
160.  *    .0    .1    .1    .2    .5    .5    .3    .3    .3    .1    .0    .0    .0    .5    .9   1.1   1.1   1.1   1.0    .9
165.  *    .0    .1    .1    .2    .6    .3    .2    .3    .3    .1    .1    .0    .0    .5    .9   1.1   1.3    .9   1.0    .9
170.  *    .0    .1    .1    .1    .6    .3    .1    .4    .4    .2    .1    .0    .0    .5    .9   1.1   1.3   1.0    .9    .9
175.  *    .0    .1    .1    .1    .3    .2    .1    .4    .4    .3    .1    .1    .0    .5    .9   1.1   1.3    .9   1.0    .9
180.  *    .0    .0    .1    .1    .3    .0    .0    .4    .4    .3    .1    .1    .0    .5   1.1   1.2   1.3    .8   1.1    .9
185.  *    .0    .0    .1    .1    .3    .0    .0    .4    .5    .3    .1    .1    .0    .5   1.1   1.1   1.3    .8   1.1    .9
190.  *    .0    .0    .1    .1    .3    .0    .0    .4    .5    .2    .1    .1    .1    .5   1.0   1.3   1.3    .8   1.0    .8
195.  *    .0    .0    .0    .1    .3    .0    .0    .4    .4    .3    .1    .1    .1    .5   1.1   1.2   1.3    .7    .9    .8
200.  *    .0    .0    .0    .1    .3    .0    .0    .4    .4    .3    .3    .1    .1    .5   1.0   1.2   1.5    .8    .9    .8
205.  *    .0    .0    .0    .1    .3    .1    .0    .4    .3    .4    .3    .1    .0    .5   1.1   1.5   1.4    .8    .9    .9
1
                                                                                                                   PAGE  4
     JOB: Site 6 Opt1/2AM 2030 - 6B1AM30.DAT                 RUN: Site 6 Opt1/2AM 2030

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .1    .3    .1    .0    .3    .3    .4    .3    .1    .0    .6   1.2   1.5   1.4    .8    .9    .9
215.  *    .0    .0    .0    .0    .2    .1    .0    .3    .3    .5    .3    .2    .1    .7   1.2   1.4   1.5    .7    .9    .9
220.  *    .0    .0    .0    .0    .2    .2    .0    .3    .4    .5    .4    .3    .1    .8   1.2   1.2   1.5    .8   1.0   1.0
225.  *    .0    .0    .0    .0    .1    .2    .0    .3    .4    .5    .5    .3    .2   1.0   1.1   1.1   1.2    .8   1.1   1.0
230.  *    .0    .0    .0    .0    .1    .2    .0    .3    .4    .5    .5    .4    .2   1.1   1.0   1.3   1.0    .9   1.2   1.0
235.  *    .0    .0    .0    .0    .0    .2    .1    .3    .4    .6    .6    .4    .3   1.4   1.1   1.2   1.1   1.1   1.1   1.1
240.  *    .0    .0    .0    .0    .0    .2    .1    .4    .4    .4    .6    .5    .4   1.6   1.0   1.0   1.1   1.1   1.2   1.1
245.  *    .1    .0    .0    .0    .0    .2    .1    .4    .4    .5    .6    .6    .7   1.7    .7   1.2   1.3   1.1   1.3   1.2
250.  *    .2    .2    .0    .0    .0    .2    .1    .4    .4    .5    .7    .7   1.1   1.9    .8   1.0   1.1   1.1   1.2   1.1
255.  *    .4    .2    .2    .0    .0    .2    .1    .3    .4    .5    .8   1.1   1.3   2.0    .7    .8   1.1   1.1   1.2   1.1
260.  *    .6    .4    .2    .2    .0    .2    .1    .4    .4    .5    .8   1.2   1.5   1.8    .3    .7    .7   1.0   1.1   1.0
265.  *    .8    .6    .4    .2    .0    .2    .1    .4    .4    .7   1.1   1.3   1.7   1.8    .2    .4    .7    .9   1.0    .8
270.  *   1.1    .9    .6    .4    .2    .2    .1    .4    .4    .7   1.2   1.3   1.7   1.4    .2    .2    .4    .8    .7    .7
275.  *   1.3   1.1    .9    .4    .2    .3    .1    .4    .6    .7   1.2   1.5   1.5   1.3    .0    .2    .2    .6    .5    .4
280.  *   1.5   1.3   1.0    .6    .2    .4    .1    .4    .6    .8   1.4   1.5   1.4   1.0    .0    .0    .2    .2    .3    .3
285.  *   1.6   1.3   1.1    .7    .4    .4    .2    .5    .5    .9   1.2   1.5   1.3    .9    .0    .0    .0    .0    .1    .2
290.  *   1.6   1.3   1.1    .8    .4    .4    .2    .6    .5   1.0   1.1   1.4   1.2    .9    .0    .0    .0    .0    .0    .0
295.  *   1.5   1.3   1.0    .8    .3    .4    .3    .6    .6   1.0   1.0   1.3   1.3    .9    .0    .0    .0    .0    .0    .0
300.  *   1.5   1.2   1.1    .8    .4    .5    .3    .7    .7    .9    .9   1.3   1.2    .9    .0    .0    .0    .0    .0    .0
305.  *   1.5   1.2   1.0    .8    .4    .5    .3    .7    .7    .8    .9   1.2   1.2    .7    .0    .0    .0    .0    .0    .0
310.  *   1.5   1.2   1.0    .8    .4    .5    .3    .7    .9    .8    .9   1.3   1.1    .7    .0    .0    .0    .0    .0    .0
315.  *   1.3   1.2    .9    .7    .3    .6    .3    .6    .7    .9    .8   1.2   1.1    .8    .0    .0    .0    .0    .0    .0
320.  *   1.3   1.0   1.0    .6    .3    .5    .3    .7    .5    .9    .8   1.1   1.1    .9    .0    .0    .0    .0    .0    .0
325.  *   1.3   1.0    .9    .6    .4    .5    .2    .7    .5    .9    .8   1.0   1.0    .9    .0    .0    .0    .0    .0    .0
330.  *   1.3   1.0    .8    .7    .4    .5    .3    .6    .5    .9    .9   1.1   1.0    .9    .0    .0    .0    .0    .0    .0
335.  *   1.3   1.0    .8    .7    .4    .4    .3    .6    .6    .8    .9   1.1   1.0    .8    .0    .0    .0    .0    .0    .0
340.  *   1.3   1.0    .8    .7    .3    .4    .3    .4    .6    .7    .9   1.0   1.0    .7    .0    .0    .0    .0    .0    .0
345.  *   1.3   1.0    .8    .7    .3    .6    .4    .3    .4    .8    .9   1.0   1.1    .7    .0    .0    .0    .0    .0    .0
350.  *   1.3   1.0    .8    .7    .2    .7    .4    .3    .3    .8   1.0   1.0   1.1    .8    .0    .0    .0    .0    .0    .0
355.  *   1.3   1.0    .8    .7    .4    .7    .3    .3    .4    .7    .9   1.0   1.2    .8    .0    .0    .0    .0    .0    .0
360.  *   1.3   1.0    .8    .7    .4    .5    .4    .2    .4    .7    .8   1.0   1.2    .9    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   1.8   1.3   1.2   1.0    .9    .9    .7    .7    .9   1.0   1.4   1.5   1.8   2.0   1.2   1.5   1.5   1.2   1.3   1.2
DEGR. *   70    60    70    55    50    20    15   300   310   290   280   275    40   255   210   205   200    80   245   245

1
                                                                                                                   PAGE  5
     JOB: Site 6 Opt1/2AM 2030 - 6B1AM30.DAT                 RUN: Site 6 Opt1/2AM 2030

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .1
  75.  *    .1
  80.  *    .3
  85.  *    .6
  90.  *    .7
  95.  *    .7
 100.  *    .8
 105.  *    .9
 110.  *    .8
 115.  *    .8
 120.  *   1.0
 125.  *   1.0
 130.  *    .8
 135.  *    .9
 140.  *    .9
 145.  *    .8
 150.  *    .8
 155.  *    .8
 160.  *    .8
 165.  *    .8
 170.  *    .8
 175.  *    .8
 180.  *    .8
 185.  *    .8
 190.  *    .8
 195.  *    .8
 200.  *    .8
 205.  *    .8
1
                                                                                                                        PAGE  6
      JOB: Site 6 Opt1/2AM 2030 - 6B1AM30.DAT                 RUN: Site 6 Opt1/2AM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .8
 215.  *    .8
 220.  *    .9
 225.  *    .9
 230.  *   1.0
 235.  *   1.1
 240.  *   1.1
 245.  *   1.0
 250.  *   1.0
 255.  *   1.0
 260.  *    .9
 265.  *    .7
 270.  *    .4
 275.  *    .4
 280.  *    .2
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.1
 DEGR. *  235

 THE HIGHEST CONCENTRATION IS    2.00 PPM AT  255 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS    1.80 PPM AT   70 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT   40 DEGREES FROM REC13.
```

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Site 6 Opt1/2PM 2014 - 6B1PM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt1/2PM 2014                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.     70011.4   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.     58511.4   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       114        84       2.0  585  102.2 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.     11511.4   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.     11511.4   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       114        84       2.0  115  102.2 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.     11511.4   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    104111.4   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    104111.4   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    104111.4   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    104111.4   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    104111.4   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    104111.4   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.    215711.4   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.    215711.4   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.    215711.4   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.    215711.4   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.    215711.4   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.    136311.4   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       114        19       2.0 1363  102.2 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     79411.4   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       114        41       2.0  794  102.2 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.    142711.4   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.    142711.4   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     52011.4   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      6411.4   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       114       102       2.0   64  102.2 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     45611.4   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     45611.4   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       114        38       2.0  456  102.2 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     45611.4   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     90911.4   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     90911.4   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     90911.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 6 Opt1/2PM 2014 - 6B1PM14.DAT                   RUN: Site 6 Opt1/2PM 2014
      DATE: 05/10/2009   TIME: 16:30:54.59


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG    700.  11.4    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG    585.  11.4    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2831.7    2013.1 *     136.   268. AG    404. 100.0    .0 24.0  .72   6.9
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG    115.  11.4    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG    115.  11.4    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2943.2    1949.4 *      53.   119. AG    202. 100.0    .0 12.0  .32   2.7
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG    115.  11.4    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG   1041.  11.4    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG   1041.  11.4    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG   1041.  11.4    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG   1041.  11.4    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG   1041.  11.4    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG   1041.  11.4    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG   2157.  11.4    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG   2157.  11.4    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG   2157.  11.4    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG   2157.  11.4    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG   2157.  11.4    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG   1363.  11.4    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3102.2    2070.6 *      71.    78. AG     91. 100.0    .0 24.0  .48   3.6
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    794.  11.4    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    3209.9    2087.0 *     178.    78. AG     99. 100.0    .0 12.0  .74   9.0
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG   1427.  11.4    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG   1427.  11.4    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    520.  11.4    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     64.  11.4    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3019.6    1968.4 *      36.   173. AG    245. 100.0    .0 12.0  .52   1.8
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    456.  11.4    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    456.  11.4    .0 32.0
      30. WB        5 right   *   3106.0    2001.0    3049.8    1924.7 *      95.   216. AG     91. 100.0    .0 12.0  .46   4.8
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    456.  11.4    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    909.  11.4    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    909.  11.4    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    909.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 Opt1/2PM 2014 - 6B1PM14.DAT                   RUN: Site 6 Opt1/2PM 2014
      DATE: 05/10/2009   TIME: 16:30:54.59

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *     114       84       2.0       585       1770     102.20      1        3
       6. NB        2A rt     *     114       84       2.0       115       1583     102.20      1        3
      20. SB        2A thru   *     114       19       2.0      1363       1770     102.20      1        3
      22. SB        2A left   *     114       41       2.0       794       1770     102.20      1        3
      27. WB        5 left    *     114      102       2.0        64       1770     102.20      1        3
      30. WB        5 right   *     114       38       2.0       456       1583     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      2594.0     1978.0       5.0   *
      2. SW 164 W             *      2757.0     1973.0       5.0   *
      3. SW 82 W              *      2839.0     1964.0       5.0   *
      4. SW CNR               *      2919.0     1936.0       5.0   *
      5. SW 82 S              *      2978.0     1874.0       5.0   *
      6. SW 164 S             *      3003.0     1794.0       5.0   *
      7. SW MID S             *      3021.0     1679.0       5.0   *
      8. SE MID S             *      3105.0     1694.0       5.0   *
      9. SE 164 S             *      3072.0     1811.0       5.0   *
     10. SE 82 S              *      3074.0     1891.0       5.0   *
     11. SE CNR               *      3109.0     1962.0       5.0   *
     12. SE 82 E              *      3164.0     2025.0       5.0   *
     13. SE 164 E             *      3242.0     2062.0       5.0   *
     14. SE MID E             *      3360.0     2134.0       5.0   *
     15. NE MID E             *      3286.0     2172.0       5.0   *
     16. NE 164 E             *      3153.0     2110.0       5.0   *
     17. NE 82 E              *      3074.0     2088.0       5.0   *
     18. N CNR                *      2994.0     2070.0       5.0   *
     19. NW 82 W              *      2912.0     2063.0       5.0   *
     20. NW 164 W             *      2829.0     2063.0       5.0   *
     21. NW  MID W            *      2704.0     2064.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 6 Opt1/2PM 2014 - 6B1PM14.DAT                   RUN: Site 6 Opt1/2PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .5    .5   1.0   1.2    .4    .8    .5    .0    .4    .7   1.0   1.0    .9   1.0    .1    .0    .0    .0    .0    .0
   5.  *    .5    .5   1.1   1.2    .7    .7    .5    .0    .4    .7    .9   1.0    .9   1.2    .1    .0    .0    .0    .0    .0
  10.  *    .5    .5   1.0   1.2    .8    .8    .4    .1    .3    .8    .9    .9    .9   1.2    .1    .0    .0    .0    .0    .0
  15.  *    .5    .5   1.1   1.1    .7    .7    .4    .1    .3    .8    .9    .9   1.1   1.2    .1    .1    .0    .0    .0    .0
  20.  *    .5    .6   1.2   1.1    .7    .8    .4    .0    .2    .7    .8   1.1   1.1   1.3    .1    .1    .0    .0    .0    .0
  25.  *    .5    .5   1.2   1.1    .7    .7    .4    .1    .3    .6    .8   1.0   1.1   1.3    .2    .1    .0    .0    .0    .0
  30.  *    .5    .5   1.1   1.2    .9    .7    .5    .1    .4    .4    .8   1.3   1.3   1.4    .3    .1    .1    .0    .0    .0
  35.  *    .6    .6   1.3   1.2   1.0    .8    .5    .1    .3    .4    .9   1.3   1.4   1.3    .4    .2    .1    .1    .0    .0
  40.  *    .7    .6   1.3   1.2   1.1    .7    .5    .1    .2    .5    .9   1.2   1.5   1.1    .6    .2    .2    .1    .1    .0
  45.  *    .7    .7   1.3   1.2   1.0    .5    .4    .0    .1    .6    .6   1.0   1.3    .9   1.0    .4    .2    .2    .1    .0
  50.  *    .7    .9   1.3   1.3    .8    .5    .4    .0    .1    .3    .6   1.1   1.2    .8   1.1    .7    .2    .2    .2    .0
  55.  *    .7   1.1   1.3   1.3    .9    .4    .4    .0    .0    .1    .6    .8   1.0    .5   1.3    .8    .5    .2    .2    .1
  60.  *    .7   1.1   1.3   1.2    .5    .4    .4    .0    .0    .0    .5    .7    .7    .3   1.4   1.0    .5    .6    .2    .1
  65.  *    .8   1.3   1.4   1.0    .4    .4    .3    .0    .0    .0    .0    .5    .5    .2   1.6   1.1    .8    .7    .3    .1
  70.  *    .7   1.1   1.1    .8    .4    .4    .3    .0    .0    .0    .0    .3    .1    .1   1.4   1.3   1.1   1.2    .6    .2
  75.  *    .8   1.3   1.0    .4    .4    .4    .4    .0    .0    .0    .0    .2    .1    .0   1.4   1.4   1.3   1.5    .7    .5
  80.  *    .9    .9    .8    .3    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.5   1.3   1.3   1.4   1.1    .5
  85.  *    .8    .8    .5    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.3   1.4   1.4   1.5   1.3    .8
  90.  *    .4    .7    .4    .1    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.4   1.3   1.4   1.7   1.2   1.0
  95.  *    .3    .5    .3    .1    .3    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.4   1.4   1.6   1.7   1.3   1.2
 100.  *    .2    .3    .3    .1    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.3   1.4   1.5   1.8   1.4   1.2
 105.  *    .0    .2    .2    .1    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.3   1.4   1.5   1.6   1.3   1.3
 110.  *    .0    .0    .2    .1    .4    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.2   1.4   1.5   1.5   1.3   1.5
 115.  *    .0    .0    .2    .1    .3    .5    .4    .0    .0    .0    .0    .0    .0    .0   1.2   1.3   1.5   1.5   1.4   1.5
 120.  *    .0    .0    .1    .1    .3    .5    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.7   1.4   1.4   1.6
 125.  *    .0    .0    .1    .2    .4    .6    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.2   1.7   1.4   1.4   1.8
 130.  *    .0    .0    .1    .2    .4    .6    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.4   1.1   1.5   1.8
 135.  *    .0    .0    .2    .3    .5    .6    .5    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.5   1.1   1.4   1.8
 140.  *    .0    .1    .3    .3    .5    .7    .5    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.5   1.2   1.6   1.7
 145.  *    .0    .1    .3    .3    .5    .7    .5    .0    .0    .0    .0    .0    .0    .0   1.2   1.3   1.5   1.2   1.5   1.5
 150.  *    .0    .1    .2    .3    .5    .7    .5    .1    .1    .0    .0    .0    .0    .0   1.2   1.3   1.3   1.1   1.7   1.6
 155.  *    .0    .0    .1    .3    .5    .7    .5    .2    .2    .0    .0    .0    .0    .0   1.1   1.3   1.3   1.1   1.9   1.3
 160.  *    .0    .0    .1    .3    .4    .6    .4    .3    .2    .2    .0    .0    .0    .0   1.1   1.3   1.5   1.3   1.9   1.3
 165.  *    .0    .0    .0    .1    .4    .5    .4    .4    .3    .2    .1    .0    .0    .0   1.1   1.3   1.6   1.4   2.0   1.1
 170.  *    .0    .0    .0    .1    .3    .5    .2    .4    .4    .2    .2    .0    .0    .0   1.1   1.3   2.0   1.4   1.8   1.1
 175.  *    .0    .0    .0    .0    .2    .2    .1    .5    .5    .3    .2    .1    .0    .0   1.1   1.4   1.9   1.4   1.7   1.0
 180.  *    .0    .0    .0    .0    .1    .2    .1    .5    .5    .3    .2    .2    .0    .0   1.1   1.5   1.8   1.2   1.7    .9
 185.  *    .0    .0    .0    .0    .0    .0    .0    .5    .4    .3    .2    .2    .1    .0   1.2   1.4   1.7   1.1   1.6    .8
 190.  *    .0    .0    .0    .0    .0    .0    .0    .4    .5    .3    .3    .2    .1    .0   1.2   1.4   1.8   1.0   1.6    .8
 195.  *    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .2    .2    .1    .0   1.3   1.5   1.7   1.2   1.6    .7
 200.  *    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .2    .1    .0    .0   1.3   1.5   1.8   1.2   1.6    .7
 205.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .2    .1    .0    .0   1.3   1.6   1.8   1.1   1.5    .6
1
                                                                                                                     PAGE  4
      JOB: Site 6 Opt1/2PM 2014 - 6B1PM14.DAT                  RUN: Site 6 Opt1/2PM 2014

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .2    .1    .0    .0   1.4   1.7   1.9   1.2   1.5    .6
 215.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .1    .0    .0   1.4   1.6   1.9   1.3   1.5    .7
 220.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .3    .1    .0    .1   1.5   1.7   1.8   1.5   1.6    .8
 225.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .4    .3    .0    .1   1.5   1.8   1.7   1.5   1.6    .8
 230.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .4    .3    .0    .2   1.6   1.8   1.8   1.6   1.5    .8
 235.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .1    .5   1.7   1.7   2.0   1.6   1.4    .9
 240.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .2    .6   1.5   1.7   1.6   1.6   1.4    .9
 245.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .5    .6    .5    .9   1.5   1.7   1.5   1.5   1.3    .9
 250.  *    .1    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .7    .6   1.4   1.1   1.5   1.7   1.5   1.3   1.0
 255.  *    .1    .1    .0    .0    .0    .0    .0    .4    .4    .3    .4    .8   1.1   1.4    .8   1.5   1.5   1.5   1.3   1.0
 260.  *    .2    .2    .2    .0    .0    .0    .0    .4    .4    .3    .6   1.2   1.1   1.5    .6   1.2   1.2   1.3   1.2   1.0
 265.  *    .4    .4    .2    .2    .0    .0    .0    .4    .4    .4    .8   1.4   1.5   1.4    .3    .8   1.0   1.1   1.0   1.0
 270.  *    .5    .4    .4    .2    .1    .0    .0    .4    .3    .5   1.1   1.5   1.5   1.4    .2    .4    .7    .8    .8    .7
 275.  *    .6    .6    .5    .3    .2    .0    .0    .4    .4    .6   1.2   1.8   1.6   1.1    .1    .2    .5    .6    .6    .6
 280.  *    .7    .6    .5    .3    .2    .1    .0    .4    .4    .8   1.3   1.5   1.6   1.0    .1    .1    .2    .4    .5    .4
 285.  *    .8    .7    .5    .4    .3    .2    .0    .5    .5    .9   1.4   1.5   1.3   1.1    .1    .0    .2    .2    .3    .2
 290.  *    .7    .7    .5    .5    .3    .2    .1    .5    .5    .9   1.2   1.6   1.2    .9    .1    .0    .1    .2    .2    .1
 295.  *    .7    .7    .7    .6    .3    .2    .1    .5    .6   1.0   1.2   1.3   1.2    .9    .1    .0    .1    .1    .1    .1
 300.  *    .7    .7    .6    .6    .4    .2    .1    .5    .6   1.0   1.3   1.2   1.0   1.0    .1    .0    .1    .1    .0    .1
 305.  *    .7    .7    .6    .8    .4    .2    .1    .5    .5   1.0   1.0   1.2   1.0   1.0    .0    .0    .1    .0    .0    .0
 310.  *    .7    .7    .6    .7    .6    .2    .1    .5    .5   1.1   1.0   1.2   1.0    .9    .0    .0    .0    .0    .0    .0
 315.  *    .7    .5    .6    .7    .5    .2    .1    .6    .6   1.0    .9   1.2   1.0   1.0    .0    .0    .0    .0    .0    .0
 320.  *    .7    .5    .5    .9    .6    .2    .1    .6    .8    .9    .9    .9    .9    .9    .0    .0    .0    .0    .0    .0
 325.  *    .6    .5    .4   1.0    .7    .3    .2    .7    .6    .8   1.0   1.0    .8   1.0    .0    .0    .0    .0    .0    .0
 330.  *    .5    .5    .5   1.2    .7    .5    .2    .5    .6    .9   1.0   1.0    .9    .9    .0    .0    .0    .0    .0    .0
 335.  *    .5    .5    .5   1.1    .7    .6    .2    .5    .5    .9   1.0   1.1    .9   1.0    .0    .0    .0    .0    .0    .0
 340.  *    .5    .5    .6   1.1    .6    .5    .2    .4    .4    .9   1.0   1.0    .9    .9    .0    .0    .0    .0    .0    .0
 345.  *    .5    .5    .7   1.2    .7    .5    .3    .4    .6    .6    .9   1.0   1.0   1.0    .0    .0    .0    .0    .0    .0
 350.  *    .5    .5    .7   1.3    .6    .5    .4    .1    .4    .6    .9   1.0    .9    .9    .0    .0    .0    .0    .0    .0
 355.  *    .5    .5    .9   1.2    .5    .6    .4    .1    .4    .6    .9    .9    .9    .9    .0    .0    .0    .0    .0    .0
 360.  *    .5    .5   1.0   1.2    .4    .8    .5    .0    .4    .7   1.0   1.0    .9   1.0    .1    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .9   1.3   1.4   1.3   1.1    .8    .5    .7    .8   1.1   1.4   1.8   1.6   1.5   1.7   1.8   2.0   1.8   2.0   1.8
 DEGR. *   80    65    65    50    40     0     0   325   320   310   285   275   275   260   235   225   170   100   165   125

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                                                                                                                     PAGE  5
      JOB: Site 6 Opt1/2PM 2014 - 6B1PM14.DAT                  RUN: Site 6 Opt1/2PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .1
  70.  *    .2
  75.  *    .2
  80.  *    .4
  85.  *    .6
  90.  *    .9
  95.  *   1.1
 100.  *   1.0
 105.  *   1.1
 110.  *   1.1
 115.  *   1.0
 120.  *   1.0
 125.  *    .9
 130.  *    .9
 135.  *    .7
 140.  *    .7
 145.  *    .8
 150.  *    .7
 155.  *    .7
 160.  *    .7
 165.  *    .7
 170.  *    .7
 175.  *    .7
 180.  *    .7
 185.  *    .7
 190.  *    .7
 195.  *    .7
 200.  *    .7
 205.  *    .7
1
                                                                                                                               PAGE  6
      JOB: Site 6 Opt1/2PM 2014 - 6B1PM14.DAT                  RUN: Site 6 Opt1/2PM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .7
 215.  *    .7
 220.  *    .8
 225.  *    .8
 230.  *    .8
 235.  *    .8
 240.  *    .9
 245.  *    .9
 250.  *   1.0
 255.  *   1.0
 260.  *    .9
 265.  *    .9
 270.  *    .7
 275.  *    .5
 280.  *    .3
 285.  *    .2
 290.  *    .1
 295.  *    .1
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.1
 DEGR. *   95

 THE HIGHEST CONCENTRATION IS    2.00 PPM AT  170 DEGREES FROM REC17.
 THE 2ND HIGHEST CONCENTRATION IS    2.00 PPM AT  165 DEGREES FROM REC19.
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT  275 DEGREES FROM REC12.
```

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Site 6 Opt1/2PM 2030 - 6B1PM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt1/2PM 2030                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.     690 9.2   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.     585 9.2   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       119        90       2.0  585   84.1 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.     105 9.2   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.     105 9.2   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       119        90       2.0  105   84.1 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.     105 9.2   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    1065 9.2   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    1065 9.2   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    1065 9.2   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    1065 9.2   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    1065 9.2   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    1065 9.2   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.    2110 9.2   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.    2110 9.2   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.    2110 9.2   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.    2110 9.2   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.    2110 9.2   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.    1285 9.2   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       119        19        2.0 1285   84.1 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     825 9.2   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       119        52        2.0  825   84.1 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.    1340 9.2   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.    1340 9.2   0  44   30.
  1
WB         5 aprch  AG  3279.  1032.  3039.  1825.     535 9.2   0  32   30.
  1
WB         5 left   AG  3038.  1827.  3012.  2029.      55 9.2   0  32   30.
  2
WB         5 left   AG  3015.  2004.  3034.  1857.      0.  12   1
       119       108        2.0   55   84.1 1770 1 3
  1
WB         5 right  AG  3039.  1847.  3064.  1943.     480 9.2   0  32   30.
  1
WB         5 right  AG  3064.  1943.  3110.  2007.     480 9.2   0  32   30.
  2
WB         5 right  AG  3106.  2001.  3067.  1948.      0.  12   1
       119        37        2.0  480   84.1 1583 1 3
  1
WB         5 right  AG  3110.  2007.  3159.  2057.     480 9.2   0  32   30.
  1
EB         5 depart AG  2991.  2021.  3012.  1857.     930 9.2   0  32   30.
  1
EB         5 depart AG  3012.  1857.  3052.  1680.     930 9.2   0  32   30.
  1
EB         5 depart AG  3052.  1680.  3248.  1014.     930 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 6 Opt1/2PM 2030 - 6B1PM30.DAT                  RUN: Site 6 Opt1/2PM 2030
      DATE: 05/10/2009   TIME: 17:04:54.47


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2    *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*---------------------------------------*-------------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG    690.   9.2    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG    585.   9.2    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2814.6    2012.4 *     154.   268. AG    341. 100.0    .0 24.0  .79   7.8
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG    105.   9.2    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG    105.   9.2    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2942.2    1950.0 *      52.   119. AG    171. 100.0    .0 12.0  .32   2.6
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG    105.   9.2    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG   1065.   9.2    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG   1065.   9.2    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG   1065.   9.2    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG   1065.   9.2    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG   1065.   9.2    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG   1065.   9.2    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG   2110.   9.2    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG   2110.   9.2    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG   2110.   9.2    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG   2110.   9.2    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG   2110.   9.2    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG   1285.   9.2    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3098.3    2069.8 *      67.    78. AG     72. 100.0    .0 24.0  .45   3.4
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    825.   9.2    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    3288.4    2104.2 *     258.    78. AG     99. 100.0    .0 12.0  .88  13.1
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG   1340.   9.2    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG   1340.   9.2    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    535.   9.2    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     55.   9.2    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3019.2    1971.2 *      33.   173. AG    205. 100.0    .0 12.0  .53   1.7
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    480.   9.2    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    480.   9.2    .0 32.0
      30. WB        5 right   *   3106.0    2001.0    3048.4    1922.8 *      97.   216. AG     70. 100.0    .0 12.0  .46   4.9
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    480.   9.2    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    930.   9.2    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    930.   9.2    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    930.   9.2    .0 32.0
1
                                                                                                                    PAGE  2
      JOB: Site 6 Opt1/2PM 2030 - 6B1PM30.DAT                  RUN: Site 6 Opt1/2PM 2030
      DATE: 05/10/2009   TIME: 17:04:54.47

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *     119       90       2.0        585       1770      84.10      1        3
       6. NB        2A rt     *     119       90       2.0        105       1583      84.10      1        3
      20. SB        2A thru   *     119       19       2.0       1285       1770      84.10      1        3
      22. SB        2A left   *     119       52       2.0        825       1770      84.10      1        3
      27. WB        5 left    *     119      108       2.0         55       1770      84.10      1        3
      30. WB        5 right   *     119       37       2.0        480       1583      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y           Z      *
     -------------------------*------------------------------------*
      1. SW MID W             *      2594.0     1978.0       5.0   *
      2. SW 164 W             *      2757.0     1973.0       5.0   *
      3. SW 82 W              *      2839.0     1964.0       5.0   *
      4. SW CNR               *      2919.0     1936.0       5.0   *
      5. SW 82 S              *      2978.0     1874.0       5.0   *
      6. SW 164 S             *      3003.0     1794.0       5.0   *
      7. SW MID S             *      3021.0     1679.0       5.0   *
      8. SE MID S             *      3105.0     1694.0       5.0   *
      9. SE 164 S             *      3072.0     1811.0       5.0   *
     10. SE 82 S              *      3074.0     1891.0       5.0   *
     11. SE CNR               *      3109.0     1962.0       5.0   *
     12. SE 82 E              *      3164.0     2025.0       5.0   *
     13. SE 164 E             *      3242.0     2062.0       5.0   *
     14. SE MID E             *      3360.0     2134.0       5.0   *
     15. NE MID E             *      3286.0     2172.0       5.0   *
     16. NE 164 E             *      3153.0     2110.0       5.0   *
     17. NE 82 E              *      3074.0     2088.0       5.0   *
     18. N CNR                *      2994.0     2070.0       5.0   *
     19. NW 82 W              *      2912.0     2063.0       5.0   *
     20. NW 164 W             *      2829.0     2063.0       5.0   *
     21. NW  MID W            *      2704.0     2064.0       5.0   *
1
                                                                                                                    PAGE  3
      JOB: Site 6 Opt1/2PM 2030 - 6B1PM30.DAT                  RUN: Site 6 Opt1/2PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *    .5    .4    .9   1.1    .3    .5    .3    .0    .3    .7    .9    .9   1.1    .7    .0    .0    .0    .0    .0    .0
  5.  *    .5    .4    .9   1.1    .5    .5    .5    .0    .2    .7    .9    .8   1.0    .9    .1    .0    .0    .0    .0    .0
 10.  *    .5    .4    .9   1.1    .7    .5    .4    .0    .1    .8    .8    .8    .9    .9    .1    .0    .0    .0    .0    .0
 15.  *    .5    .3    .9   1.1    .5    .7    .4    .0    .1    .7    .7    .8   1.0    .9    .1    .0    .0    .0    .0    .0
 20.  *    .5    .3    .9    .9    .6    .6    .4    .0    .2    .6    .7    .9   1.1   1.0    .1    .1    .0    .0    .0    .0
 25.  *    .5    .4    .9    .9    .7    .5    .4    .0    .2    .3    .5    .8   1.2   1.3    .1    .1    .0    .0    .0    .0
 30.  *    .5    .5    .9    .8    .8    .5    .4    .1    .2    .4    .6    .9   1.2   1.1    .3    .1    .0    .0    .0    .0
 35.  *    .5    .5    .9   1.0    .7    .6    .5    .1    .1    .5    .7   1.1   1.0   1.0    .3    .1    .0    .0    .0    .0
 40.  *    .5    .6   1.0    .9    .9    .5    .3    .0    .1    .4    .7   1.1   1.4   1.0    .6    .2    .0    .0    .0    .0
 45.  *    .5    .6    .9   1.0    .7    .4    .3    .0    .1    .4    .7   1.1   1.3    .8    .6    .2    .1    .1    .0    .0
 50.  *    .5    .8    .9   1.1    .7    .4    .3    .0    .0    .2    .7    .9   1.0    .7   1.0    .4    .2    .2    .0    .0
 55.  *    .5    .8   1.1   1.0    .5    .4    .3    .0    .0    .0    .6    .9    .8    .4   1.1    .5    .4    .2    .2    .0
 60.  *    .5    .9   1.1   1.1    .3    .4    .3    .0    .0    .0    .2    .8    .7    .3   1.1    .8    .5    .3    .2    .1
 65.  *    .6    .8   1.2    .9    .3    .4    .3    .0    .0    .0    .0    .4    .1    .2   1.3    .8    .6    .5    .3    .1
 70.  *    .6    .9   1.1    .6    .3    .4    .3    .0    .0    .0    .0    .3    .1    .0   1.1    .9   1.0    .9    .4    .1
 75.  *    .5    .9   1.0    .3    .3    .4    .4    .0    .0    .0    .0    .1    .1    .0   1.1   1.0   1.0   1.0    .6    .3
 80.  *    .6    .6    .7    .2    .3    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.0   1.0    .8    .4
 85.  *    .5    .6    .3    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.1   1.2   1.2   1.3   1.0    .7
 90.  *    .3    .5    .3    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.1   1.2   1.3   1.3   1.0    .8
 95.  *    .3    .3    .2    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.0   1.3   1.3   1.3   1.1   1.0
100.  *    .2    .1    .2    .1    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.0   1.3   1.2   1.4    .8   1.0
105.  *    .0    .0    .2    .1    .4    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.3   1.3   1.4    .9   1.1
110.  *    .0    .0    .2    .1    .2    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.1   1.3   1.1   1.0   1.2
115.  *    .0    .0    .2    .1    .2    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.1   1.3   1.0   1.1   1.2
120.  *    .0    .0    .0    .1    .2    .4    .3    .0    .0    .0    .0    .0    .0    .0    .8   1.1   1.2   1.1   1.2   1.3
125.  *    .0    .0    .0    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.1   1.2   1.1   1.2   1.3
130.  *    .0    .0    .1    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.2    .9   1.3   1.4
135.  *    .0    .0    .1    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.2    .8   1.1   1.4
140.  *    .0    .0    .1    .2    .3    .5    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.4    .8   1.1   1.3
145.  *    .0    .1    .1    .3    .4    .5    .4    .0    .0    .0    .0    .0    .0    .0    .9   1.0   1.3    .9   1.2   1.2
150.  *    .0    .0    .1    .3    .4    .5    .4    .1    .1    .0    .0    .0    .0    .0    .9   1.0   1.2    .9   1.2   1.2
155.  *    .0    .0    .1    .3    .4    .5    .4    .2    .2    .0    .0    .0    .0    .0    .9   1.1   1.2    .8   1.2   1.2
160.  *    .0    .0    .0    .3    .4    .5    .4    .2    .2    .2    .0    .0    .0    .0    .8   1.1   1.2    .9   1.4   1.1
165.  *    .0    .0    .0    .1    .4    .4    .3    .3    .3    .2    .0    .0    .0    .0    .8   1.1   1.2   1.2   1.3   1.1
170.  *    .0    .0    .0    .0    .3    .3    .2    .4    .3    .2    .2    .0    .0    .0    .8   1.0   1.3   1.2   1.2   1.1
175.  *    .0    .0    .0    .0    .2    .2    .1    .4    .4    .2    .2    .0    .0    .0    .8   1.0   1.4   1.1   1.2   1.0
180.  *    .0    .0    .0    .0    .0    .2    .1    .4    .4    .3    .2    .1    .0    .0    .9   1.1   1.4    .8   1.2   1.0
185.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .1    .0    .0   1.0   1.1   1.2   1.0   1.2    .9
190.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .3    .1    .0    .0   1.1   1.2   1.3    .8   1.2    .9
195.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .0    .0    .0   1.1   1.2   1.3    .7   1.2    .8
200.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .1    .0    .0    .0   1.2   1.4   1.4    .8   1.1    .8
205.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .0    .0    .0   1.1   1.3   1.4   1.0   1.1    .7
1
                                                                                                                   PAGE  4
     JOB: Site 6 Opt1/2PM 2030 - 6B1PM30.DAT                   RUN: Site 6 Opt1/2PM 2030

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .0    .0    .0   1.1   1.1   1.4   1.0   1.2    .6
215.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .0    .0    .0   1.3   1.3   1.3   1.0   1.2    .6
220.  *    .0    .0    .0    .0    .0    .0    .0    .4    .3    .2    .2    .1    .0    .1   1.3   1.3   1.5   1.1   1.2    .7
225.  *    .0    .0    .0    .0    .0    .0    .0    .4    .3    .2    .3    .2    .0    .1   1.2   1.5   1.5   1.3   1.2    .7
230.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .2    .4    .3    .0    .3   1.2   1.5   1.7   1.2   1.2    .7
235.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .4    .1    .5   1.3   1.4   1.3   1.3   1.1    .6
240.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .4    .1    .6   1.3   1.2   1.2   1.3   1.3    .6
245.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .6    .3    .8   1.0   1.3   1.4   1.3   1.2    .7
250.  *    .0    .0    .0    .0    .0    .0    .0    .3    .3    .2    .3    .6    .5   1.0    .9   1.3   1.3   1.4   1.1    .8
255.  *    .1    .0    .0    .0    .0    .0    .0    .3    .3    .2    .3    .5    .9   1.2    .6   1.2   1.3   1.2   1.1    .8
260.  *    .2    .2    .2    .0    .0    .0    .0    .3    .3    .2    .5    .8   1.0   1.3    .4    .7   1.0   1.2    .9    .8
265.  *    .3    .2    .2    .1    .0    .0    .0    .2    .3    .2    .6   1.0   1.1   1.4    .2    .4    .8   1.0    .9    .7
270.  *    .4    .4    .2    .2    .0    .0    .0    .2    .3    .3    .8   1.0   1.3   1.2    .2    .3    .6    .7    .6    .6
275.  *    .4    .4    .3    .2    .1    .0    .0    .2    .3    .3    .9   1.1   1.2   1.0    .1    .2    .4    .5    .5    .5
280.  *    .6    .5    .4    .3    .2    .1    .0    .2    .4    .5   1.0   1.2   1.2    .8    .1    .0    .2    .2    .3    .3
285.  *    .6    .5    .5    .3    .2    .1    .0    .4    .4    .5   1.0   1.2   1.0    .7    .1    .0    .1    .2    .2    .2
290.  *    .6    .5    .5    .4    .2    .2    .1    .5    .4    .4   1.0   1.1   1.0    .7    .1    .0    .1    .1    .1    .1
295.  *    .6    .5    .4    .4    .3    .2    .1    .5    .3    .6   1.0   1.0   1.0    .7    .1    .0    .0    .1    .0    .1
300.  *    .6    .5    .5    .6    .3    .1    .1    .5    .5    .6    .8    .9    .9    .7    .0    .0    .0    .0    .0    .0
305.  *    .5    .5    .4    .5    .2    .1    .1    .5    .5    .7    .6    .9    .9    .8    .0    .0    .0    .0    .0    .0
310.  *    .5    .5    .5    .7    .4    .2    .1    .6    .4    .7    .7    .8    .9    .7    .0    .0    .0    .0    .0    .0
315.  *    .5    .5    .5    .7    .4    .2    .1    .6    .5    .5    .6    .9    .9    .7    .0    .0    .0    .0    .0    .0
320.  *    .5    .4    .5    .8    .5    .2    .1    .6    .5    .7    .6    .8    .9    .8    .0    .0    .0    .0    .0    .0
325.  *    .5    .4    .5    .8    .7    .3    .2    .4    .5    .6    .7    .9    .9    .7    .0    .0    .0    .0    .0    .0
330.  *    .5    .4    .6    .9    .7    .3    .2    .5    .4    .7    .8    .9    .9    .8    .0    .0    .0    .0    .0    .0
335.  *    .5    .4    .6   1.0    .6    .3    .1    .4    .4    .8    .9    .9   1.0    .7    .0    .0    .0    .0    .0    .0
340.  *    .5    .4    .7   1.0    .6    .5    .2    .4    .3    .5    .9    .8    .9    .8    .0    .0    .0    .0    .0    .0
345.  *    .5    .4    .8   1.0    .5    .4    .2    .1    .3    .5    .8    .9    .9    .8    .0    .0    .0    .0    .0    .0
350.  *    .5    .4    .8    .9    .4    .4    .3    .1    .4    .6    .6    .8    .9    .7    .0    .0    .0    .0    .0    .0
355.  *    .5    .4    .8    .9    .4    .6    .4    .0    .3    .6    .6    .8    .9    .7    .0    .0    .0    .0    .0    .0
360.  *    .5    .4    .9   1.1    .3    .5    .3    .0    .3    .7    .9    .9   1.1    .7    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *    .6    .9   1.2   1.1    .9    .7    .5    .6    .5    .8   1.0   1.2   1.4   1.4   1.3   1.5   1.7   1.4   1.4   1.4
DEGR. *   65    70    65    50    40    15     5   310   300    10   280   280    40   265   215   225   230   100   160   130

1
                                                                                                                   PAGE  5
     JOB: Site 6 Opt1/2PM 2030 - 6B1PM30.DAT                   RUN: Site 6 Opt1/2PM 2030

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .1
  75.  *    .1
  80.  *    .2
  85.  *    .4
  90.  *    .6
  95.  *    .9
 100.  *    .9
 105.  *   1.0
 110.  *   1.0
 115.  *   1.0
 120.  *    .9
 125.  *    .9
 130.  *    .6
 135.  *    .6
 140.  *    .5
 145.  *    .5
 150.  *    .5
 155.  *    .5
 160.  *    .5
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                             PAGE  6
      JOB: Site 6 Opt1/2PM 2030 - 6B1PM30.DAT                    RUN: Site 6 Opt1/2PM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .5
 225.  *    .5
 230.  *    .7
 235.  *    .7
 240.  *    .7
 245.  *    .7
 250.  *    .8
 255.  *    .8
 260.  *    .7
 265.  *    .6
 270.  *    .5
 275.  *    .4
 280.  *    .2
 285.  *    .1
 290.  *    .1
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.0
 DEGR. *  105

 THE HIGHEST CONCENTRATION IS    1.70 PPM AT  230 DEGREES FROM REC17.
 THE 2ND HIGHEST CONCENTRATION IS    1.50 PPM AT  225 DEGREES FROM REC16.
 THE 3RD HIGHEST CONCENTRATION IS    1.40 PPM AT  265 DEGREES FROM REC14.
```

```
Site 6 Opt 3 AM 2014 - 6B3AM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt 3 AM 2014                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.    167211.4   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.    157811.4   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       120        62       2.0 1578  102.2 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.      9411.4   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.      9411.4   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       120        62       2.0   94  102.2 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.      9411.4   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    225611.4   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    225611.4   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    225611.4   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    225611.4   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    225611.4   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    225611.4   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.     72411.4   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.     72411.4   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.     72411.4   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.     72411.4   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.     72411.4   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.     33311.4   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       120        31        2.0  333  102.2 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     39111.4   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       120        92        2.0  391  102.2 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.     39611.4   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.     39611.4   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     74111.4   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      6311.4   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       120        96        2.0   63  102.2 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     67811.4   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     67811.4   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       120        65        2.0  678  102.2 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     67811.4   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     48511.4   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     48511.4   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     48511.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 6 Opt 3 AM 2014 - 6B3AM14.DAT                   RUN: Site 6 Opt 3 AM 2014
      DATE: 05/10/2009   TIME: 16:50:13.13


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*------------------------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG   1672.  11.4    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG   1578.  11.4    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2577.1    2002.1 *     391.   268. AG    283. 100.0    .0 24.0  .99  19.9
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG     94.  11.4    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG     94.  11.4    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2924.9    1959.6 *      32.   119. AG    142. 100.0    .0 12.0  .13   1.6
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG     94.  11.4    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG   2256.  11.4    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG   2256.  11.4    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG   2256.  11.4    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG   2256.  11.4    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG   2256.  11.4    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG   2256.  11.4    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG    724.  11.4    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG    724.  11.4    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG    724.  11.4    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG    724.  11.4    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG    724.  11.4    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG    333.  11.4    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3060.5    2061.8 *      28.    78. AG    142. 100.0    .0 24.0  .13   1.4
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    391.  11.4    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    3682.6    2190.4 *     662.    78. AG    210. 100.0    .0 12.0 1.10  33.6
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG    396.  11.4    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG    396.  11.4    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    741.  11.4    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     63.  11.4    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3019.2    1971.2 *      33.   173. AG    219. 100.0    .0 12.0  .21   1.7
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    678.  11.4    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    678.  11.4    .0 32.0
      30. WB        5 right   *   3106.0    2001.0    2852.8    1656.9 *     427.   216. AG    148. 100.0    .0 12.0 1.01  21.7
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    678.  11.4    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    485.  11.4    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    485.  11.4    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    485.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 Opt 3 AM 2014 - 6B3AM14.DAT                   RUN: Site 6 Opt 3 AM 2014
      DATE: 05/10/2009   TIME: 16:50:13.13

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *     120       62       2.0      1578       1770     102.20      1        3
       6. NB        2A rt     *     120       62       2.0        94       1583     102.20      1        3
      20. SB        2A thru   *     120       31       2.0       333       1770     102.20      1        3
      22. SB        2A left   *     120       92       2.0       391       1770     102.20      1        3
      27. WB        5 left    *     120       96       2.0        63       1770     102.20      1        3
      30. WB        5 right   *     120       65       2.0       678       1583     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      2594.0     1978.0        5.0   *
      2. SW 164 W             *      2757.0     1973.0        5.0   *
      3. SW 82 W              *      2839.0     1964.0        5.0   *
      4. SW CNR               *      2919.0     1936.0        5.0   *
      5. SW 82 S              *      2978.0     1874.0        5.0   *
      6. SW 164 S             *      3003.0     1794.0        5.0   *
      7. SW MID S             *      3021.0     1679.0        5.0   *
      8. SE MID S             *      3105.0     1694.0        5.0   *
      9. SE 164 S             *      3072.0     1811.0        5.0   *
     10. SE 82 S              *      3074.0     1891.0        5.0   *
     11. SE CNR               *      3109.0     1962.0        5.0   *
     12. SE 82 E              *      3164.0     2025.0        5.0   *
     13. SE 164 E             *      3242.0     2062.0        5.0   *
     14. SE MID E             *      3360.0     2134.0        5.0   *
     15. NE MID E             *      3286.0     2172.0        5.0   *
     16. NE 164 E             *      3153.0     2110.0        5.0   *
     17. NE 82 E              *      3074.0     2088.0        5.0   *
     18. N CNR                *      2994.0     2070.0        5.0   *
     19. NW 82 W              *      2912.0     2063.0        5.0   *
     20. NW 164 W             *      2829.0     2063.0        5.0   *
     21. NW  MID W            *      2704.0     2064.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 6 Opt 3 AM 2014 - 6B3AM14.DAT                   RUN: Site 6 Opt 3 AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   1.5   1.2   1.0   1.0    .4    .8    .4    .4    .5    .7   1.0   1.3   1.4   1.1    .0    .0    .0    .0    .0    .0
  5.  *   1.5   1.2   1.0    .9    .4    .7    .6    .3    .5    .8   1.0   1.3   1.4   1.1    .0    .0    .0    .0    .0    .0
 10.  *   1.5   1.3   1.0    .9    .5    .9    .7    .2    .5    .8    .9   1.3   1.4   1.2    .0    .0    .0    .0    .0    .0
 15.  *   1.5   1.2   1.0    .8    .6   1.0    .7    .2    .4    .8   1.0   1.3   1.5   1.5    .0    .0    .0    .0    .0    .0
 20.  *   1.5   1.2   1.0    .9    .6    .9    .7    .3    .3    .6    .9   1.3   1.5   1.5    .0    .0    .0    .0    .0    .0
 25.  *   1.5   1.2    .9    .6    .8    .8    .5    .3    .3    .6   1.0   1.3   1.6   1.5    .0    .0    .0    .0    .0    .0
 30.  *   1.5   1.2    .9    .6    .8    .8    .7    .3    .3    .8    .9   1.4   1.9   1.6    .1    .0    .0    .0    .0    .0
 35.  *   1.5   1.3    .9    .7    .7    .8    .8    .3    .4    .6   1.0   1.5   1.9   1.5    .2    .0    .0    .0    .0    .0
 40.  *   1.6   1.3   1.0    .6   1.1    .9    .6    .2    .4    .7   1.1   1.6   2.0   1.6    .4    .1    .0    .0    .0    .0
 45.  *   1.7   1.4   1.0    .7   1.2    .8    .4    .1    .3    .6   1.0   1.8   2.1   1.3    .6    .1    .1    .0    .0    .0
 50.  *   1.7   1.4   1.2   1.0   1.3    .8    .3    .1    .2    .6    .9   1.7   2.1   1.1    .7    .4    .1    .1    .0    .0
 55.  *   1.8   1.3   1.3   1.1   1.2    .4    .2    .0    .1    .4    .8   1.5   1.6    .8    .9    .6    .3    .1    .1    .0
 60.  *   1.8   1.6   1.3   1.0    .8    .4    .3    .0    .1    .2    .6   1.4   1.4    .7   1.0    .7    .4    .3    .1    .1
 65.  *   1.9   1.7   1.4    .9    .8    .4    .3    .0    .0    .1    .4    .9   1.1    .6   1.1    .7    .6    .6    .2    .2
 70.  *   2.0   1.5   1.3    .9    .6    .4    .2    .0    .0    .1    .2    .7    .9    .6   1.1   1.1   1.0    .7    .4    .2
 75.  *   2.1   1.4   1.1    .7    .6    .4    .2    .0    .0    .0    .1    .4    .6    .6   1.2   1.1   1.1   1.1    .6    .4
 80.  *   1.9   1.1   1.0    .5    .5    .4    .4    .0    .0    .0    .1    .4    .4    .8   1.2   1.2   1.3   1.2    .7    .5
 85.  *   1.6    .9    .7    .3    .5    .4    .4    .0    .0    .0    .0    .1    .3    .9   1.2   1.4   1.3   1.4    .9    .8
 90.  *   1.3    .6    .6    .2    .5    .4    .3    .0    .0    .0    .0    .1    .1    .8   1.2   1.5   1.2   1.6   1.1   1.0
 95.  *    .8    .5    .3    .3    .5    .4    .4    .0    .0    .0    .0    .0    .1    .9   1.3   1.5   1.4   1.5   1.0   1.1
100.  *    .6    .3    .2    .3    .5    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.4   1.5   1.4   1.4    .9   1.0
105.  *    .3    .1    .2    .3    .5    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.3   1.4   1.4   1.5    .9   1.2
110.  *    .3    .1    .1    .3    .6    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.2   1.4   1.5   1.4   1.0   1.1
115.  *    .1    .1    .1    .3    .6    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.2   1.4   1.4   1.3   1.1   1.2
120.  *    .1    .1    .1    .3    .6    .4    .4    .0    .0    .0    .0    .0    .0    .7   1.2   1.3   1.4   1.3   1.1   1.3
125.  *    .1    .1    .1    .2    .6    .4    .4    .0    .0    .0    .0    .0    .0    .7   1.2   1.3   1.3   1.3   1.3   1.1
130.  *    .0    .2    .2    .2    .5    .4    .4    .0    .0    .0    .0    .0    .0    .7   1.2   1.3   1.3   1.2   1.3   1.1
135.  *    .0    .2    .2    .3    .5    .4    .4    .0    .0    .0    .0    .0    .0    .6   1.2   1.3   1.2   1.1   1.4   1.1
140.  *    .0    .2    .2    .3    .6    .4    .4    .0    .0    .0    .0    .0    .0    .6   1.1   1.3   1.3   1.0   1.3   1.2
145.  *    .0    .2    .2    .3    .7    .5    .4    .1    .1    .0    .0    .0    .0    .6   1.1   1.3   1.2   1.1   1.4   1.2
150.  *    .0    .1    .2    .3    .7    .5    .4    .1    .1    .0    .0    .0    .0    .6   1.1   1.2   1.3   1.0   1.3   1.2
155.  *    .0    .1    .2    .2    .7    .5    .4    .2    .2    .1    .0    .0    .0    .6   1.1   1.2   1.5   1.2   1.3   1.2
160.  *    .0    .0    .1    .2    .7    .5    .3    .3    .3    .1    .0    .0    .0    .6   1.1   1.3   1.3   1.3   1.2   1.2
165.  *    .0    .0    .1    .2    .6    .3    .2    .4    .4    .1    .1    .0    .0    .6   1.1   1.4   1.5   1.2   1.2   1.1
170.  *    .0    .0    .1    .1    .6    .3    .2    .4    .4    .3    .1    .0    .0    .6   1.1   1.4   1.5   1.1   1.3   1.1
175.  *    .0    .0    .1    .1    .5    .3    .1    .5    .4    .3    .1    .1    .0    .6   1.1   1.5   1.5   1.0   1.3   1.0
180.  *    .0    .0    .0    .1    .3    .0    .0    .5    .5    .3    .1    .1    .0    .6   1.2   1.3   1.6   1.0   1.3   1.0
185.  *    .0    .0    .0    .1    .4    .0    .0    .5    .5    .3    .1    .1    .1    .6   1.2   1.3   1.7   1.0   1.2   1.0
190.  *    .0    .0    .0    .1    .4    .0    .0    .4    .5    .4    .1    .1    .1    .6   1.1   1.5   1.6    .8   1.1   1.0
195.  *    .0    .0    .0    .1    .4    .0    .0    .4    .4    .3    .1    .1    .1    .6   1.2   1.5   1.5    .9   1.0   1.0
200.  *    .0    .0    .0    .1    .3    .0    .0    .4    .4    .3    .3    .1    .1    .7   1.3   1.9   1.7    .9   1.0   1.0
205.  *    .0    .0    .0    .0    .3    .0    .0    .4    .4    .3    .4    .2    .1    .8   1.3   1.8   1.7    .8   1.0   1.0
```

```
WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .3    .1    .0    .4    .4    .5    .3    .1    .0    .8   1.5   1.8   1.6    .9   1.0   1.0
215.  *    .0    .0    .0    .0    .2    .1    .0    .4    .4    .5    .3    .4    .1    .8   1.4   1.7   1.7   1.0   1.1   1.1
220.  *    .0    .0    .0    .0    .1    .1    .0    .4    .4    .5    .4    .4    .1   1.1   1.5   1.4   1.6   1.0   1.1   1.3
225.  *    .0    .0    .0    .0    .1    .2    .0    .4    .4    .5    .6    .5    .2   1.2   1.4   1.4   1.3   1.1   1.2   1.2
230.  *    .0    .0    .0    .0    .1    .2    .0    .4    .4    .6    .6    .6    .2   1.3   1.3   1.5   1.4   1.1   1.3   1.3
235.  *    .0    .0    .0    .0    .0    .2    .0    .4    .4    .6    .7    .5    .3   1.6   1.1   1.3   1.2   1.2   1.3   1.2
240.  *    .0    .0    .0    .0    .0    .3    .0    .4    .4    .6    .7    .5    .5   2.0   1.1   1.3   1.5   1.3   1.4   1.3
245.  *    .1    .0    .0    .0    .0    .3    .0    .4    .4    .7    .8    .6    .9   2.2   1.1   1.2   1.3   1.3   1.3   1.2
250.  *    .1    .1    .0    .0    .0    .3    .0    .4    .5    .6    .8    .9   1.3   2.5    .8   1.1   1.1   1.5   1.5   1.2
255.  *    .2    .2    .1    .0    .0    .3    .0    .5    .5    .6   1.0   1.2   1.6   2.5    .8    .9   1.3   1.3   1.3   1.1
260.  *    .3    .3    .3    .1    .0    .3    .1    .4    .5    .6    .9   1.3   1.7   2.4    .5    .7   1.1   1.1   1.2   1.0
265.  *    .5    .6    .5    .2    .1    .3    .1    .5    .5    .7   1.0   1.7   1.9   2.1    .2    .5    .8    .9   1.0    .8
270.  *    .7    .9    .7    .3    .1    .2    .1    .5    .6    .7   1.2   1.6   2.0   1.9    .2    .3    .5    .7    .7    .7
275.  *    .8   1.1    .9    .6    .2    .3    .1    .5    .6    .7   1.5   1.6   1.9   1.4    .0    .2    .2    .6    .4    .4
280.  *    .9   1.3   1.0    .7    .3    .3    .1    .6    .7   1.0   1.6   1.9   1.7   1.3    .0    .0    .2    .2    .3    .2
285.  *   1.0   1.4   1.2    .8    .3    .3    .2    .6    .6   1.0   1.4   1.7   1.6   1.2    .0    .0    .0    .0    .2    .2
290.  *   1.0   1.4   1.3    .9    .4    .5    .2    .6    .5   1.0   1.4   1.8   1.7   1.1    .0    .0    .0    .0    .0    .0
295.  *   1.0   1.5   1.2    .9    .6    .5    .2    .7    .6   1.0   1.2   1.5   1.5   1.0    .0    .0    .0    .0    .0    .0
300.  *   1.0   1.5   1.2    .9    .7    .4    .3    .7    .7   1.1   1.2   1.5   1.4   1.0    .0    .0    .0    .0    .0    .0
305.  *   1.0   1.4   1.2    .8    .5    .5    .3    .7    .8   1.0   1.1   1.5   1.4   1.0    .0    .0    .0    .0    .0    .0
310.  *   1.0   1.4   1.2   1.0    .5    .6    .3    .7    .9    .9   1.2   1.5   1.4    .9    .0    .0    .0    .0    .0    .0
315.  *   1.1   1.4   1.2   1.0    .6    .6    .3    .8    .7   1.1   1.0   1.4   1.4   1.0    .0    .0    .0    .0    .0    .0
320.  *   1.1   1.3   1.0    .9    .5    .6    .3    .7    .7    .9   1.0   1.4   1.4   1.0    .0    .0    .0    .0    .0    .0
325.  *   1.1   1.2   1.1    .9    .5    .5    .4    .7    .5    .9   1.0   1.6   1.4   1.0    .0    .0    .0    .0    .0    .0
330.  *   1.2   1.2   1.1    .9    .4    .5    .3    .7    .6   1.0   1.1   1.3   1.4   1.0    .0    .0    .0    .0    .0    .0
335.  *   1.2   1.2   1.0    .9    .4    .5    .3    .6    .7    .8   1.2   1.3   1.3   1.0    .0    .0    .0    .0    .0    .0
340.  *   1.3   1.2   1.0    .9    .4    .5    .3    .6    .7    .8   1.2   1.3   1.3    .9    .0    .0    .0    .0    .0    .0
345.  *   1.4   1.2   1.0    .9    .4    .7    .4    .3    .4    .8   1.1   1.2   1.4   1.0    .0    .0    .0    .0    .0    .0
350.  *   1.4   1.2   1.0    .9    .4    .8    .5    .3    .4    .9   1.3   1.2   1.5   1.0    .0    .0    .0    .0    .0    .0
355.  *   1.4   1.2   1.0   1.0    .4    .8    .5    .4    .5    .9   1.1   1.2   1.4   1.1    .0    .0    .0    .0    .0    .0
360.  *   1.5   1.2   1.0   1.0    .4    .8    .4    .4    .5    .7   1.0   1.3   1.4   1.1    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   2.1   1.7   1.4   1.1   1.3   1.0    .8    .8    .9   1.1   1.6   1.9   2.1   2.5   1.5   1.9   1.7   1.6   1.5   1.3
DEGR. *   75    65    65    55    50    15    35   315   310   300   280   280    45   250   210   200   185    90   250   120
```

```
 MODEL RESULTS
 -------------

 REMARKS : In search of the angle corresponding to
           the maximum concentration, only the first
           angle, of the angles with same maximum
           concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .1
  75.  *    .1
  80.  *    .6
  85.  *    .6
  90.  *    .8
  95.  *    .9
 100.  *   1.1
 105.  *   1.1
 110.  *   1.2
 115.  *   1.3
 120.  *   1.2
 125.  *   1.3
 130.  *   1.3
 135.  *   1.2
 140.  *   1.3
 145.  *   1.2
 150.  *   1.0
 155.  *   1.0
 160.  *   1.0
 165.  *   1.0
 170.  *   1.0
 175.  *   1.0
 180.  *   1.0
 185.  *   1.0
 190.  *   1.0
 195.  *   1.0
 200.  *   1.0
 205.  *   1.0
1
                                                                                                                             PAGE  6
      JOB: Site 6 Opt 3 AM 2014 - 6B3AM14.DAT                  RUN: Site 6 Opt 3 AM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   1.0
 215.  *   1.0
 220.  *   1.1
 225.  *   1.1
 230.  *   1.1
 235.  *   1.1
 240.  *   1.1
 245.  *   1.0
 250.  *    .9
 255.  *    .9
 260.  *    .7
 265.  *    .7
 270.  *    .5
 275.  *    .3
 280.  *    .2
 285.  *    .2
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.3
 DEGR. *  115

 THE HIGHEST CONCENTRATION IS    2.50 PPM AT  250 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS    2.10 PPM AT   45 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    2.10 PPM AT   75 DEGREES FROM REC1 .
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Site 6 Opt 3 AM 2030 - 6B3AM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt 3 AM 2030                     34  1   0
  1
NB         2A aprch  AG  2001.  2001.  2781.  2010.    1510 9.2   0  44   30.
  1
NB         2A thru   AG  2781.  2010.  2989.  2020.    1410 9.2   0  44   30.
  2
NB         2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       120        65       2.0 1410   84.1 1770 1 3
  1
NB         2A rt     AG  2716.  2000.  2889.  1980.     100 9.2   0  32   30.
  1
NB         2A rt     AG  2889.  1980.  2957.  1942.     100 9.2   0  32   30.
  2
NB         2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       120        65       2.0  100   84.1 1583 1 3
  1
NB         2A rt     AG  2957.  1942.  3003.  1886.     100 9.2   0  32   30.
  1
NB         2A depart AG  2991.  2022.  3120.  2046.    2065 9.2   0  44   30.
  1
NB         2A depart AG  3120.  2046.  3259.  2100.    2065 9.2   0  44   30.
  1
NB         2A depart AG  3259.  2100.  3389.  2185.    2065 9.2   0  44   30.
  1
NB         2A depart AG  3389.  2185.  3483.  2285.    2065 9.2   0  44   30.
  1
NB         2A depart AG  3483.  2285.  3678.  2522.    2065 9.2   0  44   30.
  1
NB         2A depart AG  3678.  2522.  3786.  2625.    2065 9.2   0  44   30.
  1
SB         2A aprch  AG  3770.  2644.  3666.  2543.     730 9.2   0  44   30.
  1
SB         2A aprch  AG  3666.  2543.  3422.  2252.     730 9.2   0  44   30.
```

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  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.     730 9.2   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.     730 9.2   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.     730 9.2   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.     310 9.2   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       120        30       2.0  310   84.1 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     420 9.2   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       120        89       2.0  420   84.1 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.     375 9.2   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.     375 9.2   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     720 9.2   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      65 9.2   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       120        98       2.0   65   84.1 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     655 9.2   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     655 9.2   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       120        63       2.0  655   84.1 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     655 9.2   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     520 9.2   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     520 9.2   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     520 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 6 Opt 3 AM 2030 - 6B3AM30.DAT                   RUN: Site 6 Opt 3 AM 2030
      DATE: 05/10/2009   TIME: 16:59:52.10


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
        1. NB        2A aprch *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG    1510.   9.2    .0 44.0
        2. NB        2A thru  *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG    1410.   9.2    .0 44.0
        3. NB        2A thru  *   2968.0    2019.0    2655.4    2005.5 *     313.   268. AG     244. 100.0    .0 24.0  .94  15.9
        4. NB        2A rt    *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG     100.   9.2    .0 32.0
        5. NB        2A rt    *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG     100.   9.2    .0 32.0
        6. NB        2A rt    *   2897.0    1975.0    2928.1    1957.8 *      36.   119. AG     122. 100.0    .0 12.0  .15   1.8
        7. NB        2A rt    *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG     100.   9.2    .0 32.0
        8. NB        2A depart *  2991.0    2022.0    3120.0    2046.0 *     131.    79. AG    2065.   9.2    .0 44.0
        9. NB        2A depart *  3120.0    2046.0    3259.0    2100.0 *     149.    69. AG    2065.   9.2    .0 44.0
       10. NB        2A depart *  3259.0    2100.0    3389.0    2185.0 *     155.    57. AG    2065.   9.2    .0 44.0
       11. NB        2A depart *  3389.0    2185.0    3483.0    2285.0 *     137.    43. AG    2065.   9.2    .0 44.0
       12. NB        2A depart *  3483.0    2285.0    3678.0    2522.0 *     307.    39. AG    2065.   9.2    .0 44.0
       13. NB        2A depart *  3678.0    2522.0    3786.0    2625.0 *     149.    46. AG    2065.   9.2    .0 44.0
       14. SB        2A aprch *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG     730.   9.2    .0 44.0
       15. SB        2A aprch *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG     730.   9.2    .0 44.0
       16. SB        2A aprch *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG     730.   9.2    .0 44.0
       17. SB        2A aprch *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG     730.   9.2    .0 44.0
       18. SB        2A aprch *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG     730.   9.2    .0 44.0
       19. SB        2A thru  *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG     310.   9.2    .0 44.0
       20. SB        2A thru  *   3033.0    2056.0    3057.9    2061.3 *      25.    78. AG     113. 100.0    .0 24.0  .12   1.3
       21. SB        2A left  *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG     420.   9.2    .0 32.0
       22. SB        2A left  *   3036.0    2049.0    3547.2    2160.8 *     523.    78. AG     167. 100.0    .0 12.0 1.06  26.6
       23. SB        2A depart *  3000.0    2046.0    2878.0    2037.0 *     122.   266. AG     375.   9.2    .0 44.0
       24. SB        2A depart *  2878.0    2037.0    2000.0    2028.0 *     878.   269. AG     375.   9.2    .0 44.0
       25. WB        5 aprch  *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG     720.   9.2    .0 32.0
       26. WB        5 left   *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG      65.   9.2    .0 32.0
       27. WB        5 left   *   3015.0    2004.0    3019.5    1969.5 *      35.   173. AG     184. 100.0    .0 12.0  .25   1.8
       28. WB        5 right  *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG     655.   9.2    .0 32.0
       29. WB        5 right  *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG     655.   9.2    .0 32.0
       30. WB        5 right  *   3106.0    2001.0    2936.2    1770.2 *     287.   216. AG     118. 100.0    .0 12.0  .94  14.6
       31. WB        5 right  *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG     655.   9.2    .0 32.0
       32. EB        5 depart *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG     520.   9.2    .0 32.0
       33. EB        5 depart *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG     520.   9.2    .0 32.0
       34. EB        5 depart *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG     520.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 Opt 3 AM 2030 - 6B3AM30.DAT                   RUN: Site 6 Opt 3 AM 2030
      DATE: 05/10/2009   TIME: 16:59:52.10

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
        3. NB        2A thru  *     120       65       2.0      1410       1770      84.10      1        3
        6. NB        2A rt    *     120       65       2.0       100       1583      84.10      1        3
       20. SB        2A thru  *     120       30       2.0       310       1770      84.10      1        3
       22. SB        2A left  *     120       89       2.0       420       1770      84.10      1        3
       27. WB        5 left   *     120       98       2.0        65       1770      84.10      1        3
       30. WB        5 right  *     120       63       2.0       655       1583      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
       1. SW MID W            *      2594.0     1978.0        5.0   *
       2. SW 164 W            *      2757.0     1973.0        5.0   *
       3. SW 82 W             *      2839.0     1964.0        5.0   *
       4. SW CNR              *      2919.0     1936.0        5.0   *
       5. SW 82 S             *      2978.0     1874.0        5.0   *
       6. SW 164 S            *      3003.0     1794.0        5.0   *
       7. SW MID S            *      3021.0     1679.0        5.0   *
       8. SE MID S            *      3105.0     1694.0        5.0   *
       9. SE 164 S            *      3072.0     1811.0        5.0   *
      10. SE 82 S             *      3074.0     1891.0        5.0   *
      11. SE CNR              *      3109.0     1962.0        5.0   *
      12. SE 82 E             *      3164.0     2025.0        5.0   *
      13. SE 164 E            *      3242.0     2062.0        5.0   *
      14. SE MID E            *      3360.0     2134.0        5.0   *
      15. NE MID E            *      3286.0     2172.0        5.0   *
      16. NE 164 E            *      3153.0     2110.0        5.0   *
      17. NE 82 E             *      3074.0     2088.0        5.0   *
      18. N CNR               *      2994.0     2070.0        5.0   *
      19. NW 82 W             *      2912.0     2063.0        5.0   *
      20. NW 164 W            *      2829.0     2063.0        5.0   *
      21. NW  MID W           *      2704.0     2064.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 6 Opt 3 AM 2030 - 6B3AM30.DAT                   RUN: Site 6 Opt 3 AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
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```
WIND ANGLE RANGE:   0.-360.

WIND   * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*-----------------------------------------------------------------------------------------------------------------------
  0.  *   .5   1.0    .8    .7    .4    .5    .4    .2    .4    .7    .8    .9   1.1    .9    .0    .0    .0    .0    .0    .0
  5.  *   .5   1.0    .8    .7    .4    .5    .4    .2    .4    .8    .7    .9   1.0    .9    .0    .0    .0    .0    .0    .0
 10.  *   .5    .9    .8    .7    .3    .7    .4    .2    .4    .7    .8    .9   1.1   1.0    .0    .0    .0    .0    .0    .0
 15.  *   .5   1.0    .7    .7    .3    .7    .6    .2    .4    .6    .8    .9   1.0    .9    .0    .0    .0    .0    .0    .0
 20.  *   .5   1.0    .7    .5    .5    .9    .5    .2    .2    .5    .8    .9   1.1   1.2    .0    .0    .0    .0    .0    .0
 25.  *   .5   1.0    .7    .6    .5    .8    .5    .1    .2    .5    .9    .9   1.2   1.1    .0    .0    .0    .0    .0    .0
 30.  *   .5   1.0    .7    .6    .6    .7    .3    .1    .3    .4    .7   1.1   1.3   1.3    .0    .0    .0    .0    .0    .0
 35.  *   .5   1.1    .8    .4    .5    .6    .3    .1    .3    .3    .8   1.2   1.4   1.2    .1    .0    .0    .0    .0    .0
 40.  *   .7   1.1    .8    .6    .6    .7    .3    .0    .3    .4    .9   1.4   1.7   1.2    .3    .0    .0    .0    .0    .0
 45.  *   .7   1.1    .8    .5    .7    .7    .2    .0    .2    .4    .7   1.4   1.6   1.0    .5    .1    .0    .0    .0    .0
 50.  *   .8   1.1    .8    .7    .8    .3    .2    .0    .1    .4    .7   1.3   1.4    .8    .6    .1    .1    .0    .0    .0
 55.  *   .8   1.1    .9    .6    .8    .3    .2    .0    .1    .2    .6   1.2   1.2    .6    .7    .4    .1    .1    .0    .0
 60.  *   .9   1.1    .9    .8    .8    .2    .2    .0    .0    .1    .3   1.0   1.1    .6    .7    .5    .3    .2    .0    .0
 65.  *  1.1   1.3    .9    .8    .6    .2    .2    .0    .0    .1    .3    .7    .8    .4    .8    .7    .6    .5    .1    .0
 70.  *  1.2   1.1    .9    .6    .6    .3    .2    .0    .0    .0    .1    .5    .6    .5    .8    .9    .6    .5    .2    .1
 75.  *  1.3   1.1    .8    .6    .5    .3    .2    .0    .0    .0    .1    .4    .3    .5    .8    .9    .8    .5    .5    .1
 80.  *  1.2   1.0    .6    .5    .5    .3    .2    .0    .0    .0    .0    .3    .3    .5    .9    .9    .8   1.0    .6    .3
 85.  *  1.1    .7    .6    .2    .5    .3    .3    .0    .0    .0    .0    .1    .1    .5    .9   1.0   1.0   1.1    .7    .4
 90.  *   .8    .6    .5    .2    .4    .2    .3    .0    .0    .0    .0    .0    .1    .6    .9   1.0   1.0   1.2    .6    .6
 95.  *   .6    .2    .2    .2    .4    .2    .2    .0    .0    .0    .0    .0    .0    .6   1.0   1.2   1.2   1.1    .6    .7
100.  *   .4    .3    .2    .2    .4    .2    .2    .0    .0    .0    .0    .0    .0    .6   1.0   1.0   1.2   1.1    .7    .9
105.  *   .2    .1    .2    .2    .4    .3    .2    .0    .0    .0    .0    .0    .0    .6    .9   1.1   1.2   1.1    .8    .9
110.  *   .2    .1    .1    .2    .5    .4    .2    .0    .0    .0    .0    .0    .0    .6    .9   1.1   1.1   1.1    .6    .8
115.  *   .0    .1    .1    .2    .4    .4    .2    .0    .0    .0    .0    .0    .0    .6    .9    .9   1.1   1.0    .6   1.0
120.  *   .0    .1    .1    .2    .5    .4    .2    .0    .0    .0    .0    .0    .0    .6    .9    .9   1.1   1.0    .8   1.0
125.  *   .0    .0    .1    .1    .5    .4    .2    .0    .0    .0    .0    .0    .0    .5    .8    .9   1.0   1.0    .9    .9
130.  *   .0    .0    .1    .1    .4    .4    .3    .0    .0    .0    .0    .0    .0    .5    .8    .9   1.0    .9   1.1   1.0
135.  *   .0    .0    .2    .2    .4    .4    .3    .0    .0    .0    .0    .0    .0    .5    .8    .9   1.1    .9   1.0   1.0
140.  *   .0    .0    .2    .3    .4    .4    .3    .0    .0    .0    .0    .0    .0    .5    .8    .9   1.0    .8   1.0   1.0
145.  *   .0    .0    .2    .3    .5    .5    .3    .0    .0    .0    .0    .0    .0    .5    .8    .9   1.0    .8   1.0   1.0
150.  *   .0    .0    .1    .2    .5    .5    .3    .1    .1    .0    .0    .0    .0    .5    .8    .9   1.1    .8   1.1    .9
155.  *   .0    .0    .0    .2    .6    .5    .3    .1    .1    .1    .0    .0    .0    .5    .8    .9   1.0    .9   1.0    .9
160.  *   .0    .0    .0    .2    .5    .3    .2    .2    .2    .1    .0    .0    .0    .5    .8    .9   1.1   1.0   1.1    .8
165.  *   .0    .0    .0    .2    .5    .3    .2    .3    .3    .1    .1    .0    .0    .5    .8    .9   1.1    .9   1.1    .8
170.  *   .0    .0    .0    .1    .5    .3    .1    .4    .3    .2    .1    .0    .0    .5    .8   1.0   1.2    .9   1.0    .8
175.  *   .0    .0    .0    .1    .3    .2    .1    .4    .4    .3    .1    .0    .0    .5    .8   1.0   1.2    .9   1.0    .8
180.  *   .0    .0    .0    .0    .3    .0    .0    .4    .4    .3    .1    .1    .0    .5    .8   1.1   1.2    .8   1.0    .8
185.  *   .0    .0    .0    .0    .2    .0    .0    .4    .5    .2    .1    .1    .0    .5    .9   1.1   1.1    .6   1.0    .8
190.  *   .0    .0    .0    .0    .2    .0    .0    .4    .5    .2    .1    .1    .0    .5    .9   1.3   1.0    .8    .9    .8
195.  *   .0    .0    .0    .0    .2    .0    .0    .4    .3    .3    .1    .1    .0    .5    .8   1.2   1.1    .6    .9    .8
200.  *   .0    .0    .0    .0    .2    .0    .0    .3    .3    .3    .2    .1    .0    .5   1.0   1.1   1.2    .7    .9    .8
205.  *   .0    .0    .0    .0    .2    .0    .0    .3    .3    .3    .2    .1    .0    .5   1.0   1.2   1.3    .6    .9    .8
1
                                                                                                                       PAGE  4
     JOB: Site 6 Opt 3 AM 2030 - 6B3AM30.DAT                  RUN: Site 6 Opt 3 AM 2030

WIND   * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*-----------------------------------------------------------------------------------------------------------------------
210.  *   .0    .0    .0    .0    .1    .0    .0    .3    .3    .3    .2    .1    .0    .6   1.1   1.3   1.3    .7    .9    .8
215.  *   .0    .0    .0    .0    .1    .0    .0    .3    .3    .3    .3    .1    .0    .7   1.1   1.2   1.1    .7    .9    .9
220.  *   .0    .0    .0    .0    .1    .0    .0    .3    .3    .4    .3    .3    .1    .7   1.0   1.2   1.2    .8    .9    .9
225.  *   .0    .0    .0    .0    .0    .0    .0    .3    .3    .4    .4    .3    .1    .9   1.1   1.1   1.0    .8    .9   1.0
230.  *   .0    .0    .0    .0    .0    .0    .0    .3    .3    .5    .5    .4    .2    .9   1.0   1.1    .9    .9   1.0    .9
235.  *   .0    .0    .0    .0    .0    .0    .0    .3    .3    .4    .5    .4    .2   1.3    .9   1.1   1.0    .9   1.1   1.0
240.  *   .0    .0    .0    .0    .0    .1    .0    .3    .3    .4    .5    .5    .4   1.4    .9   1.0   1.0   1.0   1.1    .9
245.  *   .1    .0    .0    .0    .0    .1    .0    .3    .3    .4    .6    .5    .5   1.6    .7   1.0   1.1   1.0   1.1   1.0
250.  *   .1    .1    .0    .0    .0    .1    .0    .3    .4    .5    .6    .7    .9   1.8    .8   1.0    .9   1.1   1.1    .9
255.  *   .2    .1    .1    .0    .0    .1    .0    .2    .4    .5    .6    .8   1.1   1.8    .5    .7    .9   1.0   1.0    .9
260.  *   .2    .2    .1    .1    .0    .1    .0    .3    .4    .5    .8   1.2   1.3   1.8    .3    .6    .5    .9    .8    .7
265.  *   .3    .4    .3    .1    .0    .2    .0    .3    .4    .6    .9   1.2   1.4   1.7    .2    .3    .5    .8    .6    .6
270.  *   .5    .5    .4    .3    .1    .2    .0    .3    .4    .6   1.1   1.2   1.5   1.3    .0    .2    .3    .6    .5    .4
275.  *   .6    .7    .6    .3    .1    .2    .0    .3    .5    .7   1.1   1.4   1.5   1.0    .0    .2    .2    .4    .3    .3
280.  *   .7    .9    .8    .4    .2    .3    .0    .3    .4    .7   1.1   1.3   1.4    .9    .0    .0    .0    .2    .2    .2
285.  *   .7    .9    .8    .6    .2    .3    .0    .4    .4    .9   1.2   1.3   1.3    .9    .0    .0    .0    .0    .0    .0
290.  *   .7   1.0    .9    .7    .2    .3    .1    .4    .5    .9   1.0   1.3   1.2    .7    .0    .0    .0    .0    .0    .0
295.  *   .7   1.1    .9    .7    .3    .4    .1    .4    .5    .9   1.0   1.2   1.1    .7    .0    .0    .0    .0    .0    .0
300.  *   .7   1.1   1.0    .6    .4    .4    .1    .5    .5    .9    .9   1.1   1.0    .7    .0    .0    .0    .0    .0    .0
305.  *   .6   1.1   1.0    .7    .4    .4    .1    .6    .7    .8    .8   1.2   1.0    .7    .0    .0    .0    .0    .0    .0
310.  *   .6   1.1   1.0    .8    .4    .4    .2    .6    .7    .8    .8   1.1   1.0    .7    .0    .0    .0    .0    .0    .0
315.  *   .6   1.1    .9    .6    .3    .6    .2    .5    .7    .8    .8   1.0   1.0    .7    .0    .0    .0    .0    .0    .0
320.  *   .6   1.0    .9    .6    .3    .5    .3    .6    .5    .9    .8   1.1   1.0    .8    .0    .0    .0    .0    .0    .0
325.  *   .5   1.0   1.0    .6    .3    .5    .2    .6    .5    .9    .8    .9   1.0    .8    .0    .0    .0    .0    .0    .0
330.  *   .5   1.0    .8    .7    .3    .5    .3    .6    .5    .8    .8   1.0   1.0    .8    .0    .0    .0    .0    .0    .0
335.  *   .5   1.0    .8    .7    .3    .4    .3    .5    .6    .6    .8    .9   1.0    .7    .0    .0    .0    .0    .0    .0
340.  *   .5   1.0    .8    .7    .3    .4    .3    .2    .5    .7    .8    .9   1.0    .7    .0    .0    .0    .0    .0    .0
345.  *   .5   1.0    .8    .7    .3    .5    .4    .3    .3    .8    .8    .9   1.0    .7    .0    .0    .0    .0    .0    .0
350.  *   .5   1.0    .8    .7    .2    .6    .3    .3    .3    .8    .9    .9   1.1    .7    .0    .0    .0    .0    .0    .0
355.  *   .5   1.0    .8    .7    .4    .7    .2    .2    .4    .7    .7    .9   1.1    .7    .0    .0    .0    .0    .0    .0
360.  *   .5   1.0    .8    .7    .4    .5    .4    .2    .4    .7    .8    .9   1.1    .9    .0    .0    .0    .0    .0    .0
------*-----------------------------------------------------------------------------------------------------------------------
MAX   *  1.3   1.3   1.0    .8    .8    .9    .6    .6    .7    .9   1.2   1.4   1.7   1.8   1.1   1.3   1.3   1.2   1.1   1.0
DEGR. *  75    65   300    60    55    20    15   305   305   285   285    40    40   250   210   210   205    90   130   115

1
                                                                                                                       PAGE  5
     JOB: Site 6 Opt 3 AM 2030 - 6B3AM30.DAT                  RUN: Site 6 Opt 3 AM 2030

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND   * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .0
  75.  *    .1
  80.  *    .2
  85.  *    .5
  90.  *    .6
  95.  *    .7
 100.  *    .8
 105.  *    .9
 110.  *    .8
 115.  *    .8
 120.  *   1.0
 125.  *    .9
 130.  *    .9
 135.  *    .8
 140.  *    .9
 145.  *    .8
 150.  *    .8
 155.  *    .8
 160.  *    .8
 165.  *    .8
 170.  *    .8
 175.  *    .8
 180.  *    .8
 185.  *    .8
 190.  *    .8
 195.  *    .8
 200.  *    .8
 205.  *    .7
1
                                                                                                                             PAGE  6
      JOB: Site 6 Opt 3 AM 2030 - 6B3AM30.DAT                    RUN: Site 6 Opt 3 AM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .7
 215.  *    .7
 220.  *    .6
 225.  *    .6
 230.  *    .5
 235.  *    .5
 240.  *    .6
 245.  *    .5
 250.  *    .6
 255.  *    .6
 260.  *    .5
 265.  *    .4
 270.  *    .3
 275.  *    .2
 280.  *    .2
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.0
 DEGR. *  120

 THE HIGHEST CONCENTRATION IS    1.80 PPM AT  250 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS    1.70 PPM AT   40 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    1.40 PPM AT   40 DEGREES FROM REC12.
```

```
Site 6 Opt 3 PM 2014 - 6B3PM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt 3 PM 2014                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.     69311.4   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.     58111.4   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       109        78       2.0  581  102.2 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.     11211.4   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.     11211.4   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       109        78       2.0  112  102.2 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.     11211.4   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    103711.4   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    103711.4   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    103711.4   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    103711.4   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    103711.4   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    103711.4   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.    213511.4   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.    213511.4   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.    213511.4   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.    213511.4   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.    213511.4   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.    135511.4   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       109        16       2.0 1355  102.2 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     78011.4   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       109        51       2.0  780  102.2 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.    141911.4   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.    141911.4   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     52011.4   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      6411.4   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       109       100       2.0   64  102.2 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     45611.4   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     45611.4   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       109        44       2.0  456  102.2 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     45611.4   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     89211.4   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     89211.4   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     89211.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                       CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 6 Opt 3 PM 2014 - 6B3PM14.DAT                  RUN: Site 6 Opt 3 PM 2014
      DATE: 05/10/2009   TIME: 16:55:04.73


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2    *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*-------------------------------------*-----------------------------------------------------------
       1. NB        2A aprch  *  2001.0    2001.0    2781.0    2010.0 *     780.    89. AG    693.  11.4    .0 44.0
       2. NB        2A thru   *  2781.0    2010.0    2989.0    2020.0 *     208.    87. AG    581.  11.4    .0 44.0
       3. NB        2A thru   *  2968.0    2019.0    2844.4    2013.7 *     124.   268. AG    392. 100.0    .0 24.0  .66   6.3
       4. NB        2A rt     *  2716.0    2000.0    2889.0    1980.0 *     174.    97. AG    112.  11.4    .0 32.0
       5. NB        2A rt     *  2889.0    1980.0    2957.0    1942.0 *      78.   119. AG    112.  11.4    .0 32.0
       6. NB        2A rt     *  2897.0    1975.0    2938.8    1951.9 *      48.   119. AG    196. 100.0    .0 12.0  .29   2.4
       7. NB        2A rt     *  2957.0    1942.0    3003.0    1886.0 *      72.   141. AG    112.  11.4    .0 32.0
       8. NB        2A depart *  2991.0    2022.0    3120.0    2046.0 *     131.    79. AG   1037.  11.4    .0 44.0
       9. NB        2A depart *  3120.0    2046.0    3259.0    2100.0 *     149.    69. AG   1037.  11.4    .0 44.0
      10. NB        2A depart *  3259.0    2100.0    3389.0    2185.0 *     155.    57. AG   1037.  11.4    .0 44.0
      11. NB        2A depart *  3389.0    2185.0    3483.0    2285.0 *     137.    43. AG   1037.  11.4    .0 44.0
      12. NB        2A depart *  3483.0    2285.0    3678.0    2522.0 *     307.    39. AG   1037.  11.4    .0 44.0
      13. NB        2A depart *  3678.0    2522.0    3786.0    2625.0 *     149.    46. AG   1037.  11.4    .0 44.0
      14. SB        2A aprch  *  3770.0    2644.0    3666.0    2543.0 *     145.   226. AG   2135.  11.4    .0 44.0
      15. SB        2A aprch  *  3666.0    2543.0    3422.0    2252.0 *     380.   220. AG   2135.  11.4    .0 44.0
      16. SB        2A aprch  *  3422.0    2252.0    3332.0    2173.0 *     120.   229. AG   2135.  11.4    .0 44.0
      17. SB        2A aprch  *  3332.0    2173.0    3236.0    2117.0 *     111.   240. AG   2135.  11.4    .0 44.0
      18. SB        2A aprch  *  3236.0    2117.0    3138.0    2078.0 *     105.   248. AG   2135.  11.4    .0 44.0
      19. SB        2A thru   *  3138.0    2078.0    3001.0    2050.0 *     140.   258. AG   1355.  11.4    .0 44.0
      20. SB        2A thru   *  3033.0    2056.0    3090.9    2068.3 *      59.    78. AG     80. 100.0    .0 24.0  .47   3.0
      21. SB        2A left   *  3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    780.  11.4    .0 32.0
      22. SB        2A left   *  3036.0    2049.0    3279.1    2102.2 *     249.    78. AG    128. 100.0    .0 12.0  .89  12.6
      23. SB        2A depart *  3000.0    2046.0    2878.0    2037.0 *     122.   266. AG   1419.  11.4    .0 44.0
      24. SB        2A depart *  2878.0    2037.0    2000.0    2028.0 *     878.   269. AG   1419.  11.4    .0 44.0
      25. WB        5 aprch   *  3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    520.  11.4    .0 32.0
      26. WB        5 left    *  3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     64.  11.4    .0 32.0
      27. WB        5 left    *  3015.0    2004.0    3020.9    1958.2 *      46.   173. AG    251. 100.0    .0 12.0  .79   2.3
      28. WB        5 right   *  3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    456.  11.4    .0 32.0
      29. WB        5 right   *  3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    456.  11.4    .0 32.0
      30. WB        5 right   *  3106.0    2001.0    3041.0    1912.6 *     110.   216. AG    111. 100.0    .0 12.0  .52   5.6
      31. WB        5 right   *  3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    456.  11.4    .0 32.0
      32. EB        5 depart  *  2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    892.  11.4    .0 32.0
      33. EB        5 depart  *  3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    892.  11.4    .0 32.0
      34. EB        5 depart  *  3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    892.  11.4    .0 32.0
1
                                                                                                            PAGE  2
      JOB: Site 6 Opt 3 PM 2014 - 6B3PM14.DAT                  RUN: Site 6 Opt 3 PM 2014
      DATE: 05/10/2009   TIME: 16:55:04.73

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)     (SEC)     (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *    109       78       2.0       581       1770     102.20      1        3
       6. NB        2A rt     *    109       78       2.0       112       1583     102.20      1        3
      20. SB        2A thru   *    109       16       2.0      1355       1770     102.20      1        3
      22. SB        2A left   *    109       51       2.0       780       1770     102.20      1        3
      27. WB        5 left    *    109      100       2.0        64       1770     102.20      1        3
      30. WB        5 right   *    109       44       2.0       456       1583     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
       1. SW MID W            *      2594.0     1978.0       5.0   *
       2. SW 164 W            *      2757.0     1973.0       5.0   *
       3. SW 82 W             *      2839.0     1964.0       5.0   *
       4. SW CNR              *      2919.0     1936.0       5.0   *
       5. SW 82 S             *      2978.0     1874.0       5.0   *
       6. SW 164 S            *      3003.0     1794.0       5.0   *
       7. SW MID S            *      3021.0     1679.0       5.0   *
       8. SE MID S            *      3105.0     1694.0       5.0   *
       9. SE 164 S            *      3072.0     1811.0       5.0   *
      10. SE 82 S             *      3074.0     1891.0       5.0   *
      11. SE CNR              *      3109.0     1962.0       5.0   *
      12. SE 82 E             *      3164.0     2025.0       5.0   *
      13. SE 164 E            *      3242.0     2062.0       5.0   *
      14. SE MID E            *      3360.0     2134.0       5.0   *
      15. NE MID E            *      3286.0     2172.0       5.0   *
      16. NE 164 E            *      3153.0     2110.0       5.0   *
      17. NE 82 E             *      3074.0     2088.0       5.0   *
      18. N CNR               *      2994.0     2070.0       5.0   *
      19. NW 82 W             *      2912.0     2063.0       5.0   *
      20. NW 164 W            *      2829.0     2063.0       5.0   *
      21. NW  MID W           *      2704.0     2064.0       5.0   *
1
                                                                                                            PAGE  3
      JOB: Site 6 Opt 3 PM 2014 - 6B3PM14.DAT                  RUN: Site 6 Opt 3 PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
WIND ANGLE RANGE:   0.-360.

WIND   * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *    .5    .5    .7   1.2    .5    .9    .4    .0    .4    .8   1.0   1.1   1.1   1.0    .1    .0    .0    .0    .0    .0
  5.  *    .5    .5    .7   1.2    .7    .8    .5    .0    .5    .8    .9   1.1   1.1   1.2    .1    .0    .0    .0    .0    .0
 10.  *    .5    .5    .7   1.2    .8    .9    .4    .1    .5    .8    .9   1.0   1.1   1.2    .1    .0    .0    .0    .0    .0
 15.  *    .5    .5   1.0   1.1    .7    .8    .4    .1    .5    .8    .9   1.0   1.2   1.2    .1    .1    .0    .0    .0    .0
 20.  *    .5    .6   1.0   1.1    .7   1.0    .4    .0    .3    .7    .8   1.1   1.2   1.3    .1    .1    .0    .0    .0    .0
 25.  *    .5    .5   1.1   1.1    .8    .9    .4    .1    .4    .6    .8   1.1   1.3   1.3    .2    .1    .0    .0    .0    .0
 30.  *    .5    .5   1.0   1.2   1.0    .8    .5    .1    .4    .6    .8   1.4   1.4   1.4    .3    .1    .1    .0    .0    .0
 35.  *    .6    .5   1.2   1.1   1.0    .8    .5    .1    .3    .5    .9   1.3   1.6   1.3    .4    .2    .1    .1    .0    .0
 40.  *    .7    .6   1.2   1.2   1.1    .7    .5    .1    .2    .6   1.0   1.3   1.7   1.0    .6    .2    .2    .1    .1    .0
 45.  *    .7    .6   1.2   1.3   1.1    .5    .4    .0    .1    .6    .7   1.2   1.4    .9   1.0    .4    .2    .2    .1    .0
 50.  *    .7    .8   1.3   1.2    .9    .5    .4    .0    .1    .3    .7   1.2   1.3    .8   1.1    .7    .2    .2    .2    .0
 55.  *    .7   1.0   1.3   1.2    .9    .4    .4    .0    .0    .1    .7    .9   1.0    .5   1.3    .8    .5    .2    .2    .1
 60.  *    .7    .9   1.4   1.1    .5    .4    .4    .0    .0    .0    .4    .8    .8    .3   1.4   1.0    .5    .6    .2    .1
 65.  *    .8   1.2   1.5   1.0    .5    .4    .3    .0    .0    .0    .0    .6    .5    .2   1.5   1.1    .8    .8    .3    .1
 70.  *    .7   1.0   1.2    .9    .5    .4    .3    .0    .0    .0    .0    .3    .1    .1   1.3   1.3   1.1   1.1    .7    .2
 75.  *    .8   1.2   1.1    .5    .4    .4    .4    .0    .0    .0    .0    .2    .1    .0   1.3   1.3   1.3   1.5    .8    .5
 80.  *    .7    .9   1.0    .3    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.5   1.4   1.4   1.5   1.1    .6
 85.  *    .7    .7    .6    .3    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.3   1.5   1.5   1.6   1.2    .9
 90.  *    .4    .6    .5    .2    .3    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.4   1.4   1.5   1.6   1.1   1.1
 95.  *    .3    .5    .3    .2    .3    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.4   1.6   1.6   1.7   1.2   1.3
100.  *    .2    .3    .2    .1    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.2   1.5   1.4   1.7   1.4   1.3
105.  *    .0    .1    .2    .1    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.3   1.5   1.5   1.6   1.4   1.3
110.  *    .0    .0    .2    .1    .4    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.2   1.5   1.5   1.6   1.3   1.5
115.  *    .0    .0    .2    .1    .3    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.2   1.4   1.5   1.6   1.4   1.5
120.  *    .0    .0    .1    .1    .3    .5    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.4   1.7   1.4   1.4   1.6
125.  *    .0    .0    .1    .2    .4    .6    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.6   1.4   1.4   1.8
130.  *    .0    .0    .1    .2    .4    .6    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.4   1.3   1.5   1.7
135.  *    .0    .0    .2    .3    .4    .6    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.5   1.1   1.4   1.7
140.  *    .0    .1    .3    .2    .5    .7    .5    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.4   1.2   1.6   1.6
145.  *    .0    .1    .3    .3    .5    .7    .5    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.4   1.2   1.5   1.3
150.  *    .0    .1    .2    .3    .5    .7    .5    .1    .1    .0    .0    .0    .0    .0   1.2   1.3   1.3   1.2   1.7   1.4
155.  *    .0    .0    .1    .3    .5    .7    .5    .2    .2    .0    .0    .0    .0    .0   1.1   1.3   1.3   1.2   1.9   1.2
160.  *    .0    .0    .1    .3    .4    .6    .4    .3    .2    .2    .0    .0    .0    .0   1.1   1.3   1.4   1.4   1.9   1.1
165.  *    .0    .0    .0    .1    .4    .5    .3    .3    .3    .2    .0    .0    .0    .0   1.1   1.3   1.5   1.5   1.8    .9
170.  *    .0    .0    .0    .1    .3    .5    .2    .4    .4    .2    .2    .0    .0    .0   1.1   1.3   1.8   1.5   1.6    .8
175.  *    .0    .0    .0    .0    .2    .2    .1    .5    .5    .3    .2    .1    .0    .0   1.1   1.4   1.8   1.4   1.6    .8
180.  *    .0    .0    .0    .0    .1    .2    .1    .5    .5    .3    .2    .2    .0    .0   1.2   1.5   1.7   1.2   1.6    .7
185.  *    .0    .0    .0    .0    .0    .0    .0    .5    .4    .3    .2    .2    .1    .0   1.2   1.4   1.6   1.1   1.5    .7
190.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .3    .2    .1    .0   1.3   1.3   1.8   1.1   1.5    .6
195.  *    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .2    .2    .1    .0   1.4   1.6   1.7   1.2   1.5    .6
200.  *    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .2    .1    .0    .0   1.4   1.6   1.6   1.0   1.5    .6
205.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .2    .1    .0    .0   1.4   1.5   1.7   1.1   1.5    .6
1
                                                                                                                     PAGE  4
     JOB: Site 6 Opt 3 PM 2014 - 6B3PM14.DAT                   RUN: Site 6 Opt 3 PM 2014

WIND   * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .2    .1    .0    .0   1.6   1.7   1.8   1.2   1.5    .6
215.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .2    .0    .0   1.6   1.7   1.9   1.3   1.5    .7
220.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .4    .1    .0    .1   1.6   1.8   1.8   1.5   1.5    .8
225.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .3    .3    .0    .1   1.6   1.7   1.7   1.5   1.5    .8
230.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .4    .3    .0    .3   1.7   1.9   1.8   1.6   1.4    .8
235.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .5    .4    .2    .6   1.5   1.7   1.9   1.6   1.3    .9
240.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .5    .5    .3    .7   1.5   1.7   1.7   1.5   1.3    .9
245.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .5    .7    .6   1.0   1.4   1.6   1.5   1.5   1.3    .9
250.  *    .1    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .7    .7   1.5   1.1   1.5   1.7   1.5   1.2   1.0
255.  *    .1    .1    .0    .0    .0    .0    .0    .4    .4    .3    .5    .8   1.1   1.5    .9   1.5   1.4   1.5   1.2   1.0
260.  *    .2    .2    .2    .0    .0    .0    .0    .4    .4    .3    .7   1.2   1.1   1.6    .6   1.0   1.2   1.3   1.2   1.0
265.  *    .4    .4    .2    .2    .0    .0    .0    .4    .4    .4    .8   1.5   1.6   1.5    .3    .8    .9   1.1    .9    .9
270.  *    .5    .4    .4    .2    .1    .0    .0    .4    .3    .5   1.0   1.6   1.5   1.5    .2    .4    .7    .8    .8    .7
275.  *    .6    .5    .5    .3    .2    .0    .0    .4    .4    .6   1.2   1.7   1.7   1.2    .1    .2    .4    .6    .6    .6
280.  *    .7    .6    .5    .3    .2    .1    .0    .4    .4    .7   1.2   1.4   1.7   1.0    .1    .1    .2    .4    .5    .4
285.  *    .8    .7    .5    .4    .3    .2    .0    .5    .5    .8   1.4   1.5   1.4   1.0    .1    .0    .2    .2    .3    .2
290.  *    .7    .7    .5    .4    .3    .2    .1    .5    .5    .9   1.1   1.7   1.3    .9    .1    .0    .1    .2    .2    .1
295.  *    .7    .7    .7    .6    .3    .2    .1    .5    .6   1.1   1.2   1.4   1.3    .9    .1    .0    .1    .1    .1    .1
300.  *    .7    .7    .6    .6    .4    .2    .1    .5    .6   1.0   1.3   1.3   1.2   1.0    .1    .0    .1    .1    .0    .1
305.  *    .7    .7    .6    .6    .3    .2    .1    .5    .5   1.1   1.0   1.2   1.2   1.0    .0    .0    .1    .0    .0    .0
310.  *    .7    .6    .6    .6    .5    .1    .1    .5    .5   1.1   1.0   1.2   1.1    .9    .0    .0    .0    .0    .0    .0
315.  *    .7    .5    .5    .7    .5    .2    .1    .6    .5   1.1    .9   1.3   1.1   1.0    .0    .0    .0    .0    .0    .0
320.  *    .7    .5    .5    .8    .5    .2    .1    .6    .8    .9   1.0   1.0   1.0    .9    .0    .0    .0    .0    .0    .0
325.  *    .5    .5    .4   1.0    .7    .2    .2    .7    .6    .8    .9   1.1   1.0   1.0    .0    .0    .0    .0    .0    .0
330.  *    .5    .5    .4   1.1    .7    .4    .2    .5    .5   1.0   1.0   1.1   1.1    .9    .0    .0    .0    .0    .0    .0
335.  *    .5    .5    .4   1.1    .7    .5    .2    .5    .5   1.0   1.0   1.2   1.1   1.0    .0    .0    .0    .0    .0    .0
340.  *    .5    .5    .4   1.1    .6    .5    .2    .4    .5   1.0   1.0   1.1   1.1    .9    .0    .0    .0    .0    .0    .0
345.  *    .5    .5    .5   1.2    .7    .5    .3    .4    .8    .7    .9   1.1   1.2    .9    .0    .0    .0    .0    .0    .0
350.  *    .5    .5    .5   1.3    .5    .5    .4    .1    .6    .9    .9   1.1   1.1    .8    .0    .0    .0    .0    .0    .0
355.  *    .5    .5    .6   1.2    .5    .6    .4    .1    .4    .8    .8   1.0   1.0    .9    .0    .0    .0    .0    .0    .0
360.  *    .5    .5    .7   1.2    .5    .9    .4    .0    .4    .8   1.0   1.1   1.1   1.0    .1    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *    .8   1.2   1.5   1.3   1.1   1.0    .5    .7    .8   1.1   1.4   1.7   1.7   1.6   1.7   1.9   1.9   1.7   1.9   1.8
DEGR. *   65    65    65    45    40    20     5   325   345   295   285   275   280   260   230   230   235    95   155   125

1
                                                                                                                     PAGE  5
     JOB: Site 6 Opt 3 PM 2014 - 6B3PM14.DAT                   RUN: Site 6 Opt 3 PM 2014

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND   * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .1
  70.  *    .2
  75.  *    .2
  80.  *    .4
  85.  *    .6
  90.  *    .9
  95.  *   1.0
 100.  *   1.0
 105.  *   1.1
 110.  *   1.0
 115.  *   1.0
 120.  *   1.0
 125.  *    .9
 130.  *    .9
 135.  *    .7
 140.  *    .6
 145.  *    .7
 150.  *    .7
 155.  *    .7
 160.  *    .7
 165.  *    .7
 170.  *    .7
 175.  *    .7
 180.  *    .7
 185.  *    .7
 190.  *    .7
 195.  *    .7
 200.  *    .7
 205.  *    .7
1
                                                                                                                               PAGE  6
      JOB: Site 6 Opt 3 PM 2014 - 6B3PM14.DAT                    RUN: Site 6 Opt 3 PM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .7
 215.  *    .7
 220.  *    .7
 225.  *    .8
 230.  *    .8
 235.  *    .8
 240.  *    .9
 245.  *    .9
 250.  *   1.0
 255.  *   1.0
 260.  *    .9
 265.  *    .9
 270.  *    .6
 275.  *    .5
 280.  *    .3
 285.  *    .2
 290.  *    .1
 295.  *    .1
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.1
 DEGR. *  105

 THE HIGHEST CONCENTRATION IS    1.90 PPM AT  230 DEGREES FROM REC16.
 THE 2ND HIGHEST CONCENTRATION IS    1.90 PPM AT  235 DEGREES FROM REC17.
 THE 3RD HIGHEST CONCENTRATION IS    1.90 PPM AT  155 DEGREES FROM REC19.
```

```
Site 6 Opt 3 PM 2030 - 6B3PM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt 3 PM 2030                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.     660 9.2   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.     555 9.2   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       114        84       2.0  555   84.1 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.     105 9.2   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.     105 9.2   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       114        84       2.0  105   84.1 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.     105 9.2   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    1035 9.2   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    1035 9.2   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    1035 9.2   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    1035 9.2   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    1035 9.2   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    1035 9.2   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.    2035 9.2   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.    2035 9.2   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.    2035 9.2   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.    2035 9.2   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.    2035 9.2   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.    1245 9.2   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       114        19       2.0 1245   84.1 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     790 9.2   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       114        53       2.0  790   84.1 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.    1305 9.2   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.    1305 9.2   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     540 9.2   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      60 9.2   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       114       103       2.0   60   84.1 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     480 9.2   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     480 9.2   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       114        38       2.0  480   84.1 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     480 9.2   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     895 9.2   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     895 9.2   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     895 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 6 Opt 3 PM 2030 - 6B3PM30.DAT                   RUN: Site 6 Opt 3 PM 2030
      DATE: 05/10/2009   TIME: 17:06:54.81


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-----------------------------------------------------------
        1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG    660.   9.2    .0 44.0
        2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG    555.   9.2    .0 44.0
        3. NB        2A thru   *   2968.0    2019.0    2840.9    2013.5 *     127.   268. AG    332. 100.0    .0 24.0  .69   6.5
        4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG    105.   9.2    .0 32.0
        5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG    105.   9.2    .0 32.0
        6. NB        2A rt     *   2897.0    1975.0    2939.2    1951.6 *      48.   119. AG    166. 100.0    .0 12.0  .29   2.5
        7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG    105.   9.2    .0 32.0
        8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG   1035.   9.2    .0 44.0
        9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG   1035.   9.2    .0 44.0
       10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG   1035.   9.2    .0 44.0
       11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG   1035.   9.2    .0 44.0
       12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG   1035.   9.2    .0 44.0
       13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG   1035.   9.2    .0 44.0
       14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG   2035.   9.2    .0 44.0
       15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG   2035.   9.2    .0 44.0
       16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG   2035.   9.2    .0 44.0
       17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG   2035.   9.2    .0 44.0
       18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG   2035.   9.2    .0 44.0
       19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG   1245.   9.2    .0 44.0
       20. SB        2A thru   *   3033.0    2056.0    3096.2    2069.4 *      65.    78. AG     75. 100.0    .0 24.0  .44   3.3
       21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    790.   9.2    .0 32.0
       22. SB        2A left   *   3036.0    2049.0    3291.3    2104.9 *     261.    78. AG    105. 100.0    .0 12.0  .89  13.3
       23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG   1305.   9.2    .0 44.0
       24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG   1305.   9.2    .0 44.0
       25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    540.   9.2    .0 32.0
       26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     60.   9.2    .0 32.0
       27. WB        5 left    *   3015.0    2004.0    3019.5    1969.5 *      35.   173. AG    204. 100.0    .0 12.0  .56   1.8
       28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    480.   9.2    .0 32.0
       29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    480.   9.2    .0 32.0
       30. WB        5 right   *   3106.0    2001.0    3046.9    1920.7 *     100.   216. AG     75. 100.0    .0 12.0  .48   5.1
       31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    480.   9.2    .0 32.0
       32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    895.   9.2    .0 32.0
       33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    895.   9.2    .0 32.0
       34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    895.   9.2    .0 32.0
1
                                                                                                                  PAGE  2
      JOB: Site 6 Opt 3 PM 2030 - 6B3PM30.DAT                   RUN: Site 6 Opt 3 PM 2030
      DATE: 05/10/2009   TIME: 17:06:54.81

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE      RATE
                              *     (SEC)   (SEC)     (SEC)     (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
        3. NB        2A thru   *     114       84       2.0       555       1770      84.10      1        3
        6. NB        2A rt     *     114       84       2.0       105       1583      84.10      1        3
       20. SB        2A thru   *     114       19       2.0      1245       1770      84.10      1        3
       22. SB        2A left   *     114       53       2.0       790       1770      84.10      1        3
       27. WB        5 left    *     114      103       2.0        60       1770      84.10      1        3
       30. WB        5 right   *     114       38       2.0       480       1583      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
       1. SW MID W            *      2594.0     1978.0       5.0    *
       2. SW 164 W            *      2757.0     1973.0       5.0    *
       3. SW 82 W             *      2839.0     1964.0       5.0    *
       4. SW CNR              *      2919.0     1936.0       5.0    *
       5. SW 82 S             *      2978.0     1874.0       5.0    *
       6. SW 164 S            *      3003.0     1794.0       5.0    *
       7. SW MID S            *      3021.0     1679.0       5.0    *
       8. SE MID S            *      3105.0     1694.0       5.0    *
       9. SE 164 S            *      3072.0     1811.0       5.0    *
      10. SE 82 S             *      3074.0     1891.0       5.0    *
      11. SE CNR              *      3109.0     1962.0       5.0    *
      12. SE 82 E             *      3164.0     2025.0       5.0    *
      13. SE 164 E            *      3242.0     2062.0       5.0    *
      14. SE MID E            *      3360.0     2134.0       5.0    *
      15. NE MID E            *      3286.0     2172.0       5.0    *
      16. NE 164 E            *      3153.0     2110.0       5.0    *
      17. NE 82 E             *      3074.0     2088.0       5.0    *
      18. N CNR               *      2994.0     2070.0       5.0    *
      19. NW 82 W             *      2912.0     2063.0       5.0    *
      20. NW 164 W            *      2829.0     2063.0       5.0    *
      21. NW  MID W           *      2704.0     2064.0       5.0    *
1
                                                                                                                  PAGE  3
      JOB: Site 6 Opt 3 PM 2030 - 6B3PM30.DAT                   RUN: Site 6 Opt 3 PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
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 WIND ANGLE RANGE:   0.-360.

 WIND   * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .4    .4    .6    .9    .3    .5    .3    .0    .3    .7    .9    .9   1.0    .7    .0    .0    .0    .0    .0    .0
   5.  *    .4    .4    .6   1.0    .4    .4    .3    .0    .1    .7    .9    .8    .9    .9    .0    .0    .0    .0    .0    .0
  10.  *    .5    .3    .7   1.1    .7    .5    .4    .0    .1    .6    .8    .8    .9    .9    .1    .0    .0    .0    .0    .0
  15.  *    .5    .3    .7   1.0    .5    .7    .4    .0    .2    .7    .7    .8    .9    .9    .1    .0    .0    .0    .0    .0
  20.  *    .5    .3    .8    .8    .5    .6    .4    .0    .2    .6    .7    .9   1.1   1.0    .1    .0    .0    .0    .0    .0
  25.  *    .5    .4    .8    .8    .5    .5    .4    .0    .1    .4    .5    .8   1.2   1.1    .1    .1    .0    .0    .0    .0
  30.  *    .5    .4    .9    .8    .7    .5    .4    .1    .1    .4    .6   1.0   1.1   1.1    .3    .1    .0    .0    .0    .0
  35.  *    .5    .4    .9   1.0    .6    .5    .3    .1    .1    .5    .7   1.2   1.0   1.0    .3    .1    .0    .0    .0    .0
  40.  *    .5    .5   1.0    .9    .8    .5    .3    .0    .1    .5    .6   1.1   1.2   1.0    .6    .2    .0    .0    .0    .0
  45.  *    .5    .5    .9    .9    .7    .4    .3    .0    .1    .4    .7   1.1   1.1    .8    .6    .2    .1    .1    .0    .0
  50.  *    .5    .7    .9   1.1    .7    .4    .3    .0    .0    .1    .7    .9   1.0    .7    .9    .4    .2    .2    .0    .0
  55.  *    .5    .6   1.1   1.0    .5    .4    .3    .0    .0    .0    .7    .8    .8    .4    .9    .5    .4    .2    .1    .0
  60.  *    .5    .7   1.1    .9    .4    .4    .3    .0    .0    .0    .1    .8    .7    .3   1.1    .7    .5    .2    .2    .1
  65.  *    .6    .6   1.0    .8    .3    .4    .3    .0    .0    .0    .0    .4    .1    .2   1.3    .8    .6    .5    .2    .1
  70.  *    .6    .7   1.1    .5    .3    .4    .3    .0    .0    .0    .0    .3    .1    .0   1.1    .9    .9    .7    .4    .1
  75.  *    .5    .8    .9    .3    .3    .4    .4    .0    .0    .0    .0    .0    .1    .0   1.1    .9   1.0    .9    .6    .1
  80.  *    .5    .5    .6    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.1   1.2   1.0   1.1    .8    .5
  85.  *    .4    .5    .3    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.1   1.1   1.2   1.2   1.0    .7
  90.  *    .3    .3    .3    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.1   1.1   1.3   1.3   1.0    .7
  95.  *    .3    .1    .2    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.2   1.2   1.3   1.1    .9
 100.  *    .2    .1    .2    .1    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.0   1.3   1.1   1.4    .8   1.0
 105.  *    .0    .0    .2    .1    .4    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.3   1.1   1.3    .9   1.1
 110.  *    .0    .0    .2    .1    .2    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.1   1.3   1.2    .9   1.2
 115.  *    .0    .0    .1    .1    .2    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.1   1.3   1.0   1.1   1.2
 120.  *    .0    .0    .0    .1    .2    .4    .3    .0    .0    .0    .0    .0    .0    .0    .8   1.1   1.2   1.1   1.1   1.3
 125.  *    .0    .0    .0    .2    .4    .4    .3    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.2   1.1   1.2   1.2
 130.  *    .0    .0    .1    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.2   1.0   1.1   1.3
 135.  *    .0    .0    .1    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.2    .8   1.1   1.4
 140.  *    .0    .0    .0    .2    .3    .5    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.3    .8   1.1   1.3
 145.  *    .0    .1    .1    .2    .3    .5    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.3    .9   1.1   1.1
 150.  *    .0    .0    .1    .3    .4    .5    .4    .1    .1    .0    .0    .0    .0    .0    .9   1.0   1.2    .9   1.2   1.0
 155.  *    .0    .0    .1    .3    .4    .5    .4    .2    .2    .0    .0    .0    .0    .0    .8   1.0   1.2    .8   1.3    .9
 160.  *    .0    .0    .0    .3    .4    .5    .4    .2    .2    .2    .0    .0    .0    .0    .8   1.0   1.2    .9   1.4    .9
 165.  *    .0    .0    .0    .1    .4    .4    .3    .3    .3    .2    .0    .0    .0    .0    .8   1.0   1.2   1.2   1.3    .8
 170.  *    .0    .0    .0    .0    .3    .3    .1    .4    .3    .2    .2    .0    .0    .0    .8   1.0   1.3   1.1   1.2    .8
 175.  *    .0    .0    .0    .0    .2    .2    .1    .4    .4    .2    .2    .0    .0    .0    .9   1.0   1.4    .9   1.2    .7
 180.  *    .0    .0    .0    .0    .0    .2    .1    .4    .4    .3    .2    .1    .0    .0    .9   1.1   1.3    .8   1.2    .6
 185.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .1    .0    .0   1.0   1.1   1.3   1.0   1.2    .6
 190.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .3    .1    .0    .0   1.1   1.2   1.3    .8   1.2    .6
 195.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .0    .0    .0   1.1   1.2   1.3    .7   1.2    .5
 200.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .1    .0    .0    .0   1.2   1.3   1.4    .8   1.1    .5
 205.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .0    .0    .0   1.1   1.2   1.4   1.0   1.1    .5
1
                                                                                                                       PAGE  4
      JOB: Site 6 Opt 3 PM 2030 - 6B3PM30.DAT                  RUN: Site 6 Opt 3 PM 2030

 WIND   * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .0    .0    .0   1.1   1.1   1.4    .9   1.2    .5
 215.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .0    .0    .0   1.2   1.2   1.4   1.0   1.2    .5
 220.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .1    .0    .1   1.2   1.3   1.4   1.1   1.1    .6
 225.  *    .0    .0    .0    .0    .0    .0    .0    .4    .3    .2    .3    .2    .0    .1   1.2   1.4   1.4   1.1   1.1    .6
 230.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .2    .4    .3    .0    .3   1.2   1.5   1.5   1.2   1.1    .7
 235.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .4    .1    .5   1.3   1.3   1.3   1.3   1.0    .6
 240.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .4    .1    .6   1.1   1.2   1.1   1.2   1.0    .6
 245.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .5    .3    .7    .9   1.2   1.4   1.2   1.0    .7
 250.  *    .0    .0    .0    .0    .0    .0    .0    .3    .3    .2    .3    .6    .6   1.1    .9   1.2   1.2   1.3   1.0    .8
 255.  *    .1    .0    .0    .0    .0    .0    .0    .3    .3    .2    .4    .5    .9   1.3    .6   1.0   1.1   1.1    .9    .8
 260.  *    .2    .2    .2    .0    .0    .0    .0    .3    .3    .2    .5    .6   1.0   1.3    .4    .7   1.0   1.0    .9    .7
 265.  *    .3    .2    .2    .1    .0    .0    .0    .2    .3    .2    .6   1.0   1.2   1.1    .2    .4    .7    .9    .7    .7
 270.  *    .4    .4    .2    .2    .0    .0    .0    .2    .3    .3    .8   1.1   1.3   1.1    .2    .3    .5    .6    .6    .6
 275.  *    .4    .4    .3    .2    .1    .0    .0    .2    .3    .3    .9   1.0   1.2    .9    .1    .2    .3    .4    .5    .5
 280.  *    .6    .5    .4    .3    .2    .1    .0    .3    .4    .4   1.0   1.2   1.1    .8    .1    .0    .2    .2    .3    .3
 285.  *    .6    .5    .5    .3    .2    .1    .0    .3    .4    .5   1.0   1.2   1.0    .7    .1    .0    .1    .2    .2    .2
 290.  *    .6    .5    .4    .3    .2    .1    .0    .5    .4    .4   1.1   1.1   1.0    .7    .1    .0    .1    .1    .1    .1
 295.  *    .6    .5    .4    .4    .2    .1    .1    .5    .3    .5   1.0    .9   1.0    .7    .1    .0    .0    .1    .0    .1
 300.  *    .5    .5    .5    .5    .1    .1    .1    .5    .5    .5    .7    .9    .9    .7    .0    .0    .0    .0    .0    .0
 305.  *    .5    .5    .4    .4    .2    .1    .1    .5    .5    .7    .7    .8    .9    .8    .0    .0    .0    .0    .0    .0
 310.  *    .5    .5    .4    .6    .3    .1    .1    .5    .4    .6    .8    .8    .9    .7    .0    .0    .0    .0    .0    .0
 315.  *    .5    .5    .4    .6    .4    .2    .1    .6    .4    .7    .7    .9    .9    .7    .0    .0    .0    .0    .0    .0
 320.  *    .5    .4    .3    .6    .5    .2    .1    .4    .4    .7    .5    .8    .9    .7    .0    .0    .0    .0    .0    .0
 325.  *    .5    .4    .3    .7    .5    .2    .2    .4    .4    .6    .7    .8    .9    .7    .0    .0    .0    .0    .0    .0
 330.  *    .5    .4    .3    .9    .6    .2    .2    .4    .4    .7    .8    .9    .9    .8    .0    .0    .0    .0    .0    .0
 335.  *    .5    .4    .3   1.0    .6    .2    .1    .4    .4    .8    .8    .9    .9    .7    .0    .0    .0    .0    .0    .0
 340.  *    .5    .4    .4   1.0    .5    .4    .2    .4    .3    .5    .7    .8    .9    .7    .0    .0    .0    .0    .0    .0
 345.  *    .5    .4    .4   1.0    .4    .4    .2    .1    .2    .4    .7    .9    .9    .8    .0    .0    .0    .0    .0    .0
 350.  *    .5    .4    .4    .9    .4    .4    .3    .1    .4    .6    .6    .8    .9    .7    .0    .0    .0    .0    .0    .0
 355.  *    .4    .4    .5    .9    .4    .4    .4    .0    .3    .6    .6    .8    .9    .7    .0    .0    .0    .0    .0    .0
 360.  *    .4    .4    .6    .9    .3    .5    .3    .0    .3    .7    .9    .9   1.0    .7    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *    .6    .8   1.1   1.1    .8    .7    .4    .6    .5    .8   1.1   1.2   1.3   1.3   1.3   1.5   1.5   1.4   1.4   1.4
 DEGR. *   65    75    55    50    40    15    10   315   300   335   290   280   270   255   235   230   230   100   160   135

1
                                                                                                                       PAGE  5
      JOB: Site 6 Opt 3 PM 2030 - 6B3PM30.DAT                  RUN: Site 6 Opt 3 PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND   * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .1
  75.  *    .1
  80.  *    .2
  85.  *    .4
  90.  *    .6
  95.  *    .7
 100.  *    .8
 105.  *    .8
 110.  *    .9
 115.  *    .9
 120.  *    .8
 125.  *    .7
 130.  *    .6
 135.  *    .5
 140.  *    .5
 145.  *    .5
 150.  *    .5
 155.  *    .5
 160.  *    .5
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                PAGE  6
      JOB: Site 6 Opt 3 PM 2030 - 6B3PM30.DAT                   RUN: Site 6 Opt 3 PM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .5
 225.  *    .5
 230.  *    .5
 235.  *    .7
 240.  *    .7
 245.  *    .7
 250.  *    .8
 255.  *    .8
 260.  *    .6
 265.  *    .6
 270.  *    .5
 275.  *    .4
 280.  *    .2
 285.  *    .1
 290.  *    .1
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .9
 DEGR. *  110

 THE HIGHEST CONCENTRATION IS    1.50 PPM AT  230 DEGREES FROM REC16.
 THE 2ND HIGHEST CONCENTRATION IS    1.50 PPM AT  230 DEGREES FROM REC17.
 THE 3RD HIGHEST CONCENTRATION IS    1.40 PPM AT  100 DEGREES FROM REC18.
```

```
Site 6 Opt 8 AM 2014 - 6B8AM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt 8 AM 2014                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.    167511.4   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.    158011.4   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       120        62       2.0 1580  102.2 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.      9511.4   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.      9511.4   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       120        62       2.0   95  102.2 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.      9511.4   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    226511.4   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    226511.4   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    226511.4   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    226511.4   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    226511.4   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    226511.4   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.     73511.4   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.     73511.4   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.     73511.4   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.     73511.4   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.     73511.4   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.     33511.4   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       120       30       2.0  335  102.2 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     40011.4   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       120       91       2.0  400  102.2 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.     40011.4   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.     40011.4   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     75011.4   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      6511.4   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       120       97       2.0   65  102.2 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     68511.4   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     68511.4   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       120       65       2.0  685  102.2 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     68511.4   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     49511.4   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     49511.4   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     49511.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                  PAGE  1

      JOB: Site 6 Opt 8 AM 2014 - 6B8AM14.DAT                  RUN: Site 6 Opt 8 AM 2014
      DATE: 05/10/2009   TIME: 17:10:40.88


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)         *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*--------------------------------------*----------------------------------------------------------
        1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG  1675.  11.4    .0 44.0
        2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG  1580.  11.4    .0 44.0
        3. NB        2A thru   *   2968.0    2019.0    2574.9    2002.0 *     393.   268. AG   283. 100.0    .0 24.0  .99  20.0
        4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG    95.  11.4    .0 32.0
        5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG    95.  11.4    .0 32.0
        6. NB        2A rt     *   2897.0    1975.0    2925.2    1959.4 *      32.   119. AG   142. 100.0    .0 12.0  .13   1.6
        7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG    95.  11.4    .0 32.0
        8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG  2265.  11.4    .0 44.0
        9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG  2265.  11.4    .0 44.0
       10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG  2265.  11.4    .0 44.0
       11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG  2265.  11.4    .0 44.0
       12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG  2265.  11.4    .0 44.0
       13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG  2265.  11.4    .0 44.0
       14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG   735.  11.4    .0 44.0
       15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG   735.  11.4    .0 44.0
       16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG   735.  11.4    .0 44.0
       17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG   735.  11.4    .0 44.0
       18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG   735.  11.4    .0 44.0
       19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG   335.  11.4    .0 44.0
       20. SB        2A thru   *   3033.0    2056.0    3059.8    2061.7 *      27.    78. AG   137. 100.0    .0 24.0  .13   1.4
       21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG   400.  11.4    .0 32.0
       22. SB        2A left   *   3036.0    2049.0    3637.2    2180.5 *     615.    78. AG   208. 100.0    .0 12.0 1.09  31.3
       23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG   400.  11.4    .0 44.0
       24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG   400.  11.4    .0 44.0
       25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG   750.  11.4    .0 32.0
       26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG    65.  11.4    .0 32.0
       27. WB        5 left    *   3015.0    2004.0    3019.4    1969.8 *      34.   173. AG   222. 100.0    .0 12.0  .23   1.8
       28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG   685.  11.4    .0 32.0
       29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG   685.  11.4    .0 32.0
       30. WB        5 right   *   3106.0    2001.0    2809.7    1598.3 *     500.   216. AG   148. 100.0    .0 12.0 1.02  25.4
       31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG   685.  11.4    .0 32.0
       32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG   495.  11.4    .0 32.0
       33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG   495.  11.4    .0 32.0
       34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG   495.  11.4    .0 32.0
1
                                                                                                              PAGE  2
      JOB: Site 6 Opt 8 AM 2014 - 6B8AM14.DAT                  RUN: Site 6 Opt 8 AM 2014
      DATE: 05/10/2009   TIME: 17:10:40.88

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE      RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
        3. NB        2A thru   *     120       62       2.0      1580       1770     102.20      1        3
        6. NB        2A rt     *     120       62       2.0        95       1583     102.20      1        3
       20. SB        2A thru   *     120       30       2.0       335       1770     102.20      1        3
       22. SB        2A left   *     120       91       2.0       400       1770     102.20      1        3
       27. WB        5 left    *     120       97       2.0        65       1770     102.20      1        3
       30. WB        5 right   *     120       65       2.0       685       1583     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
       1. SW MID W            *      2594.0     1978.0       5.0   *
       2. SW 164 W            *      2757.0     1973.0       5.0   *
       3. SW 82 W             *      2839.0     1964.0       5.0   *
       4. SW CNR              *      2919.0     1936.0       5.0   *
       5. SW 82 S             *      2978.0     1874.0       5.0   *
       6. SW 164 S            *      3003.0     1794.0       5.0   *
       7. SW MID S            *      3021.0     1679.0       5.0   *
       8. SE MID S            *      3105.0     1694.0       5.0   *
       9. SE 164 S            *      3072.0     1811.0       5.0   *
      10. SE 82 S             *      3074.0     1891.0       5.0   *
      11. SE CNR              *      3109.0     1962.0       5.0   *
      12. SE 82 E             *      3164.0     2025.0       5.0   *
      13. SE 164 E            *      3242.0     2062.0       5.0   *
      14. SE MID E            *      3360.0     2134.0       5.0   *
      15. NE MID E            *      3286.0     2172.0       5.0   *
      16. NE 164 E            *      3153.0     2110.0       5.0   *
      17. NE 82 E             *      3074.0     2088.0       5.0   *
      18. N CNR               *      2994.0     2070.0       5.0   *
      19. NW 82 W             *      2912.0     2063.0       5.0   *
      20. NW 164 W            *      2829.0     2063.0       5.0   *
      21. NW  MID W           *      2704.0     2064.0       5.0   *
1
                                                                                                              PAGE  3
      JOB: Site 6 Opt 8 AM 2014 - 6B8AM14.DAT                  RUN: Site 6 Opt 8 AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.5   1.2   1.0   1.0    .4    .8    .4    .4    .5    .8   1.0   1.3   1.4   1.1    .0    .0    .0    .0    .0    .0
   5.  *   1.5   1.2   1.0    .9    .5    .7    .5    .3    .5    .8   1.0   1.3   1.5   1.1    .0    .0    .0    .0    .0    .0
  10.  *   1.5   1.3   1.0    .9    .5    .9    .7    .2    .5    .8    .9   1.3   1.4   1.2    .0    .0    .0    .0    .0    .0
  15.  *   1.5   1.2   1.0    .8    .6   1.0    .7    .2    .4    .8   1.0   1.4   1.5   1.5    .0    .0    .0    .0    .0    .0
  20.  *   1.5   1.2   1.0    .9    .6    .9    .7    .3    .3    .6    .9   1.3   1.5   1.6    .0    .0    .0    .0    .0    .0
  25.  *   1.5   1.2    .9    .6    .8    .8    .6    .3    .3    .6   1.0   1.4   1.6   1.6    .0    .0    .0    .0    .0    .0
  30.  *   1.5   1.2    .9    .6    .8    .8    .7    .3    .3    .8    .9   1.4   1.9   1.6    .1    .0    .0    .0    .0    .0
  35.  *   1.5   1.3    .9    .7    .7    .8    .8    .3    .4    .6   1.0   1.5   1.9   1.5    .2    .0    .0    .0    .0    .0
  40.  *   1.6   1.3   1.0    .6   1.1    .9    .6    .2    .4    .7   1.1   1.6   2.0   1.6    .4    .1    .0    .0    .0    .0
  45.  *   1.7   1.4   1.0    .8   1.2    .8    .5    .1    .3    .6   1.1   1.8   2.1   1.3    .6    .1    .1    .0    .0    .0
  50.  *   1.7   1.4   1.2   1.0   1.3    .8    .5    .0    .2    .6    .9   1.7   2.1   1.1    .7    .4    .1    .1    .0    .0
  55.  *   1.8   1.3   1.3   1.1   1.2    .4    .3    .0    .1    .4    .8   1.5   1.6    .8    .9    .6    .3    .1    .1    .0
  60.  *   1.8   1.6   1.3   1.0    .9    .4    .3    .0    .1    .2    .6   1.4   1.4    .7   1.0    .6    .4    .3    .1    .1
  65.  *   1.9   1.7   1.4    .9    .9    .4    .3    .0    .0    .1    .4    .9   1.1    .6   1.1    .7    .6    .6    .2    .1
  70.  *   2.0   1.5   1.3    .9    .6    .4    .3    .0    .0    .1    .2    .7    .9    .6   1.1   1.1   1.0    .7    .4    .2
  75.  *   2.1   1.4   1.1    .7    .5    .4    .3    .0    .0    .0    .1    .4    .5    .6   1.2   1.0   1.1   1.1    .6    .4
  80.  *   1.9   1.1    .9    .5    .5    .4    .4    .0    .0    .0    .1    .4    .4    .7   1.2   1.2   1.3   1.2    .6    .5
  85.  *   1.6    .9    .7    .3    .5    .4    .4    .0    .0    .0    .0    .1    .3    .8   1.2   1.5   1.3   1.4   1.0    .8
  90.  *   1.3    .6    .6    .2    .5    .4    .4    .0    .0    .0    .0    .1    .1    .8   1.2   1.4   1.2   1.6   1.2   1.0
  95.  *    .8    .5    .3    .3    .5    .4    .4    .0    .0    .0    .0    .0    .1    .8   1.2   1.5   1.4   1.5   1.0   1.1
 100.  *    .6    .3    .2    .3    .5    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.4   1.5   1.4   1.4   1.0   1.0
 105.  *    .3    .1    .2    .3    .5    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.3   1.4   1.4   1.5    .9   1.2
 110.  *    .3    .1    .1    .3    .6    .4    .3    .0    .0    .0    .0    .0    .0    .8   1.2   1.4   1.5   1.4   1.0   1.1
 115.  *    .1    .1    .1    .3    .6    .4    .3    .0    .0    .0    .0    .0    .0    .7   1.2   1.4   1.5   1.3   1.2   1.2
 120.  *    .1    .1    .1    .3    .6    .4    .4    .0    .0    .0    .0    .0    .0    .7   1.2   1.3   1.3   1.3   1.1   1.3
 125.  *    .1    .1    .1    .2    .6    .4    .4    .0    .0    .0    .0    .0    .0    .7   1.2   1.3   1.3   1.3   1.3   1.2
 130.  *    .1    .2    .2    .2    .6    .4    .4    .0    .0    .0    .0    .0    .0    .6   1.2   1.3   1.3   1.2   1.3   1.1
 135.  *    .0    .2    .2    .3    .5    .4    .4    .0    .0    .0    .0    .0    .0    .6   1.1   1.3   1.3   1.1   1.4   1.1
 140.  *    .0    .2    .2    .3    .6    .4    .4    .0    .0    .0    .0    .0    .0    .6   1.1   1.3   1.3   1.0   1.3   1.2
 145.  *    .0    .2    .2    .3    .7    .5    .4    .1    .1    .0    .0    .0    .0    .6   1.1   1.3   1.2   1.1   1.4   1.2
 150.  *    .0    .1    .2    .3    .7    .5    .4    .1    .1    .0    .0    .0    .0    .6   1.1   1.2   1.3   1.0   1.3   1.2
 155.  *    .0    .1    .2    .3    .7    .5    .4    .2    .2    .1    .0    .0    .0    .6   1.1   1.2   1.5   1.2   1.3   1.2
 160.  *    .0    .1    .1    .2    .7    .5    .3    .3    .3    .1    .0    .0    .0    .6   1.1   1.3   1.3   1.3   1.2   1.2
 165.  *    .0    .1    .1    .2    .6    .3    .2    .4    .4    .1    .1    .0    .0    .6   1.1   1.4   1.5   1.3   1.2   1.1
 170.  *    .0    .0    .1    .1    .6    .3    .2    .4    .4    .3    .1    .0    .0    .6   1.1   1.4   1.5   1.1   1.3   1.1
 175.  *    .0    .0    .1    .1    .5    .3    .1    .5    .4    .3    .1    .1    .0    .6   1.1   1.5   1.5   1.0   1.3   1.1
 180.  *    .0    .0    .1    .1    .3    .0    .0    .5    .5    .3    .1    .1    .0    .6   1.2   1.3   1.6   1.1   1.3   1.0
 185.  *    .0    .0    .1    .1    .4    .0    .0    .5    .5    .4    .1    .1    .1    .6   1.2   1.3   1.7   1.0   1.3   1.0
 190.  *    .0    .0    .0    .1    .4    .0    .0    .5    .5    .4    .1    .1    .1    .6   1.1   1.5   1.6    .8   1.2   1.0
 195.  *    .0    .0    .0    .1    .4    .0    .0    .4    .4    .3    .2    .1    .1    .6   1.2   1.5   1.6    .9   1.0   1.0
 200.  *    .0    .0    .0    .1    .4    .0    .0    .4    .4    .3    .4    .2    .1    .7   1.2   1.9   1.7    .9   1.0   1.0
 205.  *    .0    .0    .0    .1    .3    .0    .0    .4    .4    .4    .4    .2    .1    .7   1.3   1.8   1.8    .8   1.0   1.0
1
                                                                                                                 PAGE  4
      JOB: Site 6 Opt 8 AM 2014 - 6B8AM14.DAT                  RUN: Site 6 Opt 8 AM 2014

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .3    .1    .0    .4    .4    .5    .3    .1    .1    .8   1.5   1.8   1.6    .9   1.0   1.0
 215.  *    .0    .0    .0    .0    .2    .1    .0    .4    .4    .5    .4    .4    .1    .8   1.4   1.7   1.7   1.0   1.1   1.1
 220.  *    .0    .0    .0    .0    .2    .2    .0    .4    .5    .5    .5    .5    .1   1.0   1.5   1.5   1.7   1.0   1.1   1.3
 225.  *    .0    .0    .0    .0    .1    .2    .0    .4    .5    .5    .6    .5    .2   1.2   1.4   1.4   1.3   1.1   1.2   1.2
 230.  *    .0    .0    .0    .0    .1    .2    .0    .4    .4    .6    .6    .6    .3   1.3   1.3   1.5   1.4   1.1   1.3   1.3
 235.  *    .0    .0    .0    .0    .0    .3    .0    .4    .4    .7    .7    .5    .4   1.6   1.1   1.3   1.2   1.2   1.3   1.2
 240.  *    .0    .0    .0    .0    .0    .3    .0    .4    .4    .6    .7    .5    .5   1.9   1.1   1.3   1.5   1.3   1.4   1.3
 245.  *    .1    .0    .0    .0    .0    .3    .1    .4    .5    .7    .8    .6    .9   2.2   1.1   1.2   1.3   1.3   1.3   1.2
 250.  *    .1    .1    .0    .0    .0    .3    .1    .4    .5    .7    .8   1.0   1.3   2.5    .8   1.1   1.1   1.5   1.5   1.2
 255.  *    .2    .2    .1    .0    .0    .3    .1    .6    .5    .6   1.0   1.2   1.6   2.5    .8    .9   1.3   1.3   1.3   1.1
 260.  *    .3    .3    .3    .1    .0    .3    .1    .5    .5    .6    .9   1.3   1.7   2.4    .5    .7   1.1   1.1   1.2   1.0
 265.  *    .5    .6    .5    .2    .1    .3    .1    .5    .5    .7   1.1   1.7   2.0   2.1    .2    .5    .8   1.0   1.0    .8
 270.  *    .7    .9    .7    .3    .1    .2    .1    .5    .6    .8   1.2   1.7   2.2   1.9    .2    .3    .6    .7    .7    .7
 275.  *    .8   1.1    .9    .6    .2    .3    .1    .5    .6    .7   1.5   1.6   1.9   1.5    .0    .2    .2    .6    .4    .4
 280.  *    .9   1.3   1.0    .7    .3    .3    .1    .6    .7   1.0   1.6   1.9   1.7   1.3    .0    .0    .2    .2    .3    .2
 285.  *   1.1   1.4   1.2    .8    .3    .3    .2    .6    .6   1.0   1.5   1.7   1.5   1.2    .0    .0    .0    .0    .2    .2
 290.  *   1.0   1.4   1.3    .9    .5    .5    .2    .6    .6   1.0   1.4   1.8   1.6   1.1    .0    .0    .0    .0    .0    .0
 295.  *   1.0   1.5   1.2    .9    .6    .5    .2    .7    .6   1.0   1.2   1.5   1.5   1.0    .0    .0    .0    .0    .0    .0
 300.  *   1.1   1.5   1.2    .9    .7    .4    .3    .7    .7   1.1   1.2   1.5   1.4   1.0    .0    .0    .0    .0    .0    .0
 305.  *   1.0   1.4   1.2    .8    .5    .5    .3    .7    .8   1.0   1.1   1.5   1.4   1.0    .0    .0    .0    .0    .0    .0
 310.  *   1.1   1.4   1.2   1.0    .5    .6    .3    .7    .9    .9   1.2   1.5   1.4    .9    .0    .0    .0    .0    .0    .0
 315.  *   1.2   1.4   1.2   1.0    .6    .6    .3    .8    .7   1.1   1.0   1.4   1.4   1.0    .0    .0    .0    .0    .0    .0
 320.  *   1.1   1.3   1.0    .9    .5    .6    .3    .7    .7    .9   1.0   1.4   1.4   1.0    .0    .0    .0    .0    .0    .0
 325.  *   1.2   1.2   1.1   1.0    .5    .5    .4    .7    .5   1.0   1.1   1.6   1.4   1.0    .0    .0    .0    .0    .0    .0
 330.  *   1.2   1.2   1.1    .9    .4    .5    .3    .7    .6   1.0   1.1   1.3   1.4   1.0    .0    .0    .0    .0    .0    .0
 335.  *   1.3   1.2   1.0    .9    .4    .5    .3    .6    .7    .8   1.2   1.3   1.4   1.0    .0    .0    .0    .0    .0    .0
 340.  *   1.3   1.2   1.0    .9    .4    .5    .3    .6    .7    .8   1.2   1.3   1.3   1.0    .0    .0    .0    .0    .0    .0
 345.  *   1.4   1.2   1.0    .9    .4    .7    .4    .3    .4    .9   1.1   1.2   1.4   1.0    .0    .0    .0    .0    .0    .0
 350.  *   1.4   1.2   1.0    .9    .5    .8    .5    .3    .3    .9   1.3   1.2   1.5   1.0    .0    .0    .0    .0    .0    .0
 355.  *   1.4   1.2   1.0   1.0    .4    .8    .5    .4    .5    .9   1.2   1.2   1.4   1.1    .0    .0    .0    .0    .0    .0
 360.  *   1.5   1.2   1.0   1.0    .4    .8    .4    .4    .5    .8   1.0   1.3   1.4   1.1    .0    .0    .0    .0    .0    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   2.1   1.7   1.4   1.1   1.3   1.0    .8    .8    .9   1.1   1.6   1.9   2.2   2.5   1.5   1.9   1.8   1.6   1.5   1.3
 DEGR. *   75    65    65    55    50    15    35   315   310   300   280   280   270   250   210   200   205    90   250   120

1
                                                                                                                 PAGE  5
      JOB: Site 6 Opt 8 AM 2014 - 6B8AM14.DAT                  RUN: Site 6 Opt 8 AM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .1
  75.  *    .1
  80.  *    .6
  85.  *    .6
  90.  *    .8
  95.  *    .9
 100.  *   1.1
 105.  *   1.1
 110.  *   1.2
 115.  *   1.3
 120.  *   1.2
 125.  *   1.3
 130.  *   1.3
 135.  *   1.2
 140.  *   1.4
 145.  *   1.2
 150.  *   1.1
 155.  *   1.1
 160.  *   1.0
 165.  *   1.0
 170.  *   1.0
 175.  *   1.0
 180.  *   1.0
 185.  *   1.0
 190.  *   1.0
 195.  *   1.0
 200.  *   1.0
 205.  *   1.0
1
                                                                                                                               PAGE  6
      JOB: Site 6 Opt 8 AM 2014 - 6B8AM14.DAT                    RUN: Site 6 Opt 8 AM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *   1.0
 215.  *   1.0
 220.  *   1.1
 225.  *   1.1
 230.  *   1.2
 235.  *   1.1
 240.  *   1.1
 245.  *   1.0
 250.  *    .9
 255.  *    .9
 260.  *    .7
 265.  *    .7
 270.  *    .5
 275.  *    .3
 280.  *    .2
 285.  *    .2
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.4
 DEGR. *  140

 THE HIGHEST CONCENTRATION IS    2.50 PPM AT  250 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS    2.20 PPM AT  270 DEGREES FROM REC13.
 THE 3RD HIGHEST CONCENTRATION IS    2.10 PPM AT   75 DEGREES FROM REC1 .
```

```
Site 6 Opt 8 AM 2030 - 6B8AM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt 8 AM 2030                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.    1595 9.2   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.    1490 9.2   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       120        66       2.0 1490   84.1 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.     105 9.2   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.     105 9.2   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       120        66       2.0  105   84.1 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.     105 9.2   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    2175 9.2   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    2175 9.2   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    2175 9.2   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    2175 9.2   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    2175 9.2   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    2175 9.2   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.     770 9.2   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.     770 9.2   0  44   30.
```

```
   1
SB        2A aprch  AG  3422.  2252.  3332.  2173.     770 9.2   0  44   30.
   1
SB        2A aprch  AG  3332.  2173.  3236.  2117.     770 9.2   0  44   30.
   1
SB        2A aprch  AG  3236.  2117.  3138.  2078.     770 9.2   0  44   30.
   1
SB        2A thru   AG  3138.  2078.  3001.  2050.     325 9.2   0  44   30.
   2
SB        2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       120        29       2.0  325   84.1 1770 1 3
   1
SB        2A left   AG  3137.  2071.  3004.  2042.     445 9.2   0  32   30.
   2
SB        2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       120        87       2.0  445   84.1 1770 1 3
   1
SB        2A depart AG  3000.  2046.  2878.  2037.     390 9.2   0  44   30.
   1
SB        2A depart AG  2878.  2037.  2000.  2028.     390 9.2   0  44   30.
   1
WB         5 aprch   AG  3279.  1032.  3039.  1825.     750 9.2   0  32   30.
   1
WB         5 left    AG  3038.  1827.  3012.  2029.      65 9.2   0  32   30.
   2
WB         5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       120        99       2.0   65   84.1 1770 1 3
   1
WB         5 right   AG  3039.  1847.  3064.  1943.     685 9.2   0  32   30.
   1
WB         5 right   AG  3064.  1943.  3110.  2007.     685 9.2   0  32   30.
   2
WB         5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       120        62       2.0  685   84.1 1583 1 3
   1
WB         5 right   AG  3110.  2007.  3159.  2057.     685 9.2   0  32   30.
   1
EB         5 depart  AG  2991.  2021.  3012.  1857.     550 9.2   0  32   30.
   1
EB         5 depart  AG  3012.  1857.  3052.  1680.     550 9.2   0  32   30.
   1
EB         5 depart  AG  3052.  1680.  3248.  1014.     550 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 6 Opt 8 AM 2030 - 6B8AM30.DAT                   RUN: Site 6 Opt 8 AM 2030
      DATE: 05/10/2009   TIME: 17:21:29.22


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG   1595.   9.2    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG   1490.   9.2    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2487.5    1998.2 *     481.   268. AG    248. 100.0    .0 24.0 1.01  24.4
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG    105.   9.2    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG    105.   9.2    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2930.2    1956.6 *      38.   119. AG    124. 100.0    .0 12.0  .16   1.9
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG    105.   9.2    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG   2175.   9.2    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG   2175.   9.2    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG   2175.   9.2    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG   2175.   9.2    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG   2175.   9.2    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG   2175.   9.2    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG    770.   9.2    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG    770.   9.2    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG    770.   9.2    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG    770.   9.2    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG    770.   9.2    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG    325.   9.2    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3058.1    2061.3 *      26.    78. AG    109. 100.0    .0 24.0  .13   1.3
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    445.   9.2    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    3518.1    2154.5 *     494.    78. AG    164. 100.0    .0 12.0 1.04  25.1
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG    390.   9.2    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG    390.   9.2    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    750.   9.2    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     65.   9.2    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3019.5    1969.1 *      35.   173. AG    186. 100.0    .0 12.0  .26   1.8
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    685.   9.2    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    685.   9.2    .0 32.0
      30. WB        5 right   *   3106.0    2001.0    2918.9    1746.7 *     316.   216. AG    117. 100.0    .0 12.0  .96  16.0
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    685.   9.2    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    550.   9.2    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    550.   9.2    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    550.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 Opt 8 AM 2030 - 6B8AM30.DAT                   RUN: Site 6 Opt 8 AM 2030
      DATE: 05/10/2009   TIME: 17:21:29.22

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *     120       66       2.0      1490       1770      84.10      1        3
       6. NB        2A rt     *     120       66       2.0       105       1583      84.10      1        3
      20. SB        2A thru   *     120       29       2.0       325       1770      84.10      1        3
      22. SB        2A left   *     120       87       2.0       445       1770      84.10      1        3
      27. WB        5 left    *     120       99       2.0        65       1770      84.10      1        3
      30. WB        5 right   *     120       62       2.0       685       1583      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. SW MID W             *      2594.0     1978.0        5.0   *
      2. SW 164 W             *      2757.0     1973.0        5.0   *
      3. SW 82 W              *      2839.0     1964.0        5.0   *
      4. SW CNR               *      2919.0     1936.0        5.0   *
      5. SW 82 S              *      2978.0     1874.0        5.0   *
      6. SW 164 S             *      3003.0     1794.0        5.0   *
      7. SW MID S             *      3021.0     1679.0        5.0   *
      8. SE MID S             *      3105.0     1694.0        5.0   *
      9. SE 164 S             *      3072.0     1811.0        5.0   *
     10. SE 82 S              *      3074.0     1891.0        5.0   *
     11. SE CNR               *      3109.0     1962.0        5.0   *
     12. SE 82 E              *      3164.0     2025.0        5.0   *
     13. SE 164 E             *      3242.0     2062.0        5.0   *
     14. SE MID E             *      3360.0     2134.0        5.0   *
     15. NE MID E             *      3286.0     2172.0        5.0   *
     16. NE 164 E             *      3153.0     2110.0        5.0   *
     17. NE 82 E              *      3074.0     2088.0        5.0   *
     18. N CNR                *      2994.0     2070.0        5.0   *
     19. NW 82 W              *      2912.0     2063.0        5.0   *
     20. NW 164 W             *      2829.0     2063.0        5.0   *
     21. NW  MID W            *      2704.0     2064.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 6 Opt 8 AM 2030 - 6B8AM30.DAT                   RUN: Site 6 Opt 8 AM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
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WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *   1.2   1.0    .8    .7    .4    .5    .4    .2    .4    .7    .7    .9   1.1    .9    .0    .0    .0    .0    .0    .0
  5.  *   1.2   1.0    .8    .7    .4    .5    .4    .2    .5    .8    .7   1.0   1.1    .9    .0    .0    .0    .0    .0    .0
 10.  *   1.2   1.0    .8    .7    .4    .6    .5    .2    .4    .7    .7   1.0   1.1   1.0    .0    .0    .0    .0    .0    .0
 15.  *   1.2   1.0    .7    .7    .4    .8    .7    .2    .4    .6    .8    .9   1.1   1.1    .0    .0    .0    .0    .0    .0
 20.  *   1.2   1.0    .7    .6    .6    .9    .5    .2    .2    .5    .9    .9   1.1   1.2    .0    .0    .0    .0    .0    .0
 25.  *   1.2   1.0    .8    .7    .6    .8    .5    .1    .2    .6    .9    .9   1.2   1.1    .0    .0    .0    .0    .0    .0
 30.  *   1.3   1.1    .8    .6    .8    .7    .5    .1    .3    .6    .7   1.0   1.3   1.3    .0    .0    .0    .0    .0    .0
 35.  *   1.3   1.1    .8    .4    .6    .6    .4    .1    .3    .4    .8   1.3   1.5   1.3    .2    .0    .0    .0    .0    .0
 40.  *   1.4   1.1    .8    .6    .5    .8    .3    .0    .4    .4    .9   1.5   1.7   1.2    .4    .0    .0    .0    .0    .0
 45.  *   1.4   1.1    .9    .6    .7    .7    .2    .0    .2    .4    .8   1.4   1.6   1.1    .5    .1    .0    .0    .0    .0
 50.  *   1.4   1.1   1.0    .7    .8    .4    .2    .0    .1    .4    .7   1.3   1.4    .8    .6    .1    .1    .0    .0    .0
 55.  *   1.5   1.1   1.0    .6    .7    .4    .2    .0    .0    .3    .7   1.2   1.3    .7    .7    .4    .1    .1    .0    .0
 60.  *   1.6   1.1   1.0    .8    .8    .3    .2    .0    .0    .1    .3   1.0   1.1    .6    .7    .5    .3    .2    .1    .0
 65.  *   1.7   1.3    .9    .7    .6    .3    .2    .0    .0    .1    .3    .7    .8    .4    .8    .7    .6    .5    .2    .0
 70.  *   1.7   1.3    .9    .7    .5    .3    .2    .0    .0    .0    .1    .5    .6    .4    .8    .9    .6    .5    .3    .1
 75.  *   1.7   1.2    .8    .6    .5    .3    .2    .0    .0    .0    .1    .3    .3    .4    .9    .9    .8    .6    .4    .1
 80.  *   1.6   1.0    .6    .5    .5    .3    .2    .0    .0    .0    .0    .3    .3    .4    .8    .9    .8   1.1    .6    .3
 85.  *   1.2    .7    .6    .2    .5    .3    .3    .0    .0    .0    .0    .1    .1    .5   1.0   1.0    .9   1.1    .7    .5
 90.  *    .9    .6    .4    .2    .4    .4    .3    .0    .0    .0    .0    .0    .1    .6    .9   1.1   1.0   1.2    .6    .6
 95.  *    .7    .2    .2    .2    .4    .4    .3    .0    .0    .0    .0    .0    .0    .6    .9   1.2   1.2   1.2    .7    .7
100.  *    .4    .3    .2    .2    .4    .4    .2    .0    .0    .0    .0    .0    .0    .6   1.1   1.2   1.2   1.1    .7    .9
105.  *    .2    .1    .2    .3    .4    .4    .2    .0    .0    .0    .0    .0    .0    .6   1.0   1.2   1.2   1.1    .8    .9
110.  *    .2    .1    .1    .3    .5    .4    .2    .0    .0    .0    .0    .0    .0    .6    .9   1.1   1.2   1.0    .7    .9
115.  *    .0    .1    .1    .2    .4    .4    .2    .0    .0    .0    .0    .0    .0    .6    .9   1.1   1.1   1.1    .6   1.0
120.  *    .0    .1    .1    .2    .5    .4    .2    .0    .0    .0    .0    .0    .0    .6    .9   1.0   1.2   1.0    .9   1.0
125.  *    .0    .1    .1    .2    .5    .4    .3    .0    .0    .0    .0    .0    .0    .5    .9   1.0   1.1   1.0   1.0   1.0
130.  *    .0    .0    .1    .2    .4    .4    .3    .0    .0    .0    .0    .0    .0    .5    .9   1.0   1.0    .9   1.1   1.0
135.  *    .0    .1    .2    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .5    .9   1.0   1.1    .9   1.0   1.0
140.  *    .0    .1    .2    .3    .4    .4    .4    .0    .0    .0    .0    .0    .0    .5    .9   1.0   1.0    .8   1.0   1.0
145.  *    .0    .0    .2    .3    .5    .5    .4    .0    .0    .0    .0    .0    .0    .5    .9   1.0   1.0    .9   1.0   1.1
150.  *    .0    .0    .2    .3    .5    .5    .3    .1    .1    .0    .0    .0    .0    .5   1.0   1.0   1.1    .9   1.1   1.0
155.  *    .0    .0    .1    .2    .6    .5    .3    .1    .1    .1    .0    .0    .0    .5    .9   1.0   1.0   1.0   1.1    .9
160.  *    .0    .0    .0    .2    .5    .3    .3    .3    .2    .1    .0    .0    .0    .5    .9   1.0   1.1   1.0   1.1    .8
165.  *    .0    .0    .0    .2    .5    .3    .2    .3    .3    .1    .1    .0    .0    .5    .9   1.0   1.1    .9   1.1    .8
170.  *    .0    .0    .0    .1    .5    .3    .1    .4    .4    .2    .1    .0    .0    .5    .9   1.0   1.2   1.0   1.1    .8
175.  *    .0    .0    .0    .1    .3    .2    .1    .4    .4    .3    .1    .0    .0    .5    .9   1.0   1.2    .9   1.0    .8
180.  *    .0    .0    .0    .1    .3    .0    .0    .4    .4    .3    .1    .1    .0    .5    .9   1.1   1.2    .8   1.0    .8
185.  *    .0    .0    .0    .0    .3    .0    .0    .4    .5    .3    .1    .1    .0    .5    .9   1.1   1.2    .8   1.0    .8
190.  *    .0    .0    .0    .0    .3    .0    .0    .4    .5    .2    .1    .1    .0    .5   1.0   1.3   1.0    .8    .9    .8
195.  *    .0    .0    .0    .0    .2    .0    .0    .4    .4    .3    .1    .1    .0    .5   1.0   1.2   1.2    .7    .9    .8
200.  *    .0    .0    .0    .0    .2    .0    .0    .4    .3    .3    .2    .1    .0    .5   1.0   1.2   1.4    .7    .9    .8
205.  *    .0    .0    .0    .0    .2    .0    .0    .3    .3    .3    .3    .1    .0    .5   1.0   1.3   1.4    .7    .9   1.0
1
                                                                                                                   PAGE  4
     JOB: Site 6 Opt 8 AM 2030 - 6B8AM30.DAT                  RUN: Site 6 Opt 8 AM 2030

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .1    .0    .0    .3    .3    .3    .2    .1    .0    .6   1.1   1.3   1.3    .7    .9    .9
215.  *    .0    .0    .0    .0    .1    .0    .0    .3    .3    .5    .3    .1    .0    .7   1.2   1.2   1.1    .7    .9    .9
220.  *    .0    .0    .0    .0    .1    .0    .0    .3    .3    .4    .3    .3    .1    .7   1.1   1.2   1.3    .8    .9    .9
225.  *    .0    .0    .0    .0    .0    .0    .0    .3    .3    .4    .5    .3    .1    .9   1.1   1.1   1.1    .8    .9   1.0
230.  *    .0    .0    .0    .0    .0    .1    .0    .3    .3    .5    .5    .4    .2   1.0   1.0   1.2    .9    .9   1.0    .9
235.  *    .0    .0    .0    .0    .0    .1    .0    .3    .3    .5    .5    .4    .2   1.3   1.0   1.2   1.1    .9   1.2   1.0
240.  *    .0    .0    .0    .0    .0    .1    .0    .3    .3    .4    .6    .5    .4   1.4    .9   1.0   1.1   1.0   1.2   1.1
245.  *    .1    .0    .0    .0    .0    .1    .0    .3    .4    .4    .6    .5    .7   1.5    .7   1.1   1.1   1.0   1.3   1.1
250.  *    .1    .1    .0    .0    .0    .2    .0    .3    .4    .5    .6    .7   1.1   1.8    .8   1.0    .9   1.1   1.2   1.1
255.  *    .3    .2    .2    .0    .0    .2    .0    .2    .4    .5    .7   1.0   1.3   1.9    .7    .8    .9   1.1   1.2   1.0
260.  *    .4    .4    .2    .1    .0    .2    .0    .3    .4    .5    .8   1.2   1.5   1.8    .3    .7    .7   1.0   1.0   1.0
265.  *    .6    .5    .4    .2    .0    .2    .0    .3    .4    .6   1.0   1.3   1.5   1.7    .2    .4    .6    .8    .7    .8
270.  *    .9    .8    .6    .3    .1    .2    .0    .3    .4    .7   1.1   1.3   1.7   1.3    .2    .2    .4    .7    .6    .5
275.  *   1.1   1.0    .8    .4    .2    .3    .0    .3    .5    .7   1.1   1.5   1.5   1.1    .0    .2    .2    .5    .4    .4
280.  *   1.2   1.1    .9    .5    .2    .3    .0    .3    .5    .8   1.3   1.4   1.3   1.0    .0    .0    .1    .2    .3    .3
285.  *   1.4   1.3   1.1    .7    .4    .4    .0    .4    .5    .9   1.2   1.5   1.3    .9    .0    .0    .0    .0    .0    .2
290.  *   1.4   1.2   1.1    .8    .4    .4    .1    .4    .5    .9   1.0   1.4   1.2    .9    .0    .0    .0    .0    .0    .0
295.  *   1.4   1.2   1.0    .8    .3    .4    .1    .6    .6   1.0   1.0   1.2   1.1    .8    .0    .0    .0    .0    .0    .0
300.  *   1.5   1.2   1.0    .7    .4    .4    .2    .6    .7    .9    .9   1.3   1.1    .7    .0    .0    .0    .0    .0    .0
305.  *   1.5   1.2   1.0    .8    .4    .5    .2    .6    .7    .8    .9   1.2   1.1    .7    .0    .0    .0    .0    .0    .0
310.  *   1.4   1.2   1.0    .9    .4    .5    .3    .7    .7    .8    .9   1.2   1.1    .7    .0    .0    .0    .0    .0    .0
315.  *   1.4   1.1    .9    .7    .3    .6    .3    .6    .7    .8    .8   1.1   1.1    .8    .0    .0    .0    .0    .0    .0
320.  *   1.3   1.1   1.0    .6    .3    .5    .3    .6    .5    .9    .8   1.1   1.0    .8    .0    .0    .0    .0    .0    .0
325.  *   1.3   1.1   1.0    .6    .3    .5    .2    .6    .5    .9    .8    .9   1.0    .8    .0    .0    .0    .0    .0    .0
330.  *   1.2   1.0    .9    .7    .3    .5    .3    .6    .5    .8    .8   1.0   1.0    .8    .0    .0    .0    .0    .0    .0
335.  *   1.2   1.0    .9    .7    .3    .4    .3    .6    .6    .7    .8    .9   1.0    .7    .0    .0    .0    .0    .0    .0
340.  *   1.2   1.0    .8    .7    .3    .4    .3    .3    .5    .7    .9    .9   1.0    .7    .0    .0    .0    .0    .0    .0
345.  *   1.2   1.0    .8    .7    .3    .5    .4    .3    .4    .7    .8    .9   1.1    .7    .0    .0    .0    .0    .0    .0
350.  *   1.2   1.0    .8    .7    .2    .6    .3    .3    .3    .8    .9    .9   1.1    .7    .0    .0    .0    .0    .0    .0
355.  *   1.2   1.0    .8    .7    .4    .7    .3    .2    .4    .7    .9    .9   1.2    .8    .0    .0    .0    .0    .0    .0
360.  *   1.2   1.0    .8    .7    .4    .5    .4    .2    .4    .7    .7    .9   1.1    .9    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *   1.7   1.3   1.1    .9    .8    .9    .7    .7    .7   1.0   1.3   1.5   1.7   1.9   1.2   1.3   1.4   1.2   1.3   1.1
DEGR. *   65    65   285   310    60    20    15   310   300   295   280   275    40   255   215   210   200    90   245   145

1
                                                                                                                   PAGE  5
     JOB: Site 6 Opt 8 AM 2030 - 6B8AM30.DAT                  RUN: Site 6 Opt 8 AM 2030

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .0
  75.  *    .1
  80.  *    .2
  85.  *    .5
  90.  *    .7
  95.  *    .7
 100.  *    .8
 105.  *    .9
 110.  *    .8
 115.  *    .9
 120.  *   1.0
 125.  *    .9
 130.  *    .9
 135.  *    .9
 140.  *    .9
 145.  *    .8
 150.  *    .8
 155.  *    .8
 160.  *    .8
 165.  *    .8
 170.  *    .8
 175.  *    .8
 180.  *    .8
 185.  *    .8
 190.  *    .8
 195.  *    .8
 200.  *    .8
 205.  *    .8
1
                                                                                                                        PAGE  6
      JOB: Site 6 Opt 8 AM 2030 - 6B8AM30.DAT                    RUN: Site 6 Opt 8 AM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .8
 215.  *    .8
 220.  *    .8
 225.  *    .9
 230.  *   1.0
 235.  *    .9
 240.  *    .9
 245.  *   1.0
 250.  *    .9
 255.  *    .9
 260.  *    .7
 265.  *    .5
 270.  *    .4
 275.  *    .2
 280.  *    .2
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.0
 DEGR. *  120

 THE HIGHEST CONCENTRATION IS    1.90 PPM AT  255 DEGREES FROM REC14.
 THE 2ND HIGHEST CONCENTRATION IS    1.70 PPM AT   65 DEGREES FROM REC1 .
 THE 3RD HIGHEST CONCENTRATION IS    1.70 PPM AT   40 DEGREES FROM REC13.
```

```
Site 6 Opt 8 PM 2014 - 6B8PM14.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt 8 PM 2014                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.     70011.4   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.     58011.4   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       115        85       2.0  580  102.2 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.     12011.4   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.     12011.4   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       115        85       2.0  120  102.2 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.     12011.4   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    103511.4   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    103511.4   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    103511.4   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    103511.4   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    103511.4   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    103511.4   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.    215511.4   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.    215511.4   0  44   30.
```

```
  1
SB        2A aprch  AG  3422.  2252.  3332.  2173.    215511.4   0  44   30.
  1
SB        2A aprch  AG  3332.  2173.  3236.  2117.    215511.4   0  44   30.
  1
SB        2A aprch  AG  3236.  2117.  3138.  2078.    215511.4   0  44   30.
  1
SB        2A thru   AG  3138.  2078.  3001.  2050.    135511.4   0  44   30.
  2
SB        2A thru   AG  3033.  2056.  3137.  2078.       0.  24   2
       115        19       2.0 1355  102.2 1770 1 3
  1
SB        2A left   AG  3137.  2071.  3004.  2042.     80011.4   0  32   30.
  2
SB        2A left   AG  3036.  2049.  3132.  2070.       0.  12   1
       115        53       2.0  800  102.2 1770 1 3
  1
SB        2A depart AG  3000.  2046.  2878.  2037.    142511.4   0  44   30.
  1
SB        2A depart AG  2878.  2037.  2000.  2028.    142511.4   0  44   30.
  1
WB        5 aprch   AG  3279.  1032.  3039.  1825.     52511.4   0  32   30.
  1
WB        5 left    AG  3038.  1827.  3012.  2029.      7011.4   0  32   30.
  2
WB        5 left    AG  3015.  2004.  3034.  1857.       0.  12   1
       115       103       2.0   70  102.2 1770 1 3
  1
WB        5 right   AG  3039.  1847.  3064.  1943.     45511.4   0  32   30.
  1
WB        5 right   AG  3064.  1943.  3110.  2007.     45511.4   0  32   30.
  2
WB        5 right   AG  3106.  2001.  3067.  1948.       0.  12   1
       115        38       2.0  455  102.2 1583 1 3
  1
WB        5 right   AG  3110.  2007.  3159.  2057.     45511.4   0  32   30.
  1
EB        5 depart  AG  2991.  2021.  3012.  1857.     92011.4   0  32   30.
  1
EB        5 depart  AG  3012.  1857.  3052.  1680.     92011.4   0  32   30.
  1
EB        5 depart  AG  3052.  1680.  3248.  1014.     92011.4   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 6 Opt 8 PM 2014 - 6B8PM14.DAT                  RUN: Site 6 Opt 8 PM 2014
      DATE: 05/10/2009   TIME: 17:15:42.75


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG     700.  11.4    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG     580.  11.4    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2831.0    2013.1 *     137.   268. AG     405. 100.0    .0 24.0  .73   7.0
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG     120.  11.4    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG     120.  11.4    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2945.8    1948.0 *      56.   119. AG     203. 100.0    .0 12.0  .34   2.8
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG     120.  11.4    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG    1035.  11.4    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG    1035.  11.4    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG    1035.  11.4    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG    1035.  11.4    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG    1035.  11.4    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG    1035.  11.4    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG    2155.  11.4    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG    2155.  11.4    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG    2155.  11.4    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG    2155.  11.4    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG    2155.  11.4    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG    1355.  11.4    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3101.8    2070.6 *      70.    78. AG      91. 100.0    .0 24.0  .48   3.6
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG     800.  11.4    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    3295.7    2105.8 *     266.    78. AG     126. 100.0    .0 12.0  .90  13.5
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG    1425.  11.4    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG    1425.  11.4    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG     525.  11.4    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG      70.  11.4    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3020.2    1963.9 *      40.   173. AG     246. 100.0    .0 12.0  .57   2.1
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG     455.  11.4    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG     455.  11.4    .0 32.0
      30. WB        5 right   *   3106.0    2001.0    3050.0    1924.9 *      95.   216. AG      91. 100.0    .0 12.0  .45   4.8
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG     455.  11.4    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG     920.  11.4    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG     920.  11.4    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG     920.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 Opt 8 PM 2014 - 6B8PM14.DAT                  RUN: Site 6 Opt 8 PM 2014
      DATE: 05/10/2009   TIME: 17:15:42.75

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *     115       85       2.0       580       1770     102.20      1        3
       6. NB        2A rt     *     115       85       2.0       120       1583     102.20      1        3
      20. SB        2A thru   *     115       19       2.0      1355       1770     102.20      1        3
      22. SB        2A left   *     115       53       2.0       800       1770     102.20      1        3
      27. WB        5 left    *     115      103       2.0        70       1770     102.20      1        3
      30. WB        5 right   *     115       38       2.0       455       1583     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
      1. SW MID W             *      2594.0     1978.0        5.0   *
      2. SW 164 W             *      2757.0     1973.0        5.0   *
      3. SW 82 W              *      2839.0     1964.0        5.0   *
      4. SW CNR               *      2919.0     1936.0        5.0   *
      5. SW 82 S              *      2978.0     1874.0        5.0   *
      6. SW 164 S             *      3003.0     1794.0        5.0   *
      7. SW MID S             *      3021.0     1679.0        5.0   *
      8. SE MID S             *      3105.0     1694.0        5.0   *
      9. SE 164 S             *      3072.0     1811.0        5.0   *
     10. SE 82 S              *      3074.0     1891.0        5.0   *
     11. SE CNR               *      3109.0     1962.0        5.0   *
     12. SE 82 E              *      3164.0     2025.0        5.0   *
     13. SE 164 E             *      3242.0     2062.0        5.0   *
     14. SE MID E             *      3360.0     2134.0        5.0   *
     15. NE MID E             *      3286.0     2172.0        5.0   *
     16. NE 164 E             *      3153.0     2110.0        5.0   *
     17. NE 82 E              *      3074.0     2088.0        5.0   *
     18. N CNR                *      2994.0     2070.0        5.0   *
     19. NW 82 W              *      2912.0     2063.0        5.0   *
     20. NW 164 W             *      2829.0     2063.0        5.0   *
     21. NW  MID W            *      2704.0     2064.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 6 Opt 8 PM 2014 - 6B8PM14.DAT                  RUN: Site 6 Opt 8 PM 2014

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)*  REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9 REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *    .5    .5    .9   1.2    .4    .8    .5    .0    .4    .7   1.0   1.1   1.1   1.0    .1    .0    .0    .0    .0    .0
  5.  *    .5    .5   1.0   1.2    .7    .7    .5    .0    .5    .7    .9   1.1   1.1   1.2    .1    .0    .0    .0    .0    .0
 10.  *    .5    .5    .9   1.2    .8    .8    .4    .1    .4    .8    .9   1.0   1.1   1.2    .1    .0    .0    .0    .0    .0
 15.  *    .5    .5   1.1   1.1    .7    .7    .4    .1    .4    .8    .9   1.0   1.3   1.2    .1    .1    .0    .0    .0    .0
 20.  *    .5    .6   1.2   1.1    .7    .9    .4    .0    .3    .7    .8   1.1   1.3   1.3    .1    .1    .0    .0    .0    .0
 25.  *    .5    .5   1.2   1.1    .8    .9    .4    .1    .4    .6    .8   1.1   1.3   1.3    .2    .1    .0    .0    .0    .0
 30.  *    .5    .5   1.1   1.2    .9    .8    .5    .1    .5    .5    .8   1.4   1.5   1.4    .3    .1    .1    .0    .0    .0
 35.  *    .6    .6   1.3   1.2   1.0    .9    .5    .1    .3    .5    .9   1.4   1.5   1.3    .4    .2    .1    .1    .0    .0
 40.  *    .7    .6   1.3   1.3   1.1    .7    .5    .1    .2    .6   1.0   1.3   1.7   1.0    .6    .2    .2    .1    .1    .0
 45.  *    .7    .7   1.3   1.4   1.1    .5    .4    .0    .1    .7    .7   1.2   1.5    .9   1.0    .4    .2    .2    .1    .0
 50.  *    .7    .8   1.3   1.3    .9    .5    .4    .0    .1    .3    .7   1.3   1.4    .8   1.1    .7    .2    .2    .2    .0
 55.  *    .7   1.2   1.3   1.3   1.0    .4    .4    .0    .0    .1    .7    .9   1.1    .5   1.3    .8    .5    .2    .2    .1
 60.  *    .7   1.1   1.4   1.3    .5    .4    .4    .0    .0    .0    .5    .8    .8    .3   1.4   1.0    .5    .6    .2    .1
 65.  *    .8   1.3   1.5   1.2    .4    .4    .3    .0    .0    .0    .0    .6    .6    .2   1.6   1.1    .8    .8    .3    .1
 70.  *    .7   1.1   1.2    .9    .4    .4    .4    .0    .0    .0    .0    .4    .1    .1   1.4   1.3   1.2   1.2    .7    .2
 75.  *    .8   1.3   1.1    .5    .4    .4    .4    .0    .0    .0    .0    .2    .1    .0   1.4   1.5   1.3   1.5    .8    .5
 80.  *    .9   1.2   1.0    .3    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.5   1.4   1.4   1.5   1.1    .6
 85.  *    .8    .8    .6    .4    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.3   1.5   1.5   1.6   1.2    .9
 90.  *    .4    .7    .4    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.4   1.4   1.5   1.7   1.2   1.1
 95.  *    .3    .5    .3    .1    .3    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.4   1.6   1.7   1.8   1.2   1.3
100.  *    .2    .3    .3    .1    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.3   1.5   1.6   1.8   1.4   1.3
105.  *    .0    .3    .2    .1    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.3   1.5   1.6   1.6   1.4   1.3
110.  *    .0    .0    .2    .1    .4    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.2   1.5   1.6   1.6   1.3   1.5
115.  *    .0    .0    .2    .1    .3    .5    .4    .0    .0    .0    .0    .0    .0    .0   1.2   1.4   1.6   1.6   1.4   1.5
120.  *    .0    .0    .1    .1    .3    .5    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.4   1.8   1.4   1.4   1.6
125.  *    .0    .0    .1    .2    .4    .6    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.7   1.4   1.4   1.8
130.  *    .0    .0    .1    .2    .4    .6    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.6   1.2   1.5   1.8
135.  *    .0    .0    .2    .3    .5    .6    .5    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.6   1.1   1.4   1.8
140.  *    .0    .1    .3    .3    .5    .7    .5    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.5   1.2   1.6   1.7
145.  *    .0    .1    .3    .3    .5    .7    .5    .0    .0    .0    .0    .0    .0    .0   1.2   1.3   1.5   1.2   1.5   1.4
150.  *    .0    .1    .2    .3    .5    .7    .5    .1    .1    .0    .0    .0    .0    .0   1.2   1.3   1.3   1.1   1.7   1.6
155.  *    .0    .0    .1    .3    .5    .7    .5    .2    .2    .0    .0    .0    .0    .0   1.1   1.3   1.3   1.2   1.9   1.5
160.  *    .0    .0    .1    .3    .4    .6    .4    .3    .2    .2    .0    .0    .0    .0   1.1   1.3   1.4   1.3   1.9   1.3
165.  *    .0    .0    .0    .1    .4    .5    .4    .4    .3    .2    .1    .0    .0    .0   1.2   1.3   1.6   1.4   2.0   1.1
170.  *    .0    .0    .0    .1    .3    .5    .2    .4    .4    .2    .2    .0    .0    .0   1.2   1.3   1.9   1.4   1.8   1.1
175.  *    .0    .0    .0    .0    .2    .2    .1    .5    .5    .3    .2    .1    .0    .0   1.2   1.5   1.9   1.4   1.7   1.0
180.  *    .0    .0    .0    .0    .1    .2    .1    .5    .6    .3    .2    .2    .0    .0   1.2   1.5   1.8   1.2   1.7    .9
185.  *    .0    .0    .0    .0    .0    .1    .0    .5    .4    .3    .3    .2    .1    .0   1.3   1.4   1.8   1.1   1.6    .8
190.  *    .0    .0    .0    .0    .0    .0    .0    .4    .5    .3    .3    .2    .1    .0   1.3   1.5   1.9   1.0   1.6    .8
195.  *    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .3    .2    .1    .0   1.4   1.5   1.8   1.2   1.6    .7
200.  *    .0    .0    .0    .0    .0    .0    .0    .4    .5    .4    .2    .1    .0    .0   1.4   1.5   1.8   1.2   1.6    .7
205.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .2    .1    .0    .0   1.5   1.5   1.8   1.1   1.5    .6
1
                                                                                                                       PAGE  4
     JOB: Site 6 Opt 8 PM 2014 - 6B8PM14.DAT                   RUN: Site 6 Opt 8 PM 2014

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)*  REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9 REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .2    .1    .0    .0   1.6   1.8   1.9   1.2   1.5    .6
215.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .1    .0    .0   1.6   1.6   2.0   1.3   1.5    .7
220.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .3    .1    .0    .1   1.6   1.7   1.9   1.5   1.6    .8
225.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .4    .3    .0    .2   1.6   1.8   1.7   1.5   1.6    .8
230.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .4    .3    .0    .3   1.7   1.8   1.8   1.6   1.5    .8
235.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .1    .6   1.7   1.7   2.0   1.6   1.4    .9
240.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .4    .2    .8   1.5   1.8   1.7   1.6   1.5    .9
245.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .5    .7    .5   1.0   1.5   1.7   1.5   1.5   1.4    .9
250.  *    .1    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .7    .8   1.5   1.1   1.5   1.7   1.5   1.4   1.0
255.  *    .1    .1    .0    .0    .0    .0    .0    .4    .4    .3    .4    .8   1.1   1.5    .9   1.5   1.5   1.5   1.3   1.0
260.  *    .2    .2    .2    .0    .0    .0    .0    .4    .4    .3    .7   1.2   1.1   1.6    .6   1.2   1.2   1.3   1.2   1.0
265.  *    .4    .4    .2    .2    .0    .0    .0    .4    .4    .4    .9   1.5   1.6   1.5    .3    .8   1.0   1.1   1.0    .9
270.  *    .5    .4    .4    .2    .1    .0    .0    .4    .4    .5   1.1   1.6   1.5   1.5    .2    .4    .7    .8    .8    .7
275.  *    .6    .6    .5    .3    .2    .0    .0    .4    .4    .6   1.3   1.8   1.6   1.2    .1    .2    .5    .6    .6    .6
280.  *    .7    .6    .5    .3    .2    .1    .0    .4    .4    .8   1.3   1.5   1.7   1.0    .1    .1    .2    .4    .5    .4
285.  *    .8    .7    .5    .4    .3    .2    .0    .5    .5    .9   1.4   1.5   1.4   1.1    .1    .0    .2    .2    .3    .2
290.  *    .7    .7    .5    .5    .3    .2    .1    .5    .5   1.0   1.2   1.7   1.3    .9    .1    .0    .1    .2    .2    .1
295.  *    .7    .7    .7    .6    .3    .2    .1    .5    .6   1.0   1.2   1.3   1.3    .9    .1    .0    .1    .1    .1    .1
300.  *    .7    .7    .6    .7    .4    .2    .1    .5    .6   1.0   1.3   1.3   1.2   1.0    .1    .0    .1    .1    .0    .1
305.  *    .7    .7    .6    .8    .4    .2    .1    .5    .5   1.1   1.0   1.2   1.2   1.0    .0    .0    .1    .0    .0    .0
310.  *    .7    .7    .6    .7    .6    .2    .1    .6    .5   1.1   1.0   1.4   1.1    .9    .0    .0    .0    .0    .0    .0
315.  *    .7    .5    .6    .7    .5    .2    .1    .6    .6   1.0    .9   1.3   1.1   1.0    .0    .0    .0    .0    .0    .0
320.  *    .7    .5    .6    .9    .6    .2    .1    .6    .8    .9   1.0   1.0   1.0    .9    .0    .0    .0    .0    .0    .0
325.  *    .6    .5    .5   1.1    .7    .3    .2    .7    .6    .8   1.0   1.1   1.0   1.0    .0    .0    .0    .0    .0    .0
330.  *    .5    .5    .5   1.2    .7    .5    .2    .5    .6    .9   1.0   1.1   1.1    .9    .0    .0    .0    .0    .0    .0
335.  *    .5    .5    .5   1.1    .7    .6    .3    .5    .5    .9   1.0   1.2   1.1   1.0    .0    .0    .0    .0    .0    .0
340.  *    .5    .5    .6   1.1    .6    .6    .2    .4    .5    .9   1.0   1.1   1.1    .9    .0    .0    .0    .0    .0    .0
345.  *    .5    .5    .7   1.2    .7    .5    .3    .4    .7    .6    .9   1.1   1.2    .9    .0    .0    .0    .0    .0    .0
350.  *    .5    .5    .7   1.3    .6    .5    .4    .1    .4    .6    .9   1.1   1.0    .8    .0    .0    .0    .0    .0    .0
355.  *    .5    .5    .8   1.2    .5    .6    .4    .1    .4    .7    .9   1.0   1.1    .9    .0    .0    .0    .0    .0    .0
360.  *    .5    .5    .9   1.2    .4    .8    .5    .0    .4    .7   1.0   1.1   1.1   1.0    .1    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *    .9   1.3   1.5   1.4   1.1    .9    .5    .7    .8   1.1   1.4   1.8   1.7   1.6   1.7   1.8   2.0   1.8   2.0   1.8
DEGR. *   80    65    65    45    40    20     0   325   320   305   285   275   280   260   230   210   235    95   165   125

1
                                                                                                                       PAGE  5
     JOB: Site 6 Opt 8 PM 2014 - 6B8PM14.DAT                   RUN: Site 6 Opt 8 PM 2014

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .1
  70.  *    .2
  75.  *    .2
  80.  *    .4
  85.  *    .6
  90.  *    .9
  95.  *   1.1
 100.  *   1.0
 105.  *   1.1
 110.  *   1.1
 115.  *   1.1
 120.  *   1.0
 125.  *    .9
 130.  *    .9
 135.  *    .8
 140.  *    .7
 145.  *    .8
 150.  *    .7
 155.  *    .7
 160.  *    .7
 165.  *    .7
 170.  *    .7
 175.  *    .7
 180.  *    .7
 185.  *    .7
 190.  *    .7
 195.  *    .7
 200.  *    .7
 205.  *    .7
1
                                                                                                                              PAGE  6
      JOB: Site 6 Opt 8 PM 2014 - 6B8PM14.DAT                    RUN: Site 6 Opt 8 PM 2014

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .7
 215.  *    .7
 220.  *    .8
 225.  *    .8
 230.  *    .8
 235.  *    .8
 240.  *    .9
 245.  *    .9
 250.  *   1.0
 255.  *   1.0
 260.  *    .9
 265.  *    .9
 270.  *    .6
 275.  *    .5
 280.  *    .3
 285.  *    .2
 290.  *    .1
 295.  *    .1
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.1
 DEGR. *   95

 THE HIGHEST CONCENTRATION IS    2.00 PPM AT  235 DEGREES FROM REC17.
 THE 2ND HIGHEST CONCENTRATION IS    2.00 PPM AT  165 DEGREES FROM REC19.
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT  275 DEGREES FROM REC12.
```

```
Site 6 Opt 8 PM 2030 - 6B8PM30.DAT      60.0321.0.0000.000210.30480000    1
1
SW MID W                 2594.     1978.       5.0
SW 164 W                 2757.     1973.       5.0
SW 82 W                  2839.     1964.       5.0
SW CNR                   2919.     1936.       5.0
SW 82 S                  2978.     1874.       5.0
SW 164 S                 3003.     1794.       5.0
SW MID S                 3021.     1679.       5.0
SE MID S                 3105.     1694.       5.0
SE 164 S                 3072.     1811.       5.0
SE 82 S                  3074.     1891.       5.0
SE CNR                   3109.     1962.       5.0
SE 82 E                  3164.     2025.       5.0
SE 164 E                 3242.     2062.       5.0
SE MID E                 3360.     2134.       5.0
NE MID E                 3286.     2172.       5.0
NE 164 E                 3153.     2110.       5.0
NE 82 E                  3074.     2088.       5.0
N CNR                    2994.     2070.       5.0
NW 82 W                  2912.     2063.       5.0
NW 164 W                 2829.     2063.       5.0
NW  MID W                2704.     2064.       5.0
Site 6 Opt 8 PM 2030                     34  1   0
  1
NB        2A aprch  AG  2001.  2001.  2781.  2010.     690 9.2   0  44   30.
  1
NB        2A thru   AG  2781.  2010.  2989.  2020.     585 9.2   0  44   30.
  2
NB        2A thru   AG  2968.  2019.  2806.  2012.      0.  24   2
       120        91       2.0  585   84.1 1770 1 3
  1
NB        2A rt     AG  2716.  2000.  2889.  1980.     105 9.2   0  32   30.
  1
NB        2A rt     AG  2889.  1980.  2957.  1942.     105 9.2   0  32   30.
  2
NB        2A rt     AG  2897.  1975.  2953.  1944.      0.  12   1
       120        91       2.0  105   84.1 1583 1 3
  1
NB        2A rt     AG  2957.  1942.  3003.  1886.     105 9.2   0  32   30.
  1
NB        2A depart AG  2991.  2022.  3120.  2046.    1066 9.2   0  44   30.
  1
NB        2A depart AG  3120.  2046.  3259.  2100.    1065 9.2   0  44   30.
  1
NB        2A depart AG  3259.  2100.  3389.  2185.    1065 9.2   0  44   30.
  1
NB        2A depart AG  3389.  2185.  3483.  2285.    1065 9.2   0  44   30.
  1
NB        2A depart AG  3483.  2285.  3678.  2522.    1065 9.2   0  44   30.
  1
NB        2A depart AG  3678.  2522.  3786.  2625.    1065 9.2   0  44   30.
  1
SB        2A aprch  AG  3770.  2644.  3666.  2543.    2110 9.2   0  44   30.
  1
SB        2A aprch  AG  3666.  2543.  3422.  2252.    2110 9.2   0  44   30.
```

```
  1
SB         2A aprch  AG  3422.  2252.  3332.  2173.    2110 9.2   0  44   30.
  1
SB         2A aprch  AG  3332.  2173.  3236.  2117.    2110 9.2   0  44   30.
  1
SB         2A aprch  AG  3236.  2117.  3138.  2078.    2110 9.2   0  44   30.
  1
SB         2A thru   AG  3138.  2078.  3001.  2050.    1285 9.2   0  44   30.
  2
SB         2A thru   AG  3033.  2056.  3137.  2078.      0.  24   2
       120        19        2.0 1285   84.1 1770 1 3
  1
SB         2A left   AG  3137.  2071.  3004.  2042.     825 9.2   0  32   30.
  2
SB         2A left   AG  3036.  2049.  3132.  2070.      0.  12   1
       120        52        2.0  825   84.1 1770 1 3
  1
SB         2A depart AG  3000.  2046.  2878.  2037.    1340 9.2   0  44   30.
  1
SB         2A depart AG  2878.  2037.  2000.  2028.    1340 9.2   0  44   30.
  1
WB          5 aprch   AG  3279.  1032.  3039.  1825.     535 9.2   0  32   30.
  1
WB          5 left    AG  3038.  1827.  3012.  2029.      55 9.2   0  32   30.
  2
WB          5 left    AG  3015.  2004.  3034.  1857.      0.  12   1
       120       109        2.0   55   84.1 1770 1 3
  1
WB          5 right   AG  3039.  1847.  3064.  1943.     480 9.2   0  32   30.
  1
WB          5 right   AG  3064.  1943.  3110.  2007.     480 9.2   0  32   30.
  2
WB          5 right   AG  3106.  2001.  3067.  1948.      0.  12   1
       120        37        2.0  480   84.1 1583 1 3
  1
WB          5 right   AG  3110.  2007.  3159.  2057.     480 9.2   0  32   30.
  1
EB          5 depart  AG  2991.  2021.  3012.  1857.     930 9.2   0  32   30.
  1
EB          5 depart  AG  3012.  1857.  3052.  1680.     930 9.2   0  32   30.
  1
EB          5 depart  AG  3052.  1680.  3248.  1014.     930 9.2   0  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 6 Opt 8 PM 2030 - 6B8PM30.DAT                  RUN: Site 6 Opt 8 PM 2030
      DATE: 05/10/2009   TIME: 17:26:15.38


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF       H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. NB        2A aprch  *   2001.0    2001.0    2781.0    2010.0 *     780.    89. AG    690.   9.2    .0 44.0
       2. NB        2A thru   *   2781.0    2010.0    2989.0    2020.0 *     208.    87. AG    585.   9.2    .0 44.0
       3. NB        2A thru   *   2968.0    2019.0    2812.0    2012.3 *     156.   268. AG    342. 100.0    .0 24.0  .79   7.9
       4. NB        2A rt     *   2716.0    2000.0    2889.0    1980.0 *     174.    97. AG    105.   9.2    .0 32.0
       5. NB        2A rt     *   2889.0    1980.0    2957.0    1942.0 *      78.   119. AG    105.   9.2    .0 32.0
       6. NB        2A rt     *   2897.0    1975.0    2942.7    1949.7 *      52.   119. AG    171. 100.0    .0 12.0  .32   2.7
       7. NB        2A rt     *   2957.0    1942.0    3003.0    1886.0 *      72.   141. AG    105.   9.2    .0 32.0
       8. NB        2A depart *   2991.0    2022.0    3120.0    2046.0 *     131.    79. AG   1066.   9.2    .0 44.0
       9. NB        2A depart *   3120.0    2046.0    3259.0    2100.0 *     149.    69. AG   1065.   9.2    .0 44.0
      10. NB        2A depart *   3259.0    2100.0    3389.0    2185.0 *     155.    57. AG   1065.   9.2    .0 44.0
      11. NB        2A depart *   3389.0    2185.0    3483.0    2285.0 *     137.    43. AG   1065.   9.2    .0 44.0
      12. NB        2A depart *   3483.0    2285.0    3678.0    2522.0 *     307.    39. AG   1065.   9.2    .0 44.0
      13. NB        2A depart *   3678.0    2522.0    3786.0    2625.0 *     149.    46. AG   1065.   9.2    .0 44.0
      14. SB        2A aprch  *   3770.0    2644.0    3666.0    2543.0 *     145.   226. AG   2110.   9.2    .0 44.0
      15. SB        2A aprch  *   3666.0    2543.0    3422.0    2252.0 *     380.   220. AG   2110.   9.2    .0 44.0
      16. SB        2A aprch  *   3422.0    2252.0    3332.0    2173.0 *     120.   229. AG   2110.   9.2    .0 44.0
      17. SB        2A aprch  *   3332.0    2173.0    3236.0    2117.0 *     111.   240. AG   2110.   9.2    .0 44.0
      18. SB        2A aprch  *   3236.0    2117.0    3138.0    2078.0 *     105.   248. AG   2110.   9.2    .0 44.0
      19. SB        2A thru   *   3138.0    2078.0    3001.0    2050.0 *     140.   258. AG   1285.   9.2    .0 44.0
      20. SB        2A thru   *   3033.0    2056.0    3098.3    2069.8 *      67.    78. AG     71. 100.0    .0 24.0  .45   3.4
      21. SB        2A left   *   3137.0    2071.0    3004.0    2042.0 *     136.   258. AG    825.   9.2    .0 32.0
      22. SB        2A left   *   3036.0    2049.0    3285.0    2103.5 *     255.    78. AG     98. 100.0    .0 12.0  .87  12.9
      23. SB        2A depart *   3000.0    2046.0    2878.0    2037.0 *     122.   266. AG   1340.   9.2    .0 44.0
      24. SB        2A depart *   2878.0    2037.0    2000.0    2028.0 *     878.   269. AG   1340.   9.2    .0 44.0
      25. WB        5 aprch   *   3279.0    1032.0    3039.0    1825.0 *     829.   343. AG    535.   9.2    .0 32.0
      26. WB        5 left    *   3038.0    1827.0    3012.0    2029.0 *     204.   353. AG     55.   9.2    .0 32.0
      27. WB        5 left    *   3015.0    2004.0    3019.3    1970.8 *      33.   173. AG    205. 100.0    .0 12.0  .53   1.7
      28. WB        5 right   *   3039.0    1847.0    3064.0    1943.0 *      99.    15. AG    480.   9.2    .0 32.0
      29. WB        5 right   *   3064.0    1943.0    3110.0    2007.0 *      79.    36. AG    480.   9.2    .0 32.0
      30. WB        5 right   *   3106.0    2001.0    3048.4    1922.8 *      97.   216. AG     70. 100.0    .0 12.0  .46   4.9
      31. WB        5 right   *   3110.0    2007.0    3159.0    2057.0 *      70.    44. AG    480.   9.2    .0 32.0
      32. EB        5 depart  *   2991.0    2021.0    3012.0    1857.0 *     165.   173. AG    930.   9.2    .0 32.0
      33. EB        5 depart  *   3012.0    1857.0    3052.0    1680.0 *     181.   167. AG    930.   9.2    .0 32.0
      34. EB        5 depart  *   3052.0    1680.0    3248.0    1014.0 *     694.   164. AG    930.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 6 Opt 8 PM 2030 - 6B8PM30.DAT                  RUN: Site 6 Opt 8 PM 2030
      DATE: 05/10/2009   TIME: 17:26:15.38

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE    SIGNAL    ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE      RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. NB        2A thru   *     120       91       2.0       585       1770      84.10      1        3
       6. NB        2A rt     *     120       91       2.0       105       1583      84.10      1        3
      20. SB        2A thru   *     120       19       2.0      1285       1770      84.10      1        3
      22. SB        2A left   *     120       52       2.0       825       1770      84.10      1        3
      27. WB        5 left    *     120      109       2.0        55       1770      84.10      1        3
      30. WB        5 right   *     120       37       2.0       480       1583      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X          Y          Z         *
     -------------------------*-------------------------------------*
      1. SW MID W             *      2594.0     1978.0        5.0   *
      2. SW 164 W             *      2757.0     1973.0        5.0   *
      3. SW 82 W              *      2839.0     1964.0        5.0   *
      4. SW CNR               *      2919.0     1936.0        5.0   *
      5. SW 82 S              *      2978.0     1874.0        5.0   *
      6. SW 164 S             *      3003.0     1794.0        5.0   *
      7. SW MID S             *      3021.0     1679.0        5.0   *
      8. SE MID S             *      3105.0     1694.0        5.0   *
      9. SE 164 S             *      3072.0     1811.0        5.0   *
     10. SE 82 S              *      3074.0     1891.0        5.0   *
     11. SE CNR               *      3109.0     1962.0        5.0   *
     12. SE 82 E              *      3164.0     2025.0        5.0   *
     13. SE 164 E             *      3242.0     2062.0        5.0   *
     14. SE MID E             *      3360.0     2134.0        5.0   *
     15. NE MID E             *      3286.0     2172.0        5.0   *
     16. NE 164 E             *      3153.0     2110.0        5.0   *
     17. NE 82 E              *      3074.0     2088.0        5.0   *
     18. N CNR                *      2994.0     2070.0        5.0   *
     19. NW 82 W              *      2912.0     2063.0        5.0   *
     20. NW 164 W             *      2829.0     2063.0        5.0   *
     21. NW  MID W            *      2704.0     2064.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 6 Opt 8 PM 2030 - 6B8PM30.DAT                  RUN: Site 6 Opt 8 PM 2030

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.
```

```
WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
  0.  *    .5    .4    .9   1.1    .3    .5    .3    .0    .3    .7    .9    .9   1.1    .7    .0    .0    .0    .0    .0    .0
  5.  *    .5    .4    .9   1.1    .5    .5    .5    .0    .2    .7    .9    .8   1.0    .9    .1    .0    .0    .0    .0    .0
 10.  *    .5    .4    .9   1.1    .7    .5    .4    .0    .1    .8    .8    .8    .9    .9    .1    .0    .0    .0    .0    .0
 15.  *    .5    .3    .9   1.1    .5    .7    .4    .0    .1    .7    .7    .8   1.0    .9    .1    .0    .0    .0    .0    .0
 20.  *    .5    .3    .9    .9    .6    .6    .4    .0    .2    .6    .7    .9   1.1   1.0    .1    .1    .0    .0    .0    .0
 25.  *    .5    .4    .9    .9    .7    .5    .4    .0    .2    .3    .5    .8   1.2   1.3    .1    .1    .0    .0    .0    .0
 30.  *    .5    .5    .9    .8    .8    .5    .4    .1    .2    .4    .6    .9   1.2   1.1    .3    .1    .0    .0    .0    .0
 35.  *    .5    .5    .9   1.0    .7    .6    .5    .1    .1    .5    .7   1.1    .9   1.0    .3    .1    .0    .0    .0    .0
 40.  *    .5    .6   1.0    .9    .8    .5    .3    .0    .1    .4    .7   1.1   1.4   1.0    .6    .2    .0    .0    .0    .0
 45.  *    .5    .6    .9   1.0    .7    .4    .3    .0    .1    .4    .7   1.1   1.3    .8    .6    .2    .1    .1    .0    .0
 50.  *    .5    .8    .9   1.2    .6    .4    .3    .0    .0    .2    .7    .9   1.0    .7   1.0    .4    .2    .2    .0    .0
 55.  *    .5    .8   1.1   1.0    .5    .4    .3    .0    .0    .0    .6    .9    .8    .4   1.1    .5    .4    .2    .2    .0
 60.  *    .5    .9   1.1   1.1    .3    .4    .3    .0    .0    .0    .2    .8    .7    .3   1.1    .8    .5    .3    .2    .1
 65.  *    .6    .8   1.2    .9    .3    .4    .3    .0    .0    .0    .0    .4    .1    .2   1.3    .8    .6    .5    .3    .1
 70.  *    .6   1.0   1.1    .6    .3    .4    .3    .0    .0    .0    .0    .3    .1    .0   1.1    .9   1.0    .9    .4    .1
 75.  *    .5    .9   1.0    .3    .3    .4    .4    .0    .0    .0    .0    .1    .1    .0   1.1   1.0   1.0   1.0    .6    .3
 80.  *    .6    .7    .7    .2    .3    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.0   1.0    .8    .4
 85.  *    .5    .6    .3    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.1   1.2   1.1   1.3   1.0    .7
 90.  *    .3    .5    .3    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.1   1.2   1.3   1.3   1.0    .8
 95.  *    .3    .3    .2    .1    .3    .4    .3    .0    .0    .0    .0    .0    .0    .0   1.0   1.3   1.3   1.3   1.1   1.0
100.  *    .2    .1    .2    .1    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0   1.0   1.3   1.2   1.4    .8   1.0
105.  *    .0    .0    .2    .1    .4    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.3   1.3   1.4    .9   1.1
110.  *    .0    .0    .2    .1    .2    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.1   1.3   1.1   1.0   1.2
115.  *    .0    .0    .2    .1    .2    .4    .3    .0    .0    .0    .0    .0    .0    .0    .9   1.1   1.3   1.0   1.1   1.2
120.  *    .0    .0    .0    .1    .2    .4    .3    .0    .0    .0    .0    .0    .0    .0    .8   1.1   1.2   1.1   1.2   1.3
125.  *    .0    .0    .0    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.1   1.2   1.1   1.2   1.3
130.  *    .0    .0    .1    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.2    .9   1.3   1.4
135.  *    .0    .0    .1    .2    .4    .4    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.2    .8   1.1   1.4
140.  *    .0    .0    .1    .2    .3    .5    .4    .0    .0    .0    .0    .0    .0    .0    .8   1.0   1.4    .8   1.1   1.3
145.  *    .0    .1    .1    .3    .4    .5    .4    .0    .0    .0    .0    .0    .0    .0    .9   1.0   1.3    .9   1.2   1.2
150.  *    .0    .0    .1    .3    .4    .5    .4    .1    .1    .0    .0    .0    .0    .0    .9   1.0   1.2    .9   1.2   1.2
155.  *    .0    .0    .1    .3    .4    .5    .4    .2    .2    .0    .0    .0    .0    .0    .9   1.1   1.2    .8   1.3   1.2
160.  *    .0    .0    .0    .3    .4    .5    .4    .2    .2    .2    .0    .0    .0    .0    .8   1.1   1.2    .9   1.4   1.1
165.  *    .0    .0    .0    .1    .4    .4    .3    .3    .3    .2    .0    .0    .0    .0    .8   1.1   1.2   1.2   1.3   1.1
170.  *    .0    .0    .0    .0    .3    .3    .2    .4    .3    .2    .2    .0    .0    .0    .8   1.0   1.3   1.2   1.2   1.1
175.  *    .0    .0    .0    .0    .2    .2    .1    .4    .4    .2    .2    .0    .0    .0    .8   1.0   1.4   1.1   1.2   1.1
180.  *    .0    .0    .0    .0    .0    .2    .1    .4    .4    .3    .2    .1    .0    .0    .9   1.1   1.4    .8   1.2   1.0
185.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .1    .0    .0   1.0   1.1   1.2   1.0   1.2   1.0
190.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .3    .1    .0    .0   1.1   1.2   1.3    .8   1.2    .9
195.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .0    .0    .0   1.1   1.2   1.3    .7   1.2    .9
200.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .1    .0    .0    .0   1.2   1.4   1.4    .8   1.1    .8
205.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .3    .2    .0    .0    .0   1.1   1.3   1.4   1.0   1.1    .7
1
                                                                                                                     PAGE  4
     JOB: Site 6 Opt 8 PM 2030 - 6B8PM30.DAT                   RUN: Site 6 Opt 8 PM 2030

WIND  * CONCENTRATION
ANGLE *      (PPM)
(DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
------*------------------------------------------------------------------------------------------------------------------------
210.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .0    .0    .0   1.1   1.1   1.4   1.0   1.2    .7
215.  *    .0    .0    .0    .0    .0    .0    .0    .4    .4    .2    .2    .0    .0    .0   1.3   1.3   1.3   1.0   1.2    .6
220.  *    .0    .0    .0    .0    .0    .0    .0    .4    .3    .2    .2    .1    .0    .1   1.3   1.3   1.5   1.1   1.3    .7
225.  *    .0    .0    .0    .0    .0    .0    .0    .4    .3    .2    .3    .2    .0    .1   1.2   1.4   1.5   1.3   1.2    .7
230.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .2    .4    .3    .0    .3   1.2   1.5   1.7   1.2   1.2    .7
235.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .4    .1    .5   1.3   1.4   1.3   1.3   1.1    .6
240.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .4    .1    .6   1.3   1.2   1.2   1.3   1.3    .6
245.  *    .0    .0    .0    .0    .0    .0    .0    .2    .3    .3    .4    .6    .3    .8   1.0   1.3   1.4   1.3   1.2    .7
250.  *    .0    .0    .0    .0    .0    .0    .0    .3    .3    .2    .3    .6    .5   1.0    .9   1.3   1.3   1.4   1.1    .8
255.  *    .1    .0    .0    .0    .0    .0    .0    .3    .3    .2    .3    .5    .9   1.2    .6   1.2   1.3   1.2   1.1    .8
260.  *    .2    .2    .2    .0    .0    .0    .0    .3    .3    .2    .5    .8   1.0   1.3    .4    .7   1.0   1.2    .9    .8
265.  *    .3    .2    .2    .1    .0    .0    .0    .2    .3    .2    .5   1.0   1.1   1.4    .2    .4    .8   1.0    .9    .7
270.  *    .4    .4    .2    .2    .0    .0    .0    .2    .3    .3    .8   1.0   1.3   1.2    .2    .3    .6    .7    .6    .6
275.  *    .4    .4    .3    .2    .1    .0    .0    .2    .3    .3    .9   1.1   1.2    .9    .1    .2    .4    .5    .5    .5
280.  *    .6    .5    .4    .3    .2    .1    .0    .2    .4    .5   1.0   1.2   1.2    .8    .1    .0    .2    .2    .3    .3
285.  *    .6    .5    .5    .4    .2    .1    .0    .4    .4    .5   1.0   1.2   1.0    .7    .1    .0    .1    .2    .2    .2
290.  *    .6    .5    .5    .4    .2    .2    .1    .5    .4    .4   1.0   1.1   1.0    .7    .1    .0    .1    .1    .1    .1
295.  *    .6    .5    .4    .4    .3    .2    .1    .5    .3    .6   1.0   1.0   1.0    .7    .1    .0    .0    .1    .0    .1
300.  *    .6    .5    .5    .6    .3    .1    .1    .5    .5    .6    .8    .9    .9    .7    .0    .0    .0    .0    .0    .0
305.  *    .5    .5    .5    .6    .2    .1    .1    .5    .5    .7    .6    .9    .9    .8    .0    .0    .0    .0    .0    .0
310.  *    .5    .5    .5    .7    .4    .2    .1    .6    .4    .7    .7    .8    .9    .7    .0    .0    .0    .0    .0    .0
315.  *    .5    .5    .5    .8    .4    .2    .1    .6    .5    .6    .6    .9    .9    .7    .0    .0    .0    .0    .0    .0
320.  *    .5    .4    .5    .8    .5    .2    .1    .6    .5    .6    .6    .8    .9    .8    .0    .0    .0    .0    .0    .0
325.  *    .5    .4    .5    .8    .7    .3    .2    .4    .5    .6    .7    .9    .9    .7    .0    .0    .0    .0    .0    .0
330.  *    .5    .4    .6    .9    .7    .3    .2    .5    .4    .7    .8    .9    .9    .8    .0    .0    .0    .0    .0    .0
335.  *    .5    .4    .7   1.0    .6    .3    .1    .4    .4    .8    .9    .9   1.0    .7    .0    .0    .0    .0    .0    .0
340.  *    .5    .4    .7   1.0    .6    .5    .2    .4    .3    .5    .9    .8    .9    .8    .0    .0    .0    .0    .0    .0
345.  *    .5    .4    .8   1.0    .5    .4    .2    .1    .4    .5    .8    .9    .9    .8    .0    .0    .0    .0    .0    .0
350.  *    .5    .4    .8    .9    .4    .4    .3    .1    .4    .6    .6    .8    .9    .7    .0    .0    .0    .0    .0    .0
355.  *    .5    .4    .9    .9    .4    .6    .4    .0    .3    .6    .6    .8    .9    .7    .0    .0    .0    .0    .0    .0
360.  *    .5    .4    .9   1.1    .3    .5    .3    .0    .3    .7    .9    .9   1.1    .7    .0    .0    .0    .0    .0    .0
------*------------------------------------------------------------------------------------------------------------------------
MAX   *    .6   1.0   1.2   1.2    .8    .7    .5    .6    .5    .8   1.0   1.2   1.4   1.4   1.3   1.5   1.7   1.4   1.4   1.4
DEGR. *   65    70    65    50    30    15     5   310   300    10   280   280    40   265   215   230   230   100   160   130

1
                                                                                                                     PAGE  5
     JOB: Site 6 Opt 8 PM 2030 - 6B8PM30.DAT                   RUN: Site 6 Opt 8 PM 2030

      MODEL RESULTS
      -------------

      REMARKS : In search of the angle corresponding to
                the maximum concentration, only the first
                angle, of the angles with same maximum
                concentrations, is indicated as maximum.

WIND ANGLE RANGE:   0.-360.

WIND  * CONCENTRATION
```

```
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .0
  30.  *    .0
  35.  *    .0
  40.  *    .0
  45.  *    .0
  50.  *    .0
  55.  *    .0
  60.  *    .0
  65.  *    .0
  70.  *    .1
  75.  *    .1
  80.  *    .2
  85.  *    .4
  90.  *    .6
  95.  *    .9
 100.  *    .9
 105.  *   1.0
 110.  *   1.0
 115.  *   1.0
 120.  *    .9
 125.  *    .9
 130.  *    .6
 135.  *    .6
 140.  *    .5
 145.  *    .5
 150.  *    .5
 155.  *    .5
 160.  *    .5
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                             PAGE  6
      JOB: Site 6 Opt 8 PM 2030 - 6B8PM30.DAT                   RUN: Site 6 Opt 8 PM 2030

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .5
 225.  *    .5
 230.  *    .7
 235.  *    .7
 240.  *    .7
 245.  *    .7
 250.  *    .8
 255.  *    .8
 260.  *    .7
 265.  *    .6
 270.  *    .5
 275.  *    .4
 280.  *    .2
 285.  *    .1
 290.  *    .1
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.0
 DEGR. *  105

 THE HIGHEST CONCENTRATION IS    1.70 PPM AT  230 DEGREES FROM REC17.
 THE 2ND HIGHEST CONCENTRATION IS    1.50 PPM AT  230 DEGREES FROM REC16.
 THE 3RD HIGHEST CONCENTRATION IS    1.40 PPM AT  265 DEGREES FROM REC14.
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Site 7

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Site 7 Existing AM - 7EXAM.DAT          60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Existing AM                       23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    105015.5  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     64515.5  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        29       2.0  645  141.4 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     40515.5  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        97       2.0  405  141.4 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.     81515.5  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.     28515.5  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     20515.5  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        55       2.0  205  141.4 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.      8015.5  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.      8015.5  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        55       2.0   80  141.4 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.      8015.5  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.      8015.5  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    117015.5  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    113515.5  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    113515.5  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    113515.5  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     17015.5  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120        99       2.0  170  141.4 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.     96515.5  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.     96515.5  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.     96515.5  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 7 Existing AM - 7EXAM.DAT                       RUN: Site 7 Existing AM
      DATE: 05/10/2009   TIME: 22:28:19.81


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   1050.  15.5    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    645.  15.5    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3115.4    1516.2 *      51.   174. AG    183. 100.0    .0 24.0  .25   2.6
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG    405.  15.5    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3101.2    1450.7 *     114.   174. AG    613. 100.0    .0 24.0  .75   5.8
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG    815.  15.5    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG    285.  15.5    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    205.  15.5    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3051.1    1709.5 *      31.   355. AG    348. 100.0    .0 24.0  .11   1.6
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG     80.  15.5    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG     80.  15.5    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3004.9    1717.4 *      24.    27. AG    174. 100.0    .0 12.0  .10   1.2
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG     80.  15.5    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG     80.  15.5    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1170.  15.5    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   1135.  15.5    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   1135.  15.5    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   1135.  15.5    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    170.  15.5    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    2914.6    1591.4 *      95.   267. AG    313. 100.0    .0 12.0  .68   4.8
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG    965.  15.5    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG    965.  15.5    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG    965.  15.5    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Existing AM - 7EXAM.DAT                       RUN: Site 7 Existing AM
      DATE: 05/10/2009   TIME: 22:28:19.81

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       29       2.0       645     1770       141.40      1        3
       5. SW        Rt1 left  *     120       97       2.0       405     1717       141.40      1        3
       9. NE        Rt1 thru  *     120       55       2.0       205     1770       141.40      1        3
      12. NE        Rt1 right *     120       55       2.0        80     1583       141.40      1        3
      20. NW        Rt2A left *     120       99       2.0       170     1770       141.40      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0   *
      2. NE 164 E             *      2845.0     1555.0       5.0   *
      3. NE 82 E              *      2928.0     1555.0       5.0   *
      4. NE CNR               *      2987.0     1532.0       5.0   *
      5. NE 82 N              *      3024.0     1485.0       5.0   *
      6. NE 164 N             *      3039.0     1404.0       5.0   *
      7. NE MID N             *      3051.0     1276.0       5.0   *
      8. NW MID N             *      3162.0     1314.0       5.0   *
      9. NW 164 N             *      3147.0     1453.0       5.0   *
     10. NW 82 N              *      3139.0     1534.0       5.0   *
     11. W CNR                *      3129.0     1614.0       5.0   *
     12. SW 82 S              *      3116.0     1698.0       5.0   *
     13. SW 164 S             *      3106.0     1778.0       5.0   *
     14. SW MID S             *      3088.0     1931.0       5.0   *
     15. SE MID S             *      2992.0     1909.0       5.0   *
     16. SE 164 S             *      2999.0     1830.0       5.0   *
     17. SE 82 S              *      2995.0     1748.0       5.0   *
     18. SE CNR               *      2974.0     1708.0       5.0   *
     19. SE 82 E              *      2942.0     1675.0       5.0   *
     20. SE 164 E             *      2862.0     1644.0       5.0   *
     21. SE MID E             *      2679.0     1632.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Existing AM - 7EXAM.DAT                       RUN: Site 7 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .6    .6   1.1    .9    .9   1.0   1.2    .6    .6    .3    .3    .4    .4    .5    .3    .3    .3    .2    .1    .0
   5.  *    .6    .7   1.2   1.0   1.2   1.3   1.4    .4    .4    .2    .2    .3    .3    .4    .4    .4    .3    .3    .2    .1
  10.  *    .5    .6   1.2   1.1   1.1   1.6   1.3    .2    .2    .2    .1    .2    .2    .2    .4    .5    .3    .3    .2    .1
  15.  *    .5    .6   1.2   1.0   1.1   1.7   1.3    .1    .1    .0    .1    .1    .1    .2    .5    .5    .3    .3    .3    .1
  20.  *    .6    .6   1.2   1.0   1.3   1.7   1.3    .1    .1    .0    .0    .1    .1    .1    .5    .5    .3    .3    .3    .1
  25.  *    .7    .6   1.2   1.0   1.4   1.8   1.2    .0    .0    .0    .0    .0    .1    .1    .5    .4    .3    .2    .2    .1
```

```
   30.  *    .7    .6   1.2   1.0   1.5   1.8   1.1    .0    .0    .0    .0    .0    .0    .1    .3    .3    .2    .2    .2    .1
   35.  *    .7    .6   1.3    .9   1.7   1.9   1.0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .2    .1
   40.  *    .7    .7   1.3    .7   1.7   1.7    .9    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .1    .1
   45.  *    .7    .7   1.3    .8   1.8   1.5    .9    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .2    .2    .1
   50.  *    .8    .8   1.4   1.1   2.0   1.3    .9    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .3    .2    .1
   55.  *    .8    .9   1.1   1.1   2.0   1.2    .9    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .4    .2    .1
   60.  *    .8    .9   1.2   1.0   2.0   1.1    .8    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .4    .3    .1
   65.  *    .9   1.1   1.2   1.2   1.9   1.0    .7    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .5    .3    .1
   70.  *   1.0   1.2   1.2   1.4   1.9    .9    .8    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .6    .3    .2
   75.  *    .8   1.2   1.0   1.5   1.9    .9    .8    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .6    .3    .2
   80.  *    .9   1.0   1.2   1.6   1.9    .8    .8    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .7    .3    .2
   85.  *    .9   1.1   1.3   1.6   1.8    .8    .7    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .8    .2    .1
   90.  *    .7   1.0   1.3   1.8   1.8    .8    .7    .0    .0    .0    .0    .0    .0    .0    .3    .3    .3    .8    .2    .2
   95.  *    .5    .9   1.2   1.7   1.7    .8    .7    .0    .0    .0    .0    .0    .0    .0    .3    .2    .3    .8    .2    .3
  100.  *    .5    .8   1.3   1.7   1.7    .8    .7    .0    .0    .0    .0    .0    .0    .0    .3    .2    .3    .8    .2    .4
  105.  *    .4    .7   1.2   1.7   1.6    .8    .7    .0    .0    .0    .0    .0    .0    .0    .3    .3    .4    .7    .1    .6
  110.  *    .4    .5   1.2   1.5   1.5    .8    .8    .0    .0    .0    .0    .0    .0    .0    .3    .3    .4    .7    .4    .8
  115.  *    .3    .6   1.0   1.4   1.4    .8    .8    .0    .0    .0    .0    .0    .0    .0    .3    .3    .4    .6    .3   1.0
  120.  *    .1    .4    .9   1.4   1.3    .8    .9    .0    .0    .0    .0    .0    .0    .0    .3    .3    .5    .6    .5   1.2
  125.  *    .1    .4    .8   1.3   1.2    .9   1.0    .0    .0    .0    .0    .0    .0    .0    .3    .3    .5    .7    .7   1.3
  130.  *    .2    .3    .7   1.1   1.2    .9    .9    .0    .0    .0    .0    .0    .0    .0    .3    .3    .5    .7    .8   1.3
  135.  *    .2    .3    .6   1.0   1.1    .8    .8    .0    .0    .0    .0    .0    .0    .1    .3    .3    .6    .6    .9   1.1
  140.  *    .2    .3    .6    .9    .9    .9   1.0    .0    .0    .0    .0    .0    .0    .1    .3    .3    .8    .8   1.1    .9
  145.  *    .2    .3    .4    .9   1.0   1.0   1.0    .0    .0    .0    .1    .0    .0    .1    .3    .5   1.0    .7   1.2    .8
  150.  *    .2    .3    .3    .8    .9   1.0   1.0    .0    .1    .1    .1    .0    .1    .1    .4    .7   1.0   1.0   1.2    .6
  155.  *    .2    .2    .3    .8    .9   1.1   1.1    .2    .1    .1    .1    .1    .1    .2    .6    .7    .9   1.1   1.3    .7
  160.  *    .1    .2    .3    .5   1.0   1.2   1.1    .2    .2    .2    .2    .3    .3    .2    .7   1.0   1.1   1.1   1.1    .6
  165.  *    .0    .2    .3    .4   1.0    .9   1.1    .3    .4    .4    .7    .8    .6    .5    .8   1.0   1.2   1.1    .9    .4
  170.  *    .0    .1    .2    .4    .6    .8    .9    .6    .6    .6    .9   1.0   1.0    .8    .6    .9   1.2    .9    .8    .4
  175.  *    .0    .0    .1    .3    .5    .6    .8    .6    .8    .9   1.2   1.2   1.1   1.0    .6    .7   1.0    .8    .7    .4
  180.  *    .0    .0    .1    .2    .4    .5    .5    .9    .9   1.0   1.7   1.4   1.2   1.1    .4    .4    .8    .5    .6    .3
  185.  *    .0    .0    .0    .1    .2    .4    .4   1.0   1.0   1.2   2.0   1.6   1.3   1.0    .2    .3    .5    .5    .4    .3
  190.  *    .0    .0    .0    .0    .1    .2    .2   1.1   1.0   1.5   2.2   1.7   1.3    .8    .2    .2    .5    .4    .3    .3
  195.  *    .0    .0    .0    .0    .1    .1    .1   1.1   1.1   1.7   2.2   1.7   1.2    .9    .1    .1    .5    .4    .3    .3
  200.  *    .0    .0    .0    .0    .0    .0    .1   1.0   1.1   1.7   2.3   1.3   1.1    .8    .1    .1    .3    .3    .2    .3
  205.  *    .0    .0    .0    .0    .0    .0    .0   1.0   1.0   1.8   2.2   1.2   1.0    .7    .1    .2    .2    .2    .3    .3
1
                                                                                                                  PAGE  4
      JOB: Site 7 Existing AM - 7EXAM.DAT                      RUN: Site 7 Existing AM

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
  ------*------------------------------------------------------------------------------------------------------------------------
  210.  *    .0    .0    .0    .0    .0    .0    .0    .9   1.0   2.0   2.1   1.0   1.0    .6    .1    .1    .3    .3    .3    .3
  215.  *    .0    .0    .0    .0    .0    .0    .0    .9    .9   2.1   1.9   1.0    .9    .7    .1    .1    .3    .3    .3    .4
  220.  *    .0    .0    .0    .0    .0    .0    .0    .9    .9   2.3   1.8    .7    .8    .7    .1    .1    .1    .3    .3    .4
  225.  *    .0    .0    .0    .0    .0    .0    .0    .8    .9   2.3   1.5    .8    .8    .7    .1    .1    .1    .2    .3    .4
  230.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   2.2   1.2    .9    .8    .6    .1    .1    .1    .2    .2    .4
  235.  *    .0    .1    .0    .0    .0    .0    .0    .7    .8   2.3   1.2    .9    .8    .6    .0    .1    .1    .2    .2    .4
  240.  *    .1    .1    .0    .0    .0    .0    .0    .7    .8   2.2   1.2    .8    .6    .5    .0    .1    .1    .2    .2    .4
  245.  *    .1    .1    .0    .0    .0    .0    .0    .7    .8   2.5   1.1    .9    .6    .5    .0    .0    .1    .2    .2    .3
  250.  *    .1    .2    .1    .0    .0    .0    .0    .7    .9   2.5   1.1    .9    .6    .5    .0    .0    .1    .1    .2    .4
  255.  *    .3    .3    .2    .0    .0    .0    .0    .7   1.0   2.5   1.2   1.0    .6    .5    .0    .0    .1    .1    .3    .3
  260.  *    .3    .5    .3    .1    .0    .0    .0    .7   1.1   2.7   1.2    .9    .5    .5    .0    .0    .0    .1    .1    .3
  265.  *    .5    .6    .4    .1    .0    .0    .0    .7   1.3   2.6   1.2    .9    .5    .5    .0    .0    .0    .0    .1    .2
  270.  *    .7    .7    .7    .3    .1    .0    .0    .7   1.5   2.7   1.0    .8    .5    .5    .0    .0    .0    .0    .0    .1
  275.  *    .8    .8    .8    .3    .1    .0    .0    .7   1.7   2.7    .7    .8    .5    .5    .0    .0    .0    .0    .0    .0
  280.  *    .9    .9    .7    .3    .1    .0    .0    .7   1.8   2.7    .7    .7    .5    .5    .0    .0    .0    .0    .0    .0
  285.  *    .9    .9    .8    .4    .2    .1    .0    .7   1.9   2.7    .6    .7    .5    .5    .0    .0    .0    .0    .0    .0
  290.  *    .8    .8    .8    .6    .3    .1    .0    .8   2.1   2.4    .5    .7    .5    .5    .0    .0    .0    .0    .0    .0
  295.  *    .8    .7    .8    .7    .3    .1    .0    .8   2.4   2.2    .5    .6    .4    .5    .0    .0    .0    .0    .0    .0
  300.  *    .8    .7    .7    .6    .4    .1    .1    .9   2.4   2.1    .6    .6    .4    .6    .0    .0    .0    .0    .0    .0
  305.  *    .6    .7    .7    .8    .4    .1    .1   1.0   2.4   1.7    .6    .5    .5    .6    .0    .0    .0    .0    .0    .0
  310.  *    .6    .6    .7    .8    .4    .1    .1   1.1   2.4   1.6    .6    .6    .6    .6    .0    .0    .0    .0    .0    .0
  315.  *    .6    .6    .7    .9    .5    .1    .1   1.1   2.5   1.5    .7    .6    .6    .6    .0    .0    .0    .0    .0    .0
  320.  *    .6    .6    .8    .8    .6    .3    .1   1.3   2.3   1.3    .7    .6    .6    .7    .0    .0    .0    .0    .0    .0
  325.  *    .6    .6    .7    .8    .6    .3    .1   1.3   2.0   1.2    .7    .5    .7    .7    .0    .0    .0    .0    .0    .0
  330.  *    .5    .6    .8    .9    .6    .3    .1   1.5   1.8   1.2    .8    .7    .7    .7    .0    .0    .0    .0    .0    .0
  335.  *    .5    .5    .8   1.0    .6    .3    .1   1.6   1.7    .9    .7    .7    .7    .8    .0    .0    .0    .0    .0    .0
  340.  *    .5    .5    .9    .9    .7    .4    .2   1.3   1.5    .9    .8    .7    .8    .8    .0    .0    .0    .0    .0    .0
  345.  *    .5    .6    .9    .9    .8    .5    .4   1.3   1.3    .7    .6    .7    .8    .8    .1    .2    .0    .0    .0    .0
  350.  *    .6    .6   1.0   1.0    .8    .7    .7   1.0   1.0    .5    .5    .7    .7    .8    .2    .2    .2    .1    .0    .0
  355.  *    .6    .6   1.0    .9    .8    .9    .8    .8    .7    .5    .4    .5    .6    .7    .2    .2    .2    .2    .1    .0
  360.  *    .6    .6   1.1    .9    .9   1.0   1.2    .6    .6    .3    .3    .4    .4    .5    .3    .3    .3    .2    .1    .0
  ------*------------------------------------------------------------------------------------------------------------------------
  MAX   *   1.0   1.2   1.4   1.8   2.0   1.9   1.4   1.6   2.5   2.7   2.3   1.7   1.3   1.1    .8   1.0   1.2   1.1   1.3   1.3
  DEGR. *   70    70    50    90    50    35     5   335   315   260   200   190   185   180   165   160   165   155   155   125

1
                                                                                                                  PAGE  5
      JOB: Site 7 Existing AM - 7EXAM.DAT                      RUN: Site 7 Existing AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

  WIND ANGLE RANGE:   0.-360.

  WIND  * CONCENTRATION
  ANGLE *      (PPM)
  (DEGR)* REC21
  ------*------
    0.  *    .0
    5.  *    .0
   10.  *    .0
   15.  *    .0
   20.  *    .0
   25.  *    .1
   30.  *    .1
   35.  *    .1
   40.  *    .1
```

```
  45.  *    .1
  50.  *    .1
  55.  *    .1
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .1
  80.  *    .1
  85.  *    .2
  90.  *    .3
  95.  *    .4
 100.  *    .5
 105.  *    .7
 110.  *    .6
 115.  *    .5
 120.  *    .6
 125.  *    .5
 130.  *    .5
 135.  *    .6
 140.  *    .6
 145.  *    .6
 150.  *    .6
 155.  *    .5
 160.  *    .4
 165.  *    .4
 170.  *    .3
 175.  *    .3
 180.  *    .3
 185.  *    .3
 190.  *    .3
 195.  *    .3
 200.  *    .3
 205.  *    .3
1
                                                                                                                               PAGE  6
      JOB: Site 7 Existing AM - 7EXAM.DAT                         RUN: Site 7 Existing AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .3
 215.  *    .3
 220.  *    .4
 225.  *    .4
 230.  *    .4
 235.  *    .4
 240.  *    .4
 245.  *    .3
 250.  *    .4
 255.  *    .4
 260.  *    .3
 265.  *    .2
 270.  *    .2
 275.  *    .2
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .7
 DEGR. *  105

 THE HIGHEST CONCENTRATION IS    2.70 PPM AT  260 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    2.50 PPM AT  315 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    2.30 PPM AT  200 DEGREES FROM REC11.
```

```
Site 7 Existing PM - 7EXPM.DAT          60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Existing PM                       23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.     83515.5  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     29515.5  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       125        34       2.0  295  141.4 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     54015.5  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       125        94       2.0  540  141.4 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.     37015.5  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.    140515.5  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.    121515.5  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       125        69       2.0 1215  141.4 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     19015.5  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     19015.5  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       125        69       2.0  190  141.4 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     19015.5  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     19015.5  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    174015.5  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.     60015.5  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.     60015.5  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.     60015.5  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.      7515.5  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       125        99       2.0   75  141.4 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.     52515.5  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.     52515.5  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.     52515.5  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 7 Existing PM - 7EXPM.DAT                       RUN: Site 7 Existing PM
      DATE: 05/10/2009   TIME: 22:37:36.92


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG    835.  15.5    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    295.  15.5    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3112.9    1539.8 *      27.   174. AG    206. 100.0    .0 24.0  .12   1.4
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG    540.  15.5    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3103.9    1423.0 *     142.   174. AG    570. 100.0    .0 24.0  .73   7.2
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG    370.  15.5    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG   1405.  15.5    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG   1215.  15.5    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3031.8    1914.5 *     237.   355. AG    419. 100.0    .0 24.0  .82  12.0
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    190.  15.5    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    190.  15.5    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3026.6    1759.8 *      72.    27. AG    209. 100.0    .0 12.0  .29   3.6
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    190.  15.5    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    190.  15.5    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1740.  15.5    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG    600.  15.5    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG    600.  15.5    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG    600.  15.5    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG     75.  15.5    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    2968.5    1594.6 *      41.   267. AG    300. 100.0    .0 12.0  .24   2.1
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG    525.  15.5    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG    525.  15.5    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG    525.  15.5    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Existing PM - 7EXPM.DAT                       RUN: Site 7 Existing PM
      DATE: 05/10/2009   TIME: 22:37:36.92

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME     VOL    FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*-------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     125       34       2.0       295       1770     141.40      1        3
       5. SW        Rt1 left  *     125       94       2.0       540       1717     141.40      1        3
       9. NE        Rt1 thru  *     125       69       2.0      1215       1770     141.40      1        3
      12. NE        Rt1 right *     125       69       2.0       190       1583     141.40      1        3
      20. NW        Rt2A left *     125       99       2.0        75       1770     141.40      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0    *
      2. NE 164 E             *      2845.0     1555.0       5.0    *
      3. NE 82 E              *      2928.0     1555.0       5.0    *
      4. NE CNR               *      2987.0     1532.0       5.0    *
      5. NE 82 N              *      3024.0     1485.0       5.0    *
      6. NE 164 N             *      3039.0     1404.0       5.0    *
      7. NE MID N             *      3051.0     1276.0       5.0    *
      8. NW MID N             *      3162.0     1314.0       5.0    *
      9. NW 164 N             *      3147.0     1453.0       5.0    *
     10. NW 82 N              *      3139.0     1534.0       5.0    *
     11. W CNR                *      3129.0     1614.0       5.0    *
     12. SW 82 S              *      3116.0     1698.0       5.0    *
     13. SW 164 S             *      3106.0     1778.0       5.0    *
     14. SW MID S             *      3088.0     1931.0       5.0    *
     15. SE MID S             *      2992.0     1909.0       5.0    *
     16. SE 164 S             *      2999.0     1830.0       5.0    *
     17. SE 82 S              *      2995.0     1748.0       5.0    *
     18. SE CNR               *      2974.0     1708.0       5.0    *
     19. SE 82 E              *      2942.0     1675.0       5.0    *
     20. SE 164 E             *      2862.0     1644.0       5.0    *
     21. SE MID E             *      2679.0     1632.0       5.0    *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Existing PM - 7EXPM.DAT                       RUN: Site 7 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .3    .4    .6   1.2   1.3   1.4   1.6    .7    .6    .5    .3    .5    .4    .4    .8    .9    .8    .5    .2    .1
   5.  *    .3    .4    .6   1.4   1.3   1.6   1.8    .2    .3    .3    .2    .2    .2    .3    .9   1.1    .9    .7    .5    .1
  10.  *    .4    .5    .9   1.4   1.4   1.9   2.0    .2    .0    .0    .1    .1    .1    .1    .9   1.2   1.2    .8    .5    .2
  15.  *    .4    .6    .9   1.4   1.6   2.0   1.9    .0    .0    .0    .0    .0    .1    .1    .9   1.3   1.3    .9    .6    .2
  20.  *    .4    .6   1.0   1.4   1.6   2.0   1.7    .0    .0    .0    .0    .0    .0    .1    .9   1.4   1.5   1.0    .8    .3
  25.  *    .4    .5   1.0   1.3   1.5   2.0   1.6    .0    .0    .0    .0    .0    .0    .0    .9   1.4   1.4   1.1    .8    .4
```

```
   30.  *   .4    .6   1.2   1.0   1.5   2.0   1.5    .0    .0    .0    .0    .0    .0    .0    .8   1.5   1.5   1.2    .9    .5
   35.  *   .5    .7   1.1   1.0   1.5   2.0   1.4    .0    .0    .0    .0    .0    .0    .0    .8   1.6   1.5   1.2    .9    .4
   40.  *   .5    .8   1.1    .8   1.6   2.1   1.3    .0    .0    .0    .0    .0    .0    .0    .8   1.5   1.4   1.5   1.1    .4
   45.  *   .5    .7   1.0    .8   1.7   1.9   1.2    .0    .0    .0    .0    .0    .0    .0    .7   1.5   1.6   1.5   1.1    .6
   50.  *   .8    .6    .9    .7   1.8   1.9   1.1    .0    .0    .0    .0    .0    .0    .0    .7   1.5   1.6   1.5   1.0    .6
   55.  *   .7    .5    .9   1.0   1.9   1.8   1.1    .0    .0    .0    .0    .0    .0    .0    .8   1.5   1.4   1.5    .9    .5
   60.  *   .6    .6    .8    .9   1.9   1.8   1.1    .0    .0    .0    .0    .0    .0    .0    .8   1.5   1.5   1.5   1.0    .5
   65.  *   .6    .7    .7   1.0   1.9   1.5   1.1    .0    .0    .0    .0    .0    .0    .0    .9   1.5   1.5   1.5   1.0    .6
   70.  *   .6    .7    .9   1.1   1.9   1.5   1.1    .0    .0    .0    .0    .0    .0    .0    .9   1.5   1.6   1.6   1.0    .5
   75.  *   .6    .7    .9   1.2   1.9   1.5   1.1    .0    .0    .0    .0    .0    .0    .0   1.0   1.5   1.6   1.6    .8    .5
   80.  *   .6    .8    .9   1.4   1.9   1.4   1.1    .0    .0    .0    .0    .0    .0    .0   1.1   1.5   1.6   1.5    .8    .4
   85.  *   .4    .7    .9   1.6   1.9   1.3   1.1    .0    .0    .0    .0    .0    .0    .0   1.2   1.4   1.6   1.5    .8    .2
   90.  *   .4    .8    .9   1.6   1.9   1.2   1.1    .0    .0    .0    .0    .0    .0    .0   1.3   1.5   1.7   1.4    .6    .4
   95.  *   .4    .7   1.0   1.6   1.9   1.2   1.0    .0    .0    .0    .0    .0    .0    .0   1.4   1.4   1.7   1.4    .4    .5
  100.  *   .5    .7   1.1   1.6   1.9   1.0   1.0    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   1.7   1.3    .4    .5
  105.  *   .4    .6   1.0   1.5   1.8   1.1   1.0    .0    .0    .0    .0    .0    .0    .0   1.5   1.4   1.7   1.3    .5    .5
  110.  *   .3    .5   1.0   1.5   1.8   1.1   1.1    .0    .0    .0    .0    .0    .0    .0   1.5   1.5   1.8   1.1    .5    .7
  115.  *   .3    .5   1.0   1.5   1.7   1.1   1.0    .0    .0    .0    .0    .0    .0    .0   1.5   1.5   1.8   1.0    .6    .7
  120.  *   .2    .5    .9   1.4   1.7   1.1   1.0    .0    .0    .0    .0    .0    .0    .0   1.6   1.6   1.8   1.0    .7    .8
  125.  *   .2    .4    .8   1.4   1.6   1.1   1.1    .0    .0    .0    .0    .0    .0    .0   1.6   1.6   1.7   1.0    .8    .8
  130.  *   .2    .4    .7   1.3   1.5   1.2   1.2    .0    .0    .0    .0    .0    .0    .0   1.8   1.6   1.7    .9   1.0    .8
  135.  *   .3    .2    .6   1.1   1.5   1.2   1.3    .0    .0    .0    .0    .0    .0    .0   1.8   1.6   1.8    .8    .9    .8
  140.  *   .3    .3    .6   1.0   1.4   1.3   1.2    .0    .0    .0    .0    .0    .0    .0   1.9   1.6   1.8   1.1   1.0    .6
  145.  *   .3    .4    .7    .9   1.3   1.3   1.2    .0    .0    .0    .0    .0    .0    .0   1.8   1.9   1.8   1.1   1.1    .6
  150.  *   .2    .3    .6   1.0   1.3   1.2   1.4    .0    .0    .0    .0    .0    .0    .1   2.0   1.8   1.9   1.2   1.2    .5
  155.  *   .1    .3    .5    .9   1.1   1.4   1.4    .1    .0    .0    .1    .0    .0    .1   1.9   2.0   1.9   1.3   1.2    .5
  160.  *   .1    .3    .4    .8   1.1   1.4   1.5    .1    .2    .1    .3    .2    .3    .3   2.0   2.0   1.8   1.2   1.0    .4
  165.  *   .0    .1    .4    .6   1.0   1.4   1.4    .4    .3    .3    .5    .6    .4    .5   2.0   1.9   1.8   1.1    .9    .5
  170.  *   .0    .1    .3    .5    .9   1.1   1.2    .4    .5    .6    .9    .9    .8    .7   1.7   1.8   1.6    .9    .6    .3
  175.  *   .0    .1    .1    .4    .7    .9   1.0    .6    .8    .8   1.2   1.2   1.1    .9   1.2   1.2   1.4    .8    .5    .3
  180.  *   .0    .0    .1    .2    .6    .7    .8    .7    .9   1.0   1.5   1.5   1.3   1.3   1.0    .8    .9    .5    .3    .1
  185.  *   .0    .0    .0    .1    .3    .4    .5    .8   1.0   1.3   1.8   1.6   1.4   1.5    .5    .6    .7    .3    .3    .1
  190.  *   .0    .0    .0    .1    .2    .3    .3   1.1   1.0   1.5   2.1   1.4   1.2   1.6    .3    .2    .5    .3    .2    .2
  195.  *   .0    .0    .0    .0    .1    .1    .2   1.0   1.1   1.7   2.1   1.6   1.3   1.7    .0    .2    .4    .2    .2    .2
  200.  *   .0    .0    .0    .0    .0    .1    .1   1.0   1.1   1.8   2.2   1.3   1.3   1.6    .0    .0    .1    .1    .2    .2
  205.  *   .0    .0    .0    .0    .0    .0    .1    .9   1.0   1.9   2.1   1.1   1.2   1.6    .0    .0    .1    .2    .2    .2
1
                                                                                                                   PAGE  4
      JOB: Site 7 Existing PM - 7EXPM.DAT                      RUN: Site 7 Existing PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
  210.  *   .0    .0    .0    .0    .0    .0    .0   1.0   1.0   1.9   2.0    .9   1.1   1.5    .0    .0    .0    .2    .2    .2
  215.  *   .0    .0    .0    .0    .0    .0    .0   1.0   1.1   2.0   1.8    .9   1.2   1.4    .0    .0    .0    .1    .3    .2
  220.  *   .0    .0    .0    .0    .0    .0    .0    .9   1.2   2.0   1.6    .8   1.3   1.4    .0    .1    .1    .1    .2    .2
  225.  *   .0    .0    .0    .0    .0    .0    .0    .9   1.3   2.0   1.5    .7   1.3   1.3    .0    .1    .1    .1    .2    .2
  230.  *   .0    .0    .0    .0    .0    .0    .0    .8   1.4   2.1   1.3    .8   1.3   1.2    .0    .1    .1    .1    .2    .2
  235.  *   .0    .0    .0    .0    .0    .0    .0    .7   1.4   2.0   1.1    .8   1.3   1.2    .0    .0    .1    .1    .1    .2
  240.  *   .0    .0    .0    .0    .0    .0    .0    .7   1.5   2.0    .9    .9   1.5   1.1    .0    .0    .1    .1    .1    .2
  245.  *   .0    .1    .0    .0    .0    .0    .0    .7   1.6   2.0    .9   1.0   1.4   1.0    .0    .0    .1    .1    .1    .2
  250.  *   .1    .1    .0    .0    .0    .0    .0    .7   1.7   2.0    .9   1.0   1.3   1.0    .0    .0    .0    .1    .1    .2
  255.  *   .1    .1    .1    .0    .0    .0    .0    .7   1.7   2.0   1.0   1.0   1.4    .9    .0    .0    .0    .1    .1    .1
  260.  *   .2    .2    .2    .0    .0    .0    .0    .8   1.9   2.2    .9   1.2   1.4    .9    .0    .0    .0    .0    .1    .1
  265.  *   .3    .3    .3    .1    .0    .0    .0    .8   1.8   2.2   1.0   1.2   1.4    .8    .0    .0    .0    .0    .0    .1
  270.  *   .3    .3    .3    .1    .0    .0    .0    .8   1.9   2.2    .8   1.2   1.4    .7    .0    .0    .0    .0    .0    .0
  275.  *   .4    .4    .3    .1    .1    .0    .0    .7   2.0   2.3    .7   1.3   1.3    .7    .0    .0    .0    .0    .0    .0
  280.  *   .4    .4    .4    .2    .1    .0    .0    .7   2.0   2.3    .8   1.3   1.1    .6    .0    .0    .0    .0    .0    .0
  285.  *   .4    .4    .4    .2    .1    .0    .0    .7   2.0   2.1    .7   1.3   1.2    .6    .0    .0    .0    .0    .0    .0
  290.  *   .4    .4    .4    .3    .1    .1    .0    .7   2.0   1.9    .7   1.3   1.3    .6    .0    .0    .0    .0    .0    .0
  295.  *   .4    .4    .4    .3    .1    .1    .0    .8   2.0   1.9    .6   1.4   1.3    .6    .0    .0    .0    .0    .0    .0
  300.  *   .3    .4    .4    .3    .1    .1    .0    .8   2.0   2.0    .8   1.4   1.3    .6    .0    .0    .0    .0    .0    .0
  305.  *   .3    .4    .4    .2    .2    .1    .0    .9   2.0   1.8    .9   1.4   1.3    .7    .0    .0    .0    .0    .0    .0
  310.  *   .3    .3    .4    .3    .2    .1    .0   1.0   2.1   1.7    .9   1.5   1.4    .7    .0    .0    .0    .0    .0    .0
  315.  *   .3    .3    .3    .3    .2    .0    .0   1.1   2.0   1.5   1.1   1.3   1.4    .7    .0    .0    .0    .0    .0    .0
  320.  *   .3    .3    .3    .3    .1    .0    .0   1.1   2.0   1.5   1.3   1.3   1.3    .8    .0    .0    .0    .0    .0    .0
  325.  *   .3    .3    .3    .4    .3    .0    .0   1.2   2.0   1.5   1.2   1.4   1.3    .8    .0    .0    .0    .0    .0    .0
  330.  *   .3    .3    .3    .4    .3    .0    .1   1.4   2.0   1.6   1.2   1.4   1.3    .8    .1    .0    .0    .0    .0    .0
  335.  *   .3    .3    .3    .4    .3    .1    .1   1.6   2.0   1.4   1.2   1.3   1.2    .8    .1    .1    .0    .0    .0    .0
  340.  *   .3    .3    .3    .4    .5    .5    .2   1.5   1.7   1.2   1.1   1.2   1.1    .8    .2    .2    .1    .1    .0    .0
  345.  *   .3    .3    .3    .6    .7    .7    .6   1.5   1.6   1.1   1.1   1.1    .9    .7    .3    .3    .2    .1    .1    .0
  350.  *   .3    .3    .4    .7    .9    .9    .9   1.3   1.3    .9    .8    .9    .8    .6    .4    .4    .4    .2    .1    .0
  355.  *   .3    .3    .4   1.1   1.2   1.2   1.3   1.1    .9    .7    .7    .5    .6    .5    .7    .8    .6    .4    .2    .1
  360.  *   .3    .4    .6   1.2   1.3   1.4   1.6    .7    .6    .5    .3    .5    .4    .4    .8    .9    .8    .5    .2    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   .8    .8   1.2   1.6   1.9   2.1   2.0   1.6   2.1   2.3   2.2   1.6   1.5   1.7   2.0   2.0   1.9   1.6   1.2    .8
 DEGR. *   50    90    30    85    55    40    10   335   310   275   200   185   240   195   150   155   150    70   150   120

1
                                                                                                                   PAGE  5
      JOB: Site 7 Existing PM - 7EXPM.DAT                      RUN: Site 7 Existing PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
    0.  *   .0
    5.  *   .0
   10.  *   .0
   15.  *   .1
   20.  *   .1
   25.  *   .1
   30.  *   .1
   35.  *   .1
   40.  *   .1
```

```
  45.  *    .2
  50.  *    .2
  55.  *    .2
  60.  *    .2
  65.  *    .3
  70.  *    .3
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .5
  95.  *    .3
 100.  *    .3
 105.  *    .3
 110.  *    .4
 115.  *    .4
 120.  *    .5
 125.  *    .5
 130.  *    .4
 135.  *    .4
 140.  *    .5
 145.  *    .5
 150.  *    .4
 155.  *    .3
 160.  *    .3
 165.  *    .2
 170.  *    .2
 175.  *    .2
 180.  *    .2
 185.  *    .2
 190.  *    .2
 195.  *    .2
 200.  *    .2
 205.  *    .2
1
                                                                                                                             PAGE  6
      JOB: Site 7 Existing PM - 7EXPM.DAT                         RUN: Site 7 Existing PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .2
 215.  *    .2
 220.  *    .2
 225.  *    .3
 230.  *    .2
 235.  *    .2
 240.  *    .2
 245.  *    .2
 250.  *    .1
 255.  *    .1
 260.  *    .1
 265.  *    .1
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .5
 DEGR. *   90

 THE HIGHEST CONCENTRATION IS    2.30 PPM AT  275 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    2.20 PPM AT  200 DEGREES FROM REC11.
 THE 3RD HIGHEST CONCENTRATION IS    2.10 PPM AT   40 DEGREES FROM REC6 .
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Site 7 No Build 2014 AM - 7NBAM14.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 No Build 2014 AM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    148011.4  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.    122311.4  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        82       2.0 1223  102.2 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     25711.4  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120       108       2.0  257  102.2 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.    216911.4  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.     87211.4  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     50911.4  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        82       2.0  509  102.2 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     36311.4  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     36311.4  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        82       2.0  363  102.2 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     36311.4  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     36311.4  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    149411.4  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    193111.4  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    193111.4  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    193111.4  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     94611.4  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120        62       2.0  946  102.2 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.     98511.4  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.     98511.4  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.     98511.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 7 No Build 2014 AM - 7NBAM14.DAT                RUN: Site 7 No Build 2014 AM
      DATE: 05/10/2009   TIME: 23:47:31.19


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   1480.  11.4    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG   1223.  11.4    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3268.7      86.2 *    1489.   174. AG    375. 100.0    .0 24.0 1.22  75.7
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG    257.  11.4    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3116.8    1293.4 *     272.   174. AG    493. 100.0    .0 24.0 1.12  13.8
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   2169.  11.4    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG    872.  11.4    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    509.  11.4    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3043.3    1792.4 *     114.   355. AG    375. 100.0    .0 24.0  .51   5.8
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    363.  11.4    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    363.  11.4    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3073.3    1851.3 *     174.    27. AG    187. 100.0    .0 12.0  .81   8.9
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    363.  11.4    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    363.  11.4    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1494.  11.4    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   1931.  11.4    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   1931.  11.4    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   1931.  11.4    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    946.  11.4    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    1052.3    1481.0 *    1960.   267. AG    142. 100.0    .0 12.0 1.19  99.6
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG    985.  11.4    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG    985.  11.4    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG    985.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 No Build 2014 AM - 7NBAM14.DAT                RUN: Site 7 No Build 2014 AM
      DATE: 05/10/2009   TIME: 23:47:31.19

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE    RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *      120      82       2.0      1223       1770     102.20      1        3
       5. SW        Rt1 left  *      120     108       2.0       257       1717     102.20      1        3
       9. NE        Rt1 thru  *      120      82       2.0       509       1770     102.20      1        3
      12. NE        Rt1 right *      120      82       2.0       363       1583     102.20      1        3
      20. NW        Rt2A left *      120      62       2.0       946       1770     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0   *
      2. NE 164 E             *      2845.0     1555.0       5.0   *
      3. NE 82 E              *      2928.0     1555.0       5.0   *
      4. NE CNR               *      2987.0     1532.0       5.0   *
      5. NE 82 N              *      3024.0     1485.0       5.0   *
      6. NE 164 N             *      3039.0     1404.0       5.0   *
      7. NE MID N             *      3051.0     1276.0       5.0   *
      8. NW MID N             *      3162.0     1314.0       5.0   *
      9. NW 164 N             *      3147.0     1453.0       5.0   *
     10. NW 82 N              *      3139.0     1534.0       5.0   *
     11. W CNR                *      3129.0     1614.0       5.0   *
     12. SW 82 S              *      3116.0     1698.0       5.0   *
     13. SW 164 S             *      3106.0     1778.0       5.0   *
     14. SW MID S             *      3088.0     1931.0       5.0   *
     15. SE MID S             *      2992.0     1909.0       5.0   *
     16. SE 164 S             *      2999.0     1830.0       5.0   *
     17. SE 82 S              *      2995.0     1748.0       5.0   *
     18. SE CNR               *      2974.0     1708.0       5.0   *
     19. SE 82 E              *      2942.0     1675.0       5.0   *
     20. SE 164 E             *      2862.0     1644.0       5.0   *
     21. SE MID E             *      2679.0     1632.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 7 No Build 2014 AM - 7NBAM14.DAT                RUN: Site 7 No Build 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .9   1.1   1.1   1.2   1.4   1.4   1.4   1.3   1.1    .8    .7    .8    .9   1.0    .6    .7    .5    .3    .3    .1
   5.  *    .9   1.1   1.2   1.3   1.5   1.8   1.7    .8    .6    .4    .4    .5    .6    .7    .8    .8    .6    .5    .3    .2
  10.  *   1.0   1.1   1.4   1.5   1.6   1.5   2.1    .6    .3    .3    .2    .3    .4    .5    .9    .9    .7    .6    .4    .3
  15.  *   1.0   1.1   1.4   1.5   1.5   1.7   2.2    .2    .3    .2    .1    .2    .2    .3    .9    .9    .9    .7    .4    .3
  20.  *   1.2   1.2   1.4   1.5   1.6   1.8   2.3    .1    .1    .1    .1    .1    .2    .2    .9    .9    .9    .7    .5    .3
  25.  *   1.2   1.3   1.6   1.5   1.5   2.0   2.3    .1    .1    .0    .0    .1    .1    .2    .8    .8   1.0    .8    .6    .3
```

```
  30.  *   1.2   1.5   1.6   1.3   1.3   2.2   2.2    .0    .0    .0    .0    .1    .1    .1    .8    .8   1.0   1.3    .7    .3
  35.  *   1.2   1.4   1.6   1.1   1.3   2.0   2.2    .0    .0    .0    .0    .0    .1    .1    .8    .8   1.2   1.4    .8    .4
  40.  *   1.2   1.4   1.5   1.0   1.6   2.1   2.2    .0    .0    .0    .0    .0    .1    .1    .8    .8   1.3   1.3    .9    .5
  45.  *   1.2   1.4   1.5    .9   1.7   2.1   2.1    .0    .0    .0    .0    .0    .1    .1    .7    .7   1.3   1.4   1.1    .4
  50.  *   1.4   1.5   1.3   1.0   1.7   2.1   2.0    .0    .0    .0    .0    .0    .0    .1    .7    .7   1.5   1.4   1.1    .4
  55.  *   1.5   1.4   1.3   1.0   1.8   2.0   2.0    .0    .0    .0    .0    .0    .0    .1    .7    .7   1.6   1.4   1.2    .5
  60.  *   1.5   1.4   1.3   1.1   2.0   2.0   1.9    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.6   1.5   1.2    .5
  65.  *   1.5   1.3   1.0   1.2   2.0   1.9   1.7    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.7   1.5   1.1    .5
  70.  *   1.4   1.2   1.1   1.1   2.1   1.9   1.6    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.7   1.5   1.1    .5
  75.  *   1.4   1.3   1.2   1.4   2.1   2.0   1.7    .0    .0    .0    .0    .0    .0    .0    .7    .7   1.7   1.4    .9    .5
  80.  *   1.5   1.4   1.0   1.5   2.1   2.0   1.6    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.7   1.4    .9    .4
  85.  *   1.3   1.1   1.1   1.5   2.1   2.0   1.5    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.7   1.4    .7    .3
  90.  *   1.0   1.1   1.2   1.7   2.1   2.0   1.4    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.7   1.3    .6    .4
  95.  *   1.0   1.0   1.2   1.7   2.1   2.0   1.3    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.7   1.3    .5    .7
 100.  *    .7   1.1   1.1   1.8   2.1   2.0   1.2    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.6   1.2    .5    .8
 105.  *    .7   1.0   1.3   1.8   2.1   2.0   1.3    .0    .0    .0    .0    .0    .0    .0    .7    .9   1.6   1.1    .6    .8
 110.  *    .7    .8   1.2   1.7   2.2   2.0   1.3    .0    .0    .0    .0    .0    .0    .0    .7    .9   1.6   1.1    .8   1.0
 115.  *    .7    .7   1.2   1.8   2.1   2.0   1.2    .0    .0    .0    .0    .0    .0    .1    .7   1.0   1.6    .9    .7   1.3
 120.  *    .5    .7   1.2   1.8   2.1   2.0   1.2    .0    .0    .0    .0    .0    .0    .1    .8   1.0   1.6   1.0    .8   1.4
 125.  *    .4    .7   1.1   1.8   2.1   2.0   1.3    .0    .0    .0    .0    .0    .1    .1    .8   1.1   1.5   1.1    .8   1.5
 130.  *    .5    .8   1.1   1.7   2.2   2.0   1.4    .0    .0    .0    .0    .0    .1    .1    .9   1.2   1.6    .9   1.0   1.7
 135.  *    .4    .9   1.1   1.7   2.1   2.0   1.4    .0    .0    .0    .0    .0    .1    .1   1.0   1.4   1.7   1.2   1.2   1.5
 140.  *    .4    .8   1.0   1.6   2.1   2.1   1.5    .0    .1    .0    .1    .0    .1    .1   1.0   1.6   1.7   1.6   1.5   1.4
 145.  *    .4    .7   1.0   1.6   2.2   2.1   1.6    .1    .1    .1    .1    .0    .1    .2   1.3   1.8   1.7   1.2   1.7   1.4
 150.  *    .4    .6   1.0   1.6   1.9   2.0   1.6    .2    .2    .2    .2    .3    .2    .2   1.4   1.9   1.9   1.5   1.9   1.3
 155.  *    .4    .5    .8   1.4   1.8   1.9   1.7    .4    .3    .3    .4    .5    .5    .4   1.7   2.1   2.2   1.8   1.8   1.3
 160.  *    .1    .4    .7   1.2   1.8   1.8   1.7    .6    .7    .8    .7    .6    .7    .8   1.8   2.1   2.4   1.8   1.7   1.0
 165.  *    .1    .4    .6    .9   1.5   1.5   1.5   1.1   1.3   1.3   1.5   1.3   1.3   1.1   1.8   2.1   2.1   1.7   1.4    .9
 170.  *    .0    .2    .4    .8   1.2   1.3   1.3   1.5   1.8   1.9   2.0   1.8   1.8   1.8   1.6   1.9   1.8   1.4   1.3    .8
 175.  *    .0    .1    .2    .5    .9   1.0   1.0   2.0   2.3   2.5   2.5   2.2   2.0   2.1   1.4   1.7   1.5   1.0   1.1    .8
 180.  *    .0    .0    .2    .3    .6    .7    .7   2.4   2.8   3.1   3.1   2.5   2.3   2.5    .8   1.0   1.3    .7    .8    .7
 185.  *    .0    .0    .0    .2    .3    .5    .5   2.5   3.2   3.3   3.3   2.5   2.3   2.4    .6    .7    .9    .6    .5    .5
 190.  *    .0    .0    .0    .0    .1    .2    .2   2.7   3.3   3.6   3.4   2.5   2.2   2.3    .4    .5    .6    .4    .5    .6
 195.  *    .0    .0    .0    .0    .1    .1    .1   2.5   3.4   3.6   3.1   2.2   2.1   2.1    .1    .3    .5    .4    .4    .6
 200.  *    .0    .0    .0    .0    .0    .0    .1   2.4   3.4   3.5   2.8   1.9   1.9   1.9    .2    .2    .5    .4    .4    .6
 205.  *    .0    .0    .0    .0    .0    .0    .0   2.4   3.3   3.5   2.6   1.7   1.7   1.8    .2    .2    .3    .4    .5    .6
1
                                                                                                                  PAGE  4
      JOB: Site 7 No Build 2014 AM - 7NBAM14.DAT               RUN: Site 7 No Build 2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   2.3   3.3   3.3   2.3   1.5   1.8   1.7    .2    .2    .3    .5    .6    .6
 215.  *    .0    .0    .0    .0    .0    .0    .0   2.2   3.1   3.2   2.0   1.3   1.7   1.6    .2    .2    .3    .5    .7    .6
 220.  *    .0    .0    .0    .0    .0    .0    .0   2.3   3.1   3.1   1.7   1.2   1.8   1.5    .2    .2    .2    .5    .7    .7
 225.  *    .0    .0    .0    .0    .0    .0    .0   2.1   3.0   3.1   1.5   1.2   1.9   1.3    .2    .2    .3    .4    .6    .7
 230.  *    .0    .1    .0    .0    .0    .0    .0   2.2   3.0   3.1   1.5   1.3   1.9   1.3    .2    .2    .3    .3    .6    .7
 235.  *    .1    .1    .0    .0    .0    .0    .0   2.2   2.9   2.9   1.3   1.3   1.8   1.2    .2    .2    .3    .3    .6    .7
 240.  *    .1    .1    .0    .0    .0    .0    .0   2.2   2.7   2.8   1.3   1.2   1.9   1.1    .1    .2    .3    .4    .5    .7
 245.  *    .1    .1    .1    .0    .0    .0    .0   2.3   2.7   2.8   1.4   1.4   1.9   1.1    .1    .2    .2    .4    .5    .8
 250.  *    .2    .3    .2    .0    .0    .0    .0   2.3   2.7   2.8   1.3   1.4   1.9   1.1    .1    .1    .3    .5    .6    .8
 255.  *    .4    .4    .3    .2    .0    .0    .0   2.5   2.8   2.9   1.3   1.6   1.9   1.1    .1    .1    .2    .4    .5    .7
 260.  *    .7    .8    .6    .2    .1    .0    .0   2.6   2.8   3.1   1.5   1.6   1.7   1.1    .0    .1    .1    .2    .5    .6
 265.  *   1.0   1.0    .8    .4    .2    .0    .0   2.7   2.9   3.2   1.5   1.6   1.7   1.1    .0    .0    .1    .2    .3    .6
 270.  *   1.1   1.3   1.1    .5    .2    .1    .0   2.7   3.1   3.4   1.2   1.7   1.6   1.0    .0    .0    .1    .1    .2    .5
 275.  *   1.3   1.5   1.1    .7    .3    .1    .0   2.8   3.0   3.3   1.2   1.6   1.5   1.0    .0    .0    .0    .0    .1    .2
 280.  *   1.4   1.5   1.1    .7    .5    .2    .1   2.8   3.0   3.2   1.1   1.5   1.4   1.0    .0    .0    .0    .0    .0    .1
 285.  *   1.5   1.5   1.2    .7    .4    .2    .1   2.8   3.0   3.1    .9   1.5   1.4   1.0    .0    .0    .0    .0    .0    .0
 290.  *   1.4   1.2   1.1    .8    .4    .2    .1   2.9   3.0   2.9    .9   1.6   1.3   1.0    .0    .0    .0    .0    .0    .0
 295.  *   1.2   1.2   1.1    .8    .5    .2    .1   3.1   3.3   2.9    .9   1.7   1.3   1.0    .0    .0    .0    .0    .0    .0
 300.  *   1.2   1.2   1.2    .9    .5    .3    .2   3.2   3.4   2.4   1.0   1.7   1.3   1.1    .0    .0    .0    .0    .0    .0
 305.  *   1.1   1.1   1.1    .9    .5    .3    .2   3.2   3.5   2.3   1.2   1.7   1.4   1.1    .0    .0    .0    .0    .0    .0
 310.  *   1.1   1.1   1.1    .8    .5    .2    .2   3.3   3.4   2.2   1.2   1.7   1.3   1.2    .0    .0    .0    .0    .0    .0
 315.  *   1.1   1.1   1.0    .8    .5    .2    .2   3.4   3.4   2.2   1.3   1.6   1.3   1.2    .0    .0    .0    .0    .0    .0
 320.  *   1.0   1.1    .9    .8    .4    .3    .2   3.5   3.3   2.2   1.5   1.8   1.4   1.3    .0    .0    .0    .0    .0    .0
 325.  *   1.0   1.0    .8    .8    .6    .3    .2   3.5   3.2   2.0   1.5   1.7   1.5   1.4    .0    .0    .0    .0    .0    .0
 330.  *   1.0   1.0    .9    .9    .5    .3    .2   3.5   3.1   1.8   1.6   1.6   1.5   1.4    .0    .0    .0    .0    .0    .0
 335.  *   1.0   1.0    .9    .8    .5    .4    .2   3.5   2.9   1.8   1.7   1.7   1.6   1.5    .0    .0    .0    .0    .0    .0
 340.  *    .9    .9    .9    .8    .6    .6    .2   3.3   2.8   1.6   1.6   1.6   1.6   1.6    .1    .1    .0    .0    .0    .0
 345.  *    .9    .9    .9    .9    .7    .7    .4   3.1   2.4   1.6   1.5   1.6   1.6   1.6    .2    .2    .2    .1    .0    .0
 350.  *    .9    .9    .9   1.0   1.2    .9    .6   2.6   1.9   1.3   1.2   1.3   1.5   1.5    .4    .4    .2    .2    .1    .0
 355.  *   1.0   1.0   1.1   1.3   1.4   1.2   1.2   2.0   1.5   1.0   1.0   1.0   1.1   1.2    .6    .6    .4    .3    .2    .0
 360.  *    .9   1.1   1.1   1.2   1.4   1.4   1.4   1.3   1.1    .8    .7    .8    .9   1.0    .6    .7    .5    .3    .3    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.5   1.5   1.6   1.8   2.2   2.2   2.3   3.5   3.5   3.6   3.4   2.5   2.3   2.5   1.8   2.1   2.4   1.8   1.9   1.7
 DEGR. *   80    30    25   100   110    30    20   320   305   195   190   180   180   180   165   160   160   155   150   130

1
                                                                                                                  PAGE  5
      JOB: Site 7 No Build 2014 AM - 7NBAM14.DAT               RUN: Site 7 No Build 2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .2
  30.  *    .2
  35.  *    .2
  40.  *    .2
```

```
  45.  *    .2
  50.  *    .1
  55.  *    .1
  60.  *    .2
  65.  *    .3
  70.  *    .3
  75.  *    .2
  80.  *    .2
  85.  *    .5
  90.  *    .5
  95.  *    .7
 100.  *    .9
 105.  *   1.0
 110.  *   1.2
 115.  *   1.2
 120.  *   1.2
 125.  *   1.2
 130.  *   1.1
 135.  *   1.2
 140.  *   1.0
 145.  *   1.0
 150.  *   1.0
 155.  *    .8
 160.  *    .7
 165.  *    .7
 170.  *    .6
 175.  *    .6
 180.  *    .6
 185.  *    .6
 190.  *    .6
 195.  *    .6
 200.  *    .6
 205.  *    .6
1
                                                                                                                    PAGE  6
      JOB: Site 7 No Build 2014 AM - 7NBAM14.DAT                RUN: Site 7 No Build 2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .6
 215.  *    .7
 220.  *    .7
 225.  *    .7
 230.  *    .7
 235.  *    .7
 240.  *    .6
 245.  *    .8
 250.  *    .8
 255.  *    .7
 260.  *    .5
 265.  *    .5
 270.  *    .4
 275.  *    .3
 280.  *    .1
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.2
 DEGR. *  110

 THE HIGHEST CONCENTRATION IS    3.60 PPM AT  195 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    3.50 PPM AT  320 DEGREES FROM REC8 .
 THE 3RD HIGHEST CONCENTRATION IS    3.50 PPM AT  305 DEGREES FROM REC9 .
```

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Site 7 No Build 2030 AM - 7NBAM30.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 No Build 2030 AM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    1125 9.2  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     705 9.2  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
        80        37       2.0  705   84.1 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     420 9.2  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
        80        70       2.0  420   84.1 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.    1215 9.2  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.     620 9.2  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     365 9.2  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
        80        51       2.0  365   84.1 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     255 9.2  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     255 9.2  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
        80        51       2.0  255   84.1 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     255 9.2  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     255 9.2  0.  32   30.
```

```
   1
NE        Rt1 departAG  3058.  1610.  3129.   619.    1900 9.2  0.  44   30.
   1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    2045 9.2  0.  44   30.
   1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    2045 9.2  0.  44   30.
   1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    2045 9.2  0.  44   30.
   1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     510 9.2  0.  32   30.
   2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
        80        51       2.0  510   84.1 1770 1 3
   1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.    1535 9.2  0.  32   30.
   1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.    1535 9.2  0.  32   30.
   1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.    1535 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 7 No Build 2030 AM - 7NBAM30.DAT                RUN: Site 7 No Build 2030 AM
      DATE: 05/10/2009   TIME: 23:48:42.16


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =    4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =    .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH     EF      H   W    V/C QUEUE
                              *   X1         Y1        X2         Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   1125.   9.2    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    705.   9.2    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3117.6    1496.2 *      71.   174. AG    209. 100.0    .0 24.0  .41   3.6
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG    420.   9.2    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3186.3     590.5 *     978.   174. AG    395. 100.0    .0 24.0 1.64  49.7
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   1215.   9.2    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG    620.   9.2    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    365.   9.2    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3049.2    1729.5 *      51.   355. AG    288. 100.0    .0 24.0  .33   2.6
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    255.   9.2    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    255.   9.2    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3026.3    1759.3 *      71.    27. AG    144. 100.0    .0 12.0  .52   3.6
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    255.   9.2    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    255.   9.2    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1900.   9.2    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   2045.   9.2    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   2045.   9.2    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   2045.   9.2    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    510.   9.2    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    2815.9    1585.6 *     193.   267. AG    144. 100.0    .0 12.0  .92   9.8
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG   1535.   9.2    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG   1535.   9.2    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG   1535.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 No Build 2030 AM - 7NBAM30.DAT                RUN: Site 7 No Build 2030 AM
      DATE: 05/10/2009   TIME: 23:48:42.16

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*---------------------------------------------------------------------------------
       3. SW        Rt1 thru  *      80       37       2.0       705       1770      84.10      1        3
       5. SW        Rt1 left  *      80       70       2.0       420       1717      84.10      1        3
       9. NE        Rt1 thru  *      80       51       2.0       365       1770      84.10      1        3
      12. NE        Rt1 right *      80       51       2.0       255       1583      84.10      1        3
      20. NW        Rt2A left *      80       51       2.0       510       1770      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0    *
      2. NE 164 E             *      2845.0     1555.0       5.0    *
      3. NE 82 E              *      2928.0     1555.0       5.0    *
      4. NE CNR               *      2987.0     1532.0       5.0    *
      5. NE 82 N              *      3024.0     1485.0       5.0    *
      6. NE 164 N             *      3039.0     1404.0       5.0    *
      7. NE MID N             *      3051.0     1276.0       5.0    *
      8. NW MID N             *      3162.0     1314.0       5.0    *
      9. NW 164 N             *      3147.0     1453.0       5.0    *
     10. NW 82 N              *      3139.0     1534.0       5.0    *
     11. W CNR                *      3129.0     1614.0       5.0    *
     12. SW 82 S              *      3116.0     1698.0       5.0    *
     13. SW 164 S             *      3106.0     1778.0       5.0    *
     14. SW MID S             *      3088.0     1931.0       5.0    *
     15. SE MID S             *      2992.0     1909.0       5.0    *
     16. SE 164 S             *      2999.0     1830.0       5.0    *
     17. SE 82 S              *      2995.0     1748.0       5.0    *
     18. SE CNR               *      2974.0     1708.0       5.0    *
     19. SE 82 E              *      2942.0     1675.0       5.0    *
     20. SE 164 E             *      2862.0     1644.0       5.0    *
     21. SE MID E             *      2679.0     1632.0       5.0    *
1
                                                                                                                 PAGE  3
      JOB: Site 7 No Build 2030 AM - 7NBAM30.DAT                RUN: Site 7 No Build 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
   0.  *     .6    .9    .9    .8   1.0    .8   1.0    .6    .3    .3    .3    .3    .4    .4    .4    .4    .2    .2    .2    .0
   5.  *     .6    .9   1.0    .9   1.0   1.0   1.4    .3    .3    .2    .2    .2    .3    .3    .4    .4    .3    .2    .2    .1
  10.  *     .6   1.0    .9    .9   1.0   1.1   1.6    .1    .2    .1    .1    .1    .2    .2    .4    .4    .3    .3    .2    .1
  15.  *     .6    .8    .8    .9   1.0   1.5   1.7    .1    .0    .0    .1    .1    .1    .1    .4    .4    .3    .3    .2    .2
  20.  *     .7    .9    .9    .9   1.0   1.5   1.5    .0    .0    .0    .0    .1    .1    .1    .4    .4    .4    .3    .2    .2
  25.  *     .7    .9   1.0   1.0   1.0   1.6   1.5    .0    .0    .0    .0    .0    .0    .1    .4    .4    .4    .4    .2    .2
```

```
  30.  *   .7   1.0    .9    .8   1.3   1.6   1.5    .0    .0    .0    .0    .0    .0    .1    .4    .4    .4    .3    .2    .1
  35.  *   .7    .9    .9    .8   1.5   1.6   1.5    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .3    .2    .1
  40.  *   .8   1.0   1.0    .8   1.5   1.5   1.4    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .4    .2    .1
  45.  *   .8   1.1   1.0    .9   1.6   1.4   1.4    .0    .0    .0    .0    .0    .0    .0    .4    .4    .4    .6    .2    .1
  50.  *   .8   1.1   1.0    .9   1.6   1.4   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .4    .5    .6    .4    .1
  55.  *   .9   1.1   1.0    .8   1.7   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .5    .7    .4    .2
  60.  *   .9   1.2   1.0    .9   1.7   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .5    .7    .3    .3
  65.  *   .9   1.1    .9   1.1   1.7   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .5    .7    .3    .3
  70.  *   .8   1.0    .8   1.2   1.7   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .6    .8    .5    .2
  75.  *   .9   1.0    .9   1.3   1.7   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .5    .8    .5    .2
  80.  *  1.0   1.1   1.1   1.4   1.6   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .5    .8    .5    .2
  85.  *   .9    .8   1.1   1.4   1.6   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .6    .9    .4    .2
  90.  *   .8    .9   1.1   1.4   1.6   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .7    .9    .3    .1
  95.  *   .6    .9   1.0   1.4   1.6   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .7    .9    .3    .2
 100.  *   .5    .6   1.1   1.5   1.5   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .9    .9    .3    .4
 105.  *   .4    .6   1.0   1.5   1.6   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .9    .7    .2    .4
 110.  *   .4    .4   1.0   1.4   1.5   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3    .9    .7    .4    .5
 115.  *   .4    .5    .8   1.4   1.5   1.3   1.4    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.0    .7    .3    .8
 120.  *   .3    .4    .8   1.4   1.5   1.3   1.4    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.0    .6    .5    .9
 125.  *   .3    .5    .9   1.3   1.5   1.3   1.3    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.0    .6    .8   1.2
 130.  *   .3    .5    .8   1.3   1.5   1.5   1.4    .0    .0    .0    .0    .0    .0    .0    .4    .4    .9    .6    .8   1.1
 135.  *   .3    .5    .8   1.2   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0    .0    .4    .5   1.0    .6   1.1   1.2
 140.  *   .4    .5    .6   1.2   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0    .1    .4    .5   1.2    .8   1.3   1.1
 145.  *   .4    .6    .6   1.2   1.5   1.6   1.6    .0    .0    .0    .0    .0    .0    .1    .4    .6   1.3    .7   1.3   1.1
 150.  *   .3    .6    .7   1.2   1.6   1.7   1.6    .0    .0    .0    .1    .0    .1    .1    .4    .9   1.5   1.1   1.3   1.1
 155.  *   .2    .4    .7   1.1   1.6   1.6   1.6    .1    .2    .2    .2    .1    .2    .2    .8    .9   1.5   1.2   1.3   1.2
 160.  *   .2    .4    .6   1.0   1.4   1.5   1.7    .3    .3    .3    .4    .4    .3    .3    .7   1.1   1.6   1.5   1.2   1.0
 165.  *   .0    .2    .6    .8   1.2   1.4   1.5    .5    .6    .6    .7    .7    .7    .6    .9   1.2   1.5   1.4   1.0    .8
 170.  *   .0    .2    .3    .7   1.1   1.2   1.3    .8    .9    .9   1.1   1.1   1.0    .8    .8    .9   1.3   1.3    .9    .7
 175.  *   .0    .0    .2    .5    .9   1.0   1.1   1.0   1.2   1.3   1.6   1.4   1.3   1.0    .7    .7   1.2    .9    .7    .7
 180.  *   .0    .0    .2    .2    .6    .8    .7   1.4   1.5   1.7   2.0   1.7   1.5   1.1    .3    .6    .9    .8    .6    .5
 185.  *   .0    .0    .0    .2    .3    .4    .4   1.6   1.7   1.8   2.1   1.6   1.4   1.2    .2    .4    .7    .6    .5    .5
 190.  *   .0    .0    .0    .0    .2    .3    .3   1.6   1.8   2.0   2.1   1.7   1.3   1.0    .2    .4    .6    .5    .4    .5
 195.  *   .0    .0    .0    .0    .1    .1    .1   1.6   1.9   2.0   2.0   1.5   1.0    .9    .0    .1    .3    .5    .4    .5
 200.  *   .0    .0    .0    .0    .0    .0    .1   1.7   1.8   2.1   2.0   1.3   1.1    .9    .1    .1    .3    .4    .4    .5
 205.  *   .0    .0    .0    .0    .0    .0    .0   1.6   1.7   2.0   1.8   1.2   1.0    .6    .1    .2    .2    .3    .5    .5
1
                                                                                                                         PAGE  4
      JOB: Site 7 No Build 2030 AM - 7NBAM30.DAT                RUN: Site 7 No Build 2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
 210.  *   .0    .0    .0    .0    .0    .0    .0   1.6   1.6   2.0   1.7    .8    .9    .6    .1    .2    .3    .3    .5    .5
 215.  *   .0    .0    .0    .0    .0    .0    .0   1.5   1.6   2.0   1.6    .9    .8    .7    .1    .1    .3    .3    .4    .5
 220.  *   .0    .0    .0    .0    .0    .0    .0   1.4   1.4   2.0   1.2    .7    .8    .6    .1    .1    .2    .3    .5    .5
 225.  *   .0    .0    .0    .0    .0    .0    .0   1.4   1.4   2.0   1.1    .9   1.0    .6    .1    .1    .2    .3    .5    .5
 230.  *   .0    .0    .0    .0    .0    .0    .0   1.4   1.4   2.0    .9    .9   1.0    .6    .1    .1    .3    .3    .3    .5
 235.  *   .0    .1    .0    .0    .0    .0    .0   1.3   1.4   2.0    .9    .9   1.0    .6    .0    .1    .2    .3    .4    .4
 240.  *   .1    .1    .0    .0    .0    .0    .0   1.3   1.4   2.0   1.0    .8    .7    .5    .0    .1    .1    .2    .4    .4
 245.  *   .1    .1    .1    .0    .0    .0    .0   1.3   1.3   2.0   1.0    .7    .7    .5    .0    .1    .1    .2    .3    .5
 250.  *   .1    .2    .1    .0    .0    .0    .0   1.3   1.3   2.1   1.0    .8    .7    .5    .0    .0    .1    .2    .2    .4
 255.  *   .3    .3    .3    .1    .0    .0    .0   1.3   1.3   2.2   1.0    .8    .7    .5    .0    .0    .1    .1    .3    .4
 260.  *   .4    .5    .3    .1    .0    .0    .0   1.3   1.3   2.1   1.0    .9    .6    .5    .0    .0    .0    .1    .2    .3
 265.  *   .6    .6    .5    .1    .0    .0    .0   1.3   1.4   2.2   1.0   1.0    .6    .5    .0    .0    .0    .0    .1    .2
 270.  *   .8    .9    .8    .2    .1    .0    .0   1.3   1.4   2.3    .8    .9    .5    .5    .0    .0    .0    .0    .1    .2
 275.  *   .9    .9    .8    .4    .1    .0    .0   1.3   1.5   2.3    .8    .8    .5    .5    .0    .0    .0    .0    .0    .0
 280.  *   .9    .9   1.0    .5    .2    .0    .0   1.3   1.5   2.3    .6    .8    .4    .5    .0    .0    .0    .0    .0    .0
 285.  *  1.0    .9   1.0    .6    .2    .1    .0   1.3   1.5   2.3    .4    .8    .4    .5    .0    .0    .0    .0    .0    .0
 290.  *   .9    .8   1.0    .6    .4    .1    .0   1.4   1.7   2.1    .4    .8    .5    .5    .0    .0    .0    .0    .0    .0
 295.  *   .8    .8   1.0    .6    .4    .1    .0   1.4   1.9   1.9    .5    .8    .5    .5    .0    .0    .0    .0    .0    .0
 300.  *   .8    .9   1.1    .8    .3    .1    .1   1.5   2.0   1.7    .5    .8    .4    .5    .0    .0    .0    .0    .0    .0
 305.  *   .7    .8   1.0    .9    .4    .1    .1   1.5   1.9   1.6    .6    .7    .5    .5    .0    .0    .0    .0    .0    .0
 310.  *   .7    .8   1.0    .9    .4    .1    .1   1.5   1.8   1.4    .7    .6    .5    .5    .0    .0    .0    .0    .0    .0
 315.  *   .7    .8   1.0    .9    .4    .2    .1   1.6   1.8   1.1    .8    .6    .5    .6    .0    .0    .0    .0    .0    .0
 320.  *   .6    .8    .9    .8    .5    .3    .1   1.6   1.7   1.1    .8    .6    .6    .6    .0    .0    .0    .0    .0    .0
 325.  *   .6    .8    .8    .8    .6    .3    .1   1.6   1.5   1.0    .8    .6    .6    .6    .0    .0    .0    .0    .0    .0
 330.  *   .6    .8    .8    .8    .5    .2    .1   1.6   1.6    .9    .6    .6    .6    .7    .0    .0    .0    .0    .0    .0
 335.  *   .6    .8    .8    .9    .6    .3    .1   1.7   1.5    .7    .6    .6    .7    .7    .0    .0    .0    .0    .0    .0
 340.  *   .6    .8    .7    .8    .6    .4    .1   1.5   1.3    .6    .7    .7    .7    .7    .0    .0    .0    .0    .0    .0
 345.  *   .6    .8    .7    .8    .7    .5    .3   1.4   1.2    .8    .7    .6    .7    .7    .1    .1    .1    .0    .0    .0
 350.  *   .6    .8    .8    .8    .8    .6    .6   1.1    .8    .6    .5    .6    .6    .7    .2    .2    .2    .0    .0    .0
 355.  *   .6    .9    .8    .9   1.0    .8    .8    .8    .7    .3    .4    .5    .6    .6    .3    .2    .2    .2    .0    .0
 360.  *   .6    .9    .9    .8   1.0    .8   1.0    .6    .3    .3    .3    .3    .4    .4    .4    .4    .2    .2    .2    .0
 ------*-------------------------------------------------------------------------------------------------------------------------
 MAX   *  1.0   1.2   1.1   1.5   1.7   1.7   1.7   1.7   2.0   2.3   2.1   1.7   1.5   1.2    .9   1.2   1.6   1.5   1.3   1.2
 DEGR. *  80    60    80   100    55   150    15   200   300   270   185   180   180   185   165   165   160   160   140   155

1
                                                                                                                         PAGE  5
      JOB: Site 7 No Build 2030 AM - 7NBAM30.DAT                RUN: Site 7 No Build 2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .1
  30.  *    .1
  35.  *    .1
  40.  *    .1
```

```
  45.  *    .1
  50.  *    .1
  55.  *    .1
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .1
  80.  *    .0
  85.  *    .2
  90.  *    .2
  95.  *    .5
 100.  *    .5
 105.  *    .6
 110.  *    .6
 115.  *    .8
 120.  *    .8
 125.  *    .7
 130.  *    .7
 135.  *    .7
 140.  *    .7
 145.  *    .7
 150.  *    .6
 155.  *    .6
 160.  *    .5
 165.  *    .4
 170.  *    .4
 175.  *    .4
 180.  *    .4
 185.  *    .4
 190.  *    .4
 195.  *    .4
 200.  *    .4
 205.  *    .4
1
                                                                                                                        PAGE  6
      JOB: Site 7 No Build 2030 AM - 7NBAM30.DAT                RUN: Site 7 No Build 2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .4
 215.  *    .4
 220.  *    .4
 225.  *    .4
 230.  *    .4
 235.  *    .4
 240.  *    .4
 245.  *    .4
 250.  *    .4
 255.  *    .4
 260.  *    .3
 265.  *    .2
 270.  *    .2
 275.  *    .2
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .8
 DEGR. *  115

 THE HIGHEST CONCENTRATION IS    2.30 PPM AT  270 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    2.10 PPM AT  185 DEGREES FROM REC11.
 THE 3RD HIGHEST CONCENTRATION IS    2.00 PPM AT  300 DEGREES FROM REC9 .
```

```
Site 7 No Build 2014 PM - 7NBPM14.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 No Build 2014 PM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    118011.4  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     29511.4  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        71       2.0  295  102.2 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     88511.4  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        87       2.0  885  102.2 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.     65111.4  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.    217011.4  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.    126111.4  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        71       2.0 1261  102.2 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     90911.4  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     90911.4  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        71       2.0  909  102.2 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     90911.4  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     90911.4  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    183611.4  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.     93111.4  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.     93111.4  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.     93111.4  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     35611.4  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120        94       2.0  356  102.2 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.     57511.4  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.     57511.4  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.     57511.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 7 No Build 2014 PM - 7NBPM14.DAT                RUN: Site 7 No Build 2014 PM
      DATE: 05/10/2009   TIME: 23:48:25.68


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2    *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*---------------------------------------*-------------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   1180.  11.4    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    295.  11.4    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3116.1    1510.3 *      57.   174. AG    324. 100.0    .0 24.0  .22    2.9
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG    885.  11.4    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3148.2     975.4 *     591.   174. AG    397. 100.0    .0 24.0 1.07   30.0
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG    651.  11.4    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG   2170.  11.4    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG   1261.  11.4    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3024.4    1993.4 *     316.   355. AG    324. 100.0    .0 24.0  .95   16.0
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    909.  11.4    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    909.  11.4    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    4651.5    4941.9 *    3645.    27. AG    162. 100.0    .0 12.0 1.53  185.1
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    909.  11.4    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    909.  11.4    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1836.  11.4    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG    931.  11.4    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG    931.  11.4    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG    931.  11.4    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    356.  11.4    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    2415.9    1561.9 *     594.   267. AG    215. 100.0    .0 12.0 1.10   30.2
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG    575.  11.4    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG    575.  11.4    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG    575.  11.4    .0 32.0
1
                                                                                                                   PAGE  2
      JOB: Site 7 No Build 2014 PM - 7NBPM14.DAT                RUN: Site 7 No Build 2014 PM
      DATE: 05/10/2009   TIME: 23:48:25.68

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*-------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       71       2.0       295       1770     102.20      1        3
       5. SW        Rt1 left  *     120       87       2.0       885       1717     102.20      1        3
       9. NE        Rt1 thru  *     120       71       2.0      1261       1770     102.20      1        3
      12. NE        Rt1 right *     120       71       2.0       909       1583     102.20      1        3
      20. NW        Rt2A left *     120       94       2.0       356       1770     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *         COORDINATES (FT)         *
         RECEPTOR             *      X          Y          Z     *
     -------------------------*----------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0   *
      2. NE 164 E             *      2845.0     1555.0       5.0   *
      3. NE 82 E              *      2928.0     1555.0       5.0   *
      4. NE CNR               *      2987.0     1532.0       5.0   *
      5. NE 82 N              *      3024.0     1485.0       5.0   *
      6. NE 164 N             *      3039.0     1404.0       5.0   *
      7. NE MID N             *      3051.0     1276.0       5.0   *
      8. NW MID N             *      3162.0     1314.0       5.0   *
      9. NW 164 N             *      3147.0     1453.0       5.0   *
     10. NW 82 N              *      3139.0     1534.0       5.0   *
     11. W CNR                *      3129.0     1614.0       5.0   *
     12. SW 82 S              *      3116.0     1698.0       5.0   *
     13. SW 164 S             *      3106.0     1778.0       5.0   *
     14. SW MID S             *      3088.0     1931.0       5.0   *
     15. SE MID S             *      2992.0     1909.0       5.0   *
     16. SE 164 S             *      2999.0     1830.0       5.0   *
     17. SE 82 S              *      2995.0     1748.0       5.0   *
     18. SE CNR               *      2974.0     1708.0       5.0   *
     19. SE 82 E              *      2942.0     1675.0       5.0   *
     20. SE 164 E             *      2862.0     1644.0       5.0   *
     21. SE MID E             *      2679.0     1632.0       5.0   *
1
                                                                                                                   PAGE  3
      JOB: Site 7 No Build 2014 PM - 7NBPM14.DAT                RUN: Site 7 No Build 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .7    .8   1.0   1.3   1.4   1.4   1.5    .9    .7    .4    .6    .7    .8    .5   1.0   1.2   1.0    .7    .4    .1
   5.  *    .8    .8   1.3   1.4   1.3   1.6   1.9    .4    .6    .4    .5    .5    .6    .4   1.2   1.4   1.3    .8    .5    .2
  10.  *    .8    .9   1.4   1.5   1.3   1.8   2.0    .1    .2    .1    .3    .4    .5    .2   1.3   1.5   1.6   1.0    .7    .2
  15.  *    .8   1.2   1.6   1.4   1.5   1.8   2.0    .1    .1    .1    .2    .3    .4    .3   1.4   1.8   1.7   1.3    .7    .4
  20.  *    .8   1.2   1.8   1.3   1.5   1.9   1.9    .1    .1    .1    .1    .2    .3    .4   1.6   1.9   1.7   1.4    .9    .5
  25.  *    .9   1.5   1.7   1.3   1.3   1.7   1.9    .1    .1    .1    .1    .2    .2    .4   1.6   1.8   1.9   1.6   1.1    .5
```

```
  30.  *   1.0   1.4   1.8   1.2   1.5   1.7   1.9    .0    .0    .1    .1    .1    .2    .5   1.7   1.9   2.0   1.6   1.4    .7
  35.  *   1.1   1.4   1.5    .9   1.3   1.7   1.7    .0    .0    .0    .0    .1    .1    .5   1.7   1.9   1.9   1.7   1.3    .7
  40.  *   1.1   1.6   1.4    .9   1.3   1.7   1.6    .0    .0    .0    .0    .0    .1    .5   1.8   1.8   1.9   1.7   1.3    .7
  45.  *   1.1   1.5   1.2    .8   1.5   1.7   1.6    .0    .0    .0    .0    .0    .0    .5   1.6   1.8   1.9   1.7   1.5    .7
  50.  *   1.2   1.4    .9    .7   1.5   1.6   1.6    .0    .0    .0    .0    .0    .0    .5   1.7   1.8   1.9   1.7   1.4    .7
  55.  *   1.2   1.3   1.0    .8   1.6   1.5   1.5    .0    .0    .0    .0    .0    .0    .5   1.7   1.7   1.9   1.7   1.2    .6
  60.  *   1.2   1.1    .9    .8   1.6   1.5   1.5    .0    .0    .0    .0    .0    .0    .4   1.7   1.7   1.8   1.5   1.2    .7
  65.  *   1.2    .9    .8    .8   1.6   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.7   1.6   1.7   1.4   1.1    .8
  70.  *   1.1   1.0    .9    .9   1.6   1.5   1.5    .0    .0    .0    .0    .0    .0    .4   1.7   1.5   1.7   1.4   1.0    .7
  75.  *   1.0    .8   1.0    .9   1.6   1.5   1.5    .0    .0    .0    .0    .0    .0    .4   1.7   1.5   1.7   1.4   1.1    .6
  80.  *    .8    .7    .9   1.1   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0    .4   1.7   1.5   1.7   1.4   1.0    .4
  85.  *    .8    .9    .7   1.2   1.6   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.7   1.5   1.8   1.4   1.0    .5
  90.  *    .6    .7    .8   1.4   1.6   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.7   1.4   1.7   1.3    .8    .6
  95.  *    .4    .8    .8   1.4   1.4   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.3    .7    .6
 100.  *    .6    .7    .9   1.2   1.4   1.5   1.4    .0    .0    .0    .0    .0    .0    .3   1.6   1.5   1.7   1.2    .7    .7
 105.  *    .5    .5    .9   1.2   1.5   1.5   1.4    .0    .0    .0    .0    .0    .0    .3   1.6   1.5   1.8   1.2    .6    .9
 110.  *    .4    .5    .9   1.2   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0    .3   1.6   1.5   1.6   1.0    .7    .9
 115.  *    .4    .6    .9   1.3   1.4   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.6   1.1    .8   1.1
 120.  *    .3    .6    .7   1.2   1.5   1.5   1.4    .0    .0    .0    .0    .0    .0    .3   1.6   1.6   1.6   1.0    .8   1.2
 125.  *    .3    .6    .9   1.2   1.5   1.5   1.5    .0    .0    .0    .0    .0    .0    .3   1.6   1.5   1.6   1.2   1.0   1.3
 130.  *    .3    .6    .8   1.1   1.6   1.7   1.7    .0    .0    .0    .0    .0    .0    .3   1.7   1.6   1.6   1.1   1.2   1.2
 135.  *    .4    .6    .8   1.1   1.6   1.6   1.7    .0    .0    .0    .0    .0    .0    .3   1.8   1.7   1.7   1.2   1.3   1.2
 140.  *    .3    .6    .8   1.1   1.6   1.7   1.8    .0    .0    .0    .0    .0    .0    .4   1.8   1.7   1.8   1.2   1.3   1.2
 145.  *    .3    .5    .9   1.1   1.6   1.8   1.8    .0    .0    .0    .0    .0    .0    .4   1.9   1.9   1.9   1.2   1.3   1.3
 150.  *    .3    .5    .8   1.1   1.7   1.8   1.8    .0    .0    .0    .0    .0    .0    .5   2.0   2.0   1.9   1.3   1.5   1.1
 155.  *    .1    .4    .7   1.1   1.5   1.8   1.8    .1    .1    .1    .1    .1    .2    .5   2.1   2.2   1.8   1.6   1.6   1.0
 160.  *    .1    .3    .6   1.0   1.5   1.8   1.7    .2    .2    .1    .4    .5    .3    .6   2.0   2.3   1.9   1.5   1.5   1.1
 165.  *    .0    .2    .5    .9   1.4   1.6   1.5    .5    .5    .6    .8    .9    .6    .9   1.8   2.0   1.7   1.5   1.4    .8
 170.  *    .0    .1    .4    .6   1.2   1.3   1.3    .7    .8    .8   1.1   1.1   1.0   1.3   1.6   1.8   1.9   1.2   1.3    .7
 175.  *    .0    .0    .2    .4    .9   1.0   1.0   1.0   1.1   1.1   1.5   1.4   1.2   1.6   1.3   1.7   1.7   1.0    .9    .5
 180.  *    .0    .0    .1    .3    .7    .8    .7   1.1   1.4   1.4   1.9   1.6   1.3   1.6   1.1   1.1   1.1    .8    .8    .4
 185.  *    .0    .0    .0    .1    .3    .4    .4   1.5   1.7   1.7   2.3   1.7   1.5   1.9    .6    .9   1.0    .7    .8    .5
 190.  *    .0    .0    .0    .0    .1    .2    .2   1.7   1.8   2.0   2.4   1.5   1.3   1.9    .4    .6    .7    .7    .8    .5
 195.  *    .0    .0    .0    .0    .1    .1    .1   1.6   1.8   2.0   2.3   1.5   1.2   2.1    .1    .3    .5    .6    .8    .5
 200.  *    .0    .0    .0    .0    .0    .1    .1   1.7   1.8   1.9   2.2   1.3   1.1   2.2    .1    .1    .5    .6    .8    .5
 205.  *    .0    .0    .0    .0    .0    .0    .0   1.8   1.7   1.9   1.9    .9   1.2   1.8    .1    .1    .6    .5    .6    .5
1
                                                                                                                  PAGE  4
      JOB: Site 7 No Build 2014 PM - 7NBPM14.DAT                 RUN: Site 7 No Build 2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.7   1.7   2.0   1.7    .9   1.1   1.7    .1    .1    .5    .5    .7    .5
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.6   1.7   2.1   1.5   1.0   1.2   1.7    .2    .2    .5    .5    .6    .5
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.5   1.6   2.1   1.5    .7   1.1   1.6    .2    .2    .5    .5    .6    .5
 225.  *    .0    .0    .0    .0    .0    .0    .0   1.5   1.5   2.1   1.2    .7   1.4   1.5    .1    .2    .4    .5    .6    .5
 230.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   2.1   1.1    .8   1.4   1.5    .1    .2    .3    .5    .6    .5
 235.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   2.2    .9    .8   1.5   1.3    .1    .2    .3    .4    .6    .5
 240.  *    .0    .0    .0    .0    .0    .0    .0   1.3   1.5   2.3    .9    .8   1.6   1.3    .1    .1    .3    .4    .5    .5
 245.  *    .0    .1    .0    .0    .0    .0    .0   1.3   1.3   2.3    .9   1.0   1.6   1.2    .0    .1    .2    .3    .5    .5
 250.  *    .1    .2    .2    .0    .0    .0    .0   1.3   1.4   2.4    .9   1.0   1.5   1.2    .0    .1    .2    .3    .4    .5
 255.  *    .2    .3    .2    .0    .0    .0    .0   1.3   1.5   2.4   1.1   1.2   1.5   1.2    .0    .0    .1    .2    .3    .5
 260.  *    .4    .4    .3    .2    .0    .0    .0   1.3   1.4   2.6   1.1   1.2   1.5   1.3    .0    .0    .1    .1    .3    .3
 265.  *    .5    .6    .6    .2    .1    .0    .0   1.3   1.3   2.5   1.1   1.3   1.3   1.3    .0    .0    .0    .1    .1    .3
 270.  *    .7    .8    .6    .3    .1    .0    .0   1.3   1.5   2.7   1.1   1.2   1.3   1.3    .0    .0    .0    .0    .1    .1
 275.  *    .8    .8    .7    .3    .2    .0    .0   1.3   1.5   2.6   1.0   1.1   1.3   1.2    .0    .0    .0    .0    .0    .1
 280.  *    .9   1.0    .8    .4    .3    .1    .0   1.3   1.7   2.6    .9   1.2   1.3   1.2    .0    .0    .0    .0    .0    .0
 285.  *   1.0   1.0    .9    .5    .3    .1    .0   1.4   1.8   2.5    .7   1.2   1.3   1.2    .0    .0    .0    .0    .0    .0
 290.  *   1.0   1.0    .9    .5    .3    .2    .0   1.4   1.8   2.4    .7   1.2   1.3   1.2    .0    .0    .0    .0    .0    .0
 295.  *   1.0    .9    .8    .6    .3    .2    .1   1.5   1.8   2.2    .4   1.3   1.3   1.3    .0    .0    .0    .0    .0    .0
 300.  *    .9    .9    .8    .6    .3    .2    .1   1.5   1.7   2.1    .7   1.3   1.5   1.2    .0    .0    .0    .0    .0    .0
 305.  *    .9    .9    .8    .7    .3    .2    .1   1.6   1.8   2.1    .9   1.3   1.4   1.2    .0    .0    .0    .0    .0    .0
 310.  *    .8    .8    .8    .6    .3    .2    .1   1.7   1.9   1.8   1.0   1.5   1.5   1.2    .0    .0    .0    .0    .0    .0
 315.  *    .8    .8    .8    .8    .3    .2    .2   1.7   1.7   1.5   1.0   1.5   1.6   1.1    .0    .0    .0    .0    .0    .0
 320.  *    .8    .8    .7    .8    .3    .1    .1   1.8   1.9   1.6   1.1   1.5   1.6   1.1    .0    .0    .0    .0    .0    .0
 325.  *    .7    .8    .8    .7    .3    .1    .1   1.7   1.7   1.7   1.2   1.5   1.6   1.2    .0    .0    .0    .0    .0    .0
 330.  *    .7    .7    .8    .7    .4    .1    .2   1.8   1.7   1.6   1.3   1.4   1.6   1.1    .1    .1    .0    .0    .0    .0
 335.  *    .7    .7    .8    .7    .4    .1    .2   2.0   1.9   1.4   1.3   1.5   1.6   1.1    .1    .1    .1    .0    .0    .0
 340.  *    .7    .7    .7    .7    .5    .4    .2   1.8   1.8   1.4   1.3   1.5   1.6   1.0    .2    .2    .1    .1    .0    .0
 345.  *    .7    .7    .7    .8    .6    .6    .6   1.8   1.6   1.2   1.2   1.4   1.4    .9    .3    .4    .3    .1    .1    .0
 350.  *    .7    .7    .8    .8   1.2    .9    .8   1.4   1.5   1.0   1.1   1.1   1.2    .8    .6    .7    .4    .3    .1    .0
 355.  *    .7    .8    .9   1.3   1.2   1.3   1.3   1.2   1.2    .9    .7   1.0    .9    .6    .9    .9    .7    .4    .2    .1
 360.  *    .7    .8   1.0   1.3   1.4   1.4   1.5    .9    .7    .4    .6    .7    .8    .5   1.0   1.2   1.0    .7    .4    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.2   1.6   1.8   1.5   1.7   1.9   2.0   2.0   1.9   2.7   2.4   1.7   1.6   2.2   2.1   2.3   2.0   1.7   1.6   1.3
 DEGR. *   50    40    20    10   150    20    10   335   335   270   190   185   240   200   155   160    30    35   155   125

1
                                                                                                                  PAGE  5
      JOB: Site 7 No Build 2014 PM - 7NBPM14.DAT                 RUN: Site 7 No Build 2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .1
  15.  *    .1
  20.  *    .1
  25.  *    .2
  30.  *    .2
  35.  *    .2
  40.  *    .3
```

```
  45.  *    .3
  50.  *    .3
  55.  *    .3
  60.  *    .3
  65.  *    .3
  70.  *    .3
  75.  *    .3
  80.  *    .3
  85.  *    .3
  90.  *    .3
  95.  *    .5
 100.  *    .6
 105.  *    .7
 110.  *    .7
 115.  *    .9
 120.  *    .8
 125.  *    .8
 130.  *    .8
 135.  *    .8
 140.  *    .8
 145.  *    .8
 150.  *    .8
 155.  *    .6
 160.  *    .6
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                           PAGE  6
      JOB: Site 7 No Build 2014 PM - 7NBPM14.DAT                RUN: Site 7 No Build 2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .5
 225.  *    .6
 230.  *    .6
 235.  *    .5
 240.  *    .5
 245.  *    .5
 250.  *    .5
 255.  *    .3
 260.  *    .4
 265.  *    .3
 270.  *    .2
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .9
 DEGR. *  115

 THE HIGHEST CONCENTRATION IS    2.70 PPM AT  270 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    2.40 PPM AT  190 DEGREES FROM REC11.
 THE 3RD HIGHEST CONCENTRATION IS    2.30 PPM AT  160 DEGREES FROM REC16.
```

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Site 7 No Build 2030 PM - 7NBPM30.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 No Build 2030 PM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    1945 9.2  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     560 9.2  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        35       2.0  560   84.1 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.    1385 9.2  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        68       2.0 1385   84.1 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.     885 9.2  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.    1325 9.2  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     765 9.2  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        91       2.0  765   84.1 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     560 9.2  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     560 9.2  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        91       2.0  560   84.1 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     560 9.2  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     560 9.2  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    1420 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.     980 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.     980 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.     980 9.2  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     325 9.2  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120        93       2.0  325   84.1 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.     655 9.2  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.     655 9.2  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.     655 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 7 No Build 2030 PM - 7NBPM30.DAT                RUN: Site 7 No Build 2030 PM
      DATE: 05/10/2009   TIME: 23:48:58.03


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*-----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   1945.   9.2    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    560.   9.2    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3115.7    1513.7 *      54.   174. AG    132. 100.0    .0 24.0  .23   2.7
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG   1385.   9.2    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3133.8    1121.4 *     445.   174. AG    256. 100.0    .0 24.0 1.01  22.6
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG    885.   9.2    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG   1325.   9.2    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    765.   9.2    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3014.2    2101.8 *     425.   355. AG    342. 100.0    .0 24.0 1.04  21.6
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    560.   9.2    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    560.   9.2    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    4223.0    4102.8 *    2702.    27. AG    171. 100.0    .0 12.0 1.70 137.3
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    560.   9.2    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    560.   9.2    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1420.   9.2    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG    980.   9.2    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG    980.   9.2    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG    980.   9.2    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    325.   9.2    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    2781.7    1583.5 *     228.   267. AG    175. 100.0    .0 12.0  .96  11.6
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG    655.   9.2    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG    655.   9.2    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG    655.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 No Build 2030 PM - 7NBPM30.DAT                RUN: Site 7 No Build 2030 PM
      DATE: 05/10/2009   TIME: 23:48:58.03

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       35       2.0       560       1770      84.10      1        3
       5. SW        Rt1 left  *     120       68       2.0      1385       1717      84.10      1        3
       9. NE        Rt1 thru  *     120       91       2.0       765       1770      84.10      1        3
      12. NE        Rt1 right *     120       91       2.0       560       1583      84.10      1        3
      20. NW        Rt2A left *     120       93       2.0       325       1770      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0    *
      2. NE 164 E             *      2845.0     1555.0       5.0    *
      3. NE 82 E              *      2928.0     1555.0       5.0    *
      4. NE CNR               *      2987.0     1532.0       5.0    *
      5. NE 82 N              *      3024.0     1485.0       5.0    *
      6. NE 164 N             *      3039.0     1404.0       5.0    *
      7. NE MID N             *      3051.0     1276.0       5.0    *
      8. NW MID N             *      3162.0     1314.0       5.0    *
      9. NW 164 N             *      3147.0     1453.0       5.0    *
     10. NW 82 N              *      3139.0     1534.0       5.0    *
     11. W CNR                *      3129.0     1614.0       5.0    *
     12. SW 82 S              *      3116.0     1698.0       5.0    *
     13. SW 164 S             *      3106.0     1778.0       5.0    *
     14. SW MID S             *      3088.0     1931.0       5.0    *
     15. SE MID S             *      2992.0     1909.0       5.0    *
     16. SE 164 S             *      2999.0     1830.0       5.0    *
     17. SE 82 S              *      2995.0     1748.0       5.0    *
     18. SE CNR               *      2974.0     1708.0       5.0    *
     19. SE 82 E              *      2942.0     1675.0       5.0    *
     20. SE 164 E             *      2862.0     1644.0       5.0    *
     21. SE MID E             *      2679.0     1632.0       5.0    *
1
                                                                                                                 PAGE  3
      JOB: Site 7 No Build 2030 PM - 7NBPM30.DAT                RUN: Site 7 No Build 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .3    .6    .9   1.1   1.0   1.2   1.2    .6    .7    .5    .7    .6    .8    .5    .9   1.0    .8    .6    .3    .1
   5.  *    .3    .8   1.2   1.3   1.1   1.3   1.3    .5    .4    .4    .4    .6    .7    .3   1.1   1.1   1.1    .7    .5    .2
  10.  *    .3    .8   1.1   1.3   1.3   1.4   1.4    .2    .2    .2    .3    .3    .4    .3   1.3   1.4   1.2    .8    .7    .3
  15.  *    .4   1.0   1.3   1.3   1.1   1.2   1.4    .1    .1    .1    .2    .3    .4    .3   1.4   1.5   1.4   1.0    .7    .3
  20.  *    .5   1.0   1.3   1.1   1.2   1.5   1.4    .1    .1    .1    .1    .2    .4    .4   1.5   1.5   1.6   1.2    .8    .5
  25.  *    .6   1.1   1.5   1.0   1.0   1.3   1.4    .0    .1    .1    .1    .2    .2    .5   1.5   1.6   1.6   1.3    .9    .5
```

```
  30.  *     .6   1.1   1.3   1.0   1.1   1.3   1.3    .0    .0    .1    .1    .1    .2    .5   1.6   1.7   1.6   1.5   1.0    .6
  35.  *     .6   1.1   1.3    .7   1.1   1.3   1.3    .0    .0    .0    .0    .1    .1    .6   1.6   1.7   1.7   1.6   1.1    .7
  40.  *     .7   1.1   1.2    .8   1.1   1.2   1.2    .0    .0    .0    .0    .0    .1    .6   1.6   1.7   1.8   1.5   1.2    .7
  45.  *     .7   1.2   1.1    .6   1.1   1.1   1.1    .0    .0    .0    .0    .0    .0    .6   1.4   1.4   1.6   1.4   1.1    .7
  50.  *     .7   1.2   1.0    .6   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .5   1.3   1.4   1.5   1.4   1.1    .6
  55.  *     .7   1.1    .8    .4   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .5   1.3   1.4   1.4   1.4   1.1    .6
  60.  *     .8    .9    .9    .6   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .5   1.3   1.4   1.4   1.4   1.0    .5
  65.  *     .8    .7    .7    .7   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.4   1.4   1.2    .9    .5
  70.  *     .6    .7    .7    .8   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.3   1.4   1.3    .9    .5
  75.  *     .6    .7    .6   1.0   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.2   1.4   1.3    .8    .6
  80.  *     .5    .7    .6   1.0   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.2   1.5   1.2    .6    .4
  85.  *     .6    .6    .5   1.0   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.3   1.5   1.2    .7    .3
  90.  *     .6    .5    .5   1.0   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.3   1.5   1.2    .6    .2
  95.  *     .5    .5    .4   1.1   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.2   1.5   1.1    .5    .2
 100.  *     .5    .3    .6   1.1   1.1   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.2   1.4    .9    .5    .4
 105.  *     .4    .3    .6   1.0   1.2   1.1   1.2    .0    .0    .0    .0    .0    .0    .4   1.3   1.3   1.4    .9    .6    .5
 110.  *     .3    .4    .7   1.0   1.1   1.1   1.2    .0    .0    .0    .0    .0    .0    .4   1.3   1.3   1.4    .8    .4    .7
 115.  *     .3    .4    .7   1.0   1.1   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.2   1.5    .7    .6    .7
 120.  *     .3    .4    .6   1.0   1.1   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.3   1.4    .7    .5    .7
 125.  *     .2    .4    .6    .9   1.1   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.5   1.4   1.4    .7    .5    .8
 130.  *     .3    .4    .5    .9   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .4   1.5   1.4   1.4    .8    .8    .9
 135.  *     .3    .5    .5    .9   1.2   1.1   1.3    .0    .0    .0    .0    .0    .0    .4   1.5   1.4   1.4    .8    .9    .9
 140.  *     .3    .4    .6   1.0   1.1   1.3   1.3    .0    .0    .0    .0    .0    .0    .4   1.6   1.4   1.6    .9   1.0    .8
 145.  *     .2    .3    .6   1.1   1.2   1.3   1.1    .0    .0    .0    .0    .0    .0    .5   1.5   1.4   1.5   1.0    .8    .9
 150.  *     .2    .3    .6    .8   1.2   1.3   1.2    .0    .0    .0    .0    .0    .0    .5   1.6   1.6   1.4    .9    .8    .7
 155.  *     .2    .3    .5    .8   1.2   1.3   1.2    .1    .0    .0    .1    .0    .1    .5   1.7   1.5   1.6   1.0    .8    .6
 160.  *     .0    .2    .4    .7   1.1   1.1   1.2    .1    .3    .3    .3    .3    .3    .6   1.6   1.6   1.6    .8   1.1    .6
 165.  *     .0    .2    .3    .6    .9   1.0   1.0    .3    .4    .4    .7    .7    .5   1.0   1.4   1.5   1.4    .8   1.0    .6
 170.  *     .0    .0    .2    .4    .9   1.0    .9    .6    .7    .6    .9    .8    .8   1.2   1.2   1.3   1.1    .8    .7    .5
 175.  *     .0    .0    .2    .4    .5    .7    .6    .7    .9   1.0   1.2   1.1   1.0   1.5   1.0   1.1   1.1    .8    .7    .3
 180.  *     .0    .0    .0    .2    .4    .5    .4    .8   1.2   1.2   1.4   1.3   1.1   1.7    .7   1.0   1.0    .5    .5    .3
 185.  *     .0    .0    .0    .1    .1    .3    .3   1.2   1.2   1.3   1.7   1.4   1.3   1.7    .5    .5    .7    .4    .5    .3
 190.  *     .0    .0    .0    .0    .1    .1    .1   1.3   1.5   1.5   1.9   1.3   1.1   1.9    .2    .3    .6    .3    .4    .3
 195.  *     .0    .0    .0    .0    .0    .1    .1   1.2   1.5   1.5   1.6   1.0   1.0   1.7    .1    .2    .4    .2    .4    .4
 200.  *     .0    .0    .0    .0    .0    .0    .0   1.4   1.5   1.6   1.6    .9    .9   1.6    .1    .1    .4    .2    .4    .4
 205.  *     .0    .0    .0    .0    .0    .0    .0   1.3   1.4   1.6   1.5    .9    .9   1.6    .1    .1    .4    .3    .4    .4
1
                                                                                                                          PAGE  4
      JOB: Site 7 No Build 2030 PM - 7NBPM30.DAT                RUN: Site 7 No Build 2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *     .0    .0    .0    .0    .0    .0    .0   1.3   1.4   1.6   1.4    .8   1.0   1.6    .0    .1    .2    .3    .3    .4
 215.  *     .0    .0    .0    .0    .0    .0    .0   1.3   1.3   1.5   1.3    .6    .9   1.4    .0    .1    .1    .3    .4    .4
 220.  *     .0    .0    .0    .0    .0    .0    .0   1.3   1.2   1.3   1.2    .7   1.1   1.2    .0    .2    .2    .4    .4    .4
 225.  *     .0    .0    .0    .0    .0    .0    .0   1.2   1.2   1.4    .9    .6   1.1   1.2    .0    .1    .2    .3    .4    .4
 230.  *     .0    .0    .0    .0    .0    .0    .0   1.2   1.2   1.4    .8    .5   1.1   1.1    .0    .1    .2    .2    .4    .4
 235.  *     .0    .0    .0    .0    .0    .0    .0   1.2   1.2   1.5    .8    .6   1.1   1.1    .0    .0    .2    .2    .3    .3
 240.  *     .0    .0    .0    .0    .0    .0    .0   1.2   1.2   1.6    .8    .5   1.3   1.1    .0    .0    .1    .2    .3    .3
 245.  *     .0    .1    .0    .0    .0    .0    .0   1.2   1.2   1.6    .8    .7   1.1   1.0    .0    .0    .1    .2    .2    .3
 250.  *     .1    .1    .0    .0    .0    .0    .0   1.2   1.2   1.6    .9    .7   1.1   1.0    .0    .0    .0    .1    .2    .2
 255.  *     .1    .1    .1    .0    .0    .0    .0   1.2   1.2   1.6    .9    .9   1.1   1.1    .0    .0    .0    .1    .1    .1
 260.  *     .2    .2    .1    .0    .0    .0    .0   1.2   1.2   1.6   1.1    .8   1.2   1.1    .0    .0    .0    .0    .1    .1
 265.  *     .3    .3    .4    .1    .0    .0    .0   1.2   1.2   1.7   1.0    .9   1.2   1.1    .0    .0    .0    .0    .0    .1
 270.  *     .3    .3    .4    .2    .0    .0    .0   1.2   1.2   1.7    .9    .9   1.2   1.1    .0    .0    .0    .0    .0    .0
 275.  *     .4    .5    .5    .2    .1    .0    .0   1.2   1.2   1.8    .8   1.0   1.2   1.1    .0    .0    .0    .0    .0    .0
 280.  *     .4    .5    .5    .2    .1    .0    .0   1.2   1.3   1.6    .6    .9   1.2   1.0    .0    .0    .0    .0    .0    .0
 285.  *     .4    .5    .6    .4    .2    .0    .0   1.2   1.5   1.5    .5    .9   1.2   1.1    .0    .0    .0    .0    .0    .0
 290.  *     .4    .6    .7    .4    .2    .0    .0   1.2   1.4   1.5    .5   1.0   1.1   1.1    .0    .0    .0    .0    .0    .0
 295.  *     .3    .6    .7    .5    .2    .1    .0   1.2   1.4   1.4    .6   1.0   1.3   1.1    .0    .0    .0    .0    .0    .0
 300.  *     .3    .6    .6    .5    .2    .1    .0   1.2   1.4   1.4    .6   1.1   1.3   1.1    .0    .0    .0    .0    .0    .0
 305.  *     .3    .6    .7    .4    .2    .2    .0   1.2   1.4   1.3    .7   1.1   1.3   1.2    .0    .0    .0    .0    .0    .0
 310.  *     .3    .6    .7    .4    .1    .2    .0   1.3   1.3   1.3    .8   1.1   1.3   1.2    .0    .0    .0    .0    .0    .0
 315.  *     .3    .6    .6    .5    .3    .1    .0   1.3   1.4   1.2    .7   1.2   1.4   1.2    .0    .0    .0    .0    .0    .0
 320.  *     .3    .6    .6    .5    .2    .1    .0   1.3   1.5   1.4    .9   1.2   1.3   1.3    .0    .0    .0    .0    .0    .0
 325.  *     .3    .6    .6    .4    .2    .1    .1   1.4   1.3   1.3   1.1   1.3   1.4   1.2    .0    .0    .0    .0    .0    .0
 330.  *     .3    .6    .6    .5    .3    .1    .1   1.3   1.6   1.3   1.1   1.4   1.5   1.2    .0    .0    .0    .0    .0    .0
 335.  *     .3    .6    .6    .5    .3    .1    .2   1.3   1.6   1.4   1.1   1.5   1.5   1.1    .1    .1    .0    .0    .0    .0
 340.  *     .3    .6    .7    .5    .4    .3    .3   1.5   1.5   1.3   1.1   1.3   1.4   1.1    .1    .2    .2    .0    .0    .0
 345.  *     .3    .6    .7    .6    .6    .5    .4   1.5   1.5   1.2   1.0   1.2   1.2    .9    .3    .3    .2    .1    .0    .0
 350.  *     .3    .6    .7    .8    .8    .8    .6   1.3   1.0    .9    .8   1.1   1.1    .8    .6    .5    .4    .2    .1    .0
 355.  *     .3    .6    .9   1.0   1.1    .8   1.0   1.0    .9    .7    .6    .8   1.0    .6    .7    .8    .6    .4    .2    .0
 360.  *     .3    .6    .9   1.1   1.0   1.2   1.2    .6    .7    .5    .7    .6    .8    .5    .9   1.0    .8    .6    .3    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *     .8   1.2   1.5   1.3   1.3   1.5   1.4   1.5   1.6   1.8   1.9   1.5   1.5   1.9   1.7   1.7   1.8   1.6   1.2    .9
 DEGR. *   60    45    25     5    10    20    10   340   330   275   190   335   330   190   155    30    40    35    40   130

1
                                                                                                                          PAGE  5
      JOB: Site 7 No Build 2030 PM - 7NBPM30.DAT                RUN: Site 7 No Build 2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *     .0
   5.  *     .0
  10.  *     .0
  15.  *     .0
  20.  *     .1
  25.  *     .1
  30.  *     .3
  35.  *     .3
  40.  *     .3
```

```
  45.  *    .3
  50.  *    .4
  55.  *    .3
  60.  *    .3
  65.  *    .2
  70.  *    .2
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .2
 100.  *    .5
 105.  *    .6
 110.  *    .7
 115.  *    .6
 120.  *    .6
 125.  *    .6
 130.  *    .4
 135.  *    .5
 140.  *    .5
 145.  *    .4
 150.  *    .4
 155.  *    .4
 160.  *    .2
 165.  *    .2
 170.  *    .2
 175.  *    .2
 180.  *    .2
 185.  *    .2
 190.  *    .2
 195.  *    .2
 200.  *    .2
 205.  *    .2
1
                                                                                                                             PAGE  6
      JOB: Site 7 No Build 2030 PM - 7NBPM30.DAT                RUN: Site 7 No Build 2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .2
 215.  *    .2
 220.  *    .2
 225.  *    .1
 230.  *    .2
 235.  *    .2
 240.  *    .2
 245.  *    .2
 250.  *    .1
 255.  *    .1
 260.  *    .1
 265.  *    .1
 270.  *    .0
 275.  *    .0
 280.  *    .0
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .7
 DEGR. *  110

 THE HIGHEST CONCENTRATION IS    1.90 PPM AT  190 DEGREES FROM REC11.
 THE 2ND HIGHEST CONCENTRATION IS    1.90 PPM AT  190 DEGREES FROM REC14.
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT  275 DEGREES FROM REC10.
```

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Site 7 Opt 1/2  2014 AM - 7B1AM14.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 1/2  2014 AM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    129911.4  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     82711.4  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        61       2.0  827  102.2 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     47211.4  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        95       2.0  472  102.2 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.    130611.4  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.     75211.4  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     48811.4  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        61       2.0  488  102.2 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     26411.4  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     26411.4  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        61       2.0  264  102.2 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     26411.4  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     26411.4  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    227411.4  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    226511.4  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    226511.4  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    226511.4  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     47911.4  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120        95       2.0  479  102.2 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.    178611.4  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.    178611.4  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.    178611.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 7 Opt 1/2  2014 AM - 7B1AM14.DAT                RUN: Site 7 Opt 1/2  2014 AM
      DATE: 05/11/2009   TIME: 01:42:30.88


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   1299.  11.4    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    827.  11.4    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3124.7    1430.0 *     138.   174. AG    279. 100.0    .0 24.0  .51   7.0
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG    472.  11.4    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3103.1    1431.2 *     133.   174. AG    434. 100.0    .0 24.0  .79   6.8
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   1306.  11.4    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG    752.  11.4    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    488.  11.4    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3046.4    1760.0 *      81.   355. AG    279. 100.0    .0 24.0  .30   4.1
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    264.  11.4    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    264.  11.4    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3034.0    1774.4 *      88.    27. AG    139. 100.0    .0 12.0  .36   4.5
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    264.  11.4    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    264.  11.4    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   2274.  11.4    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   2265.  11.4    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   2265.  11.4    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   2265.  11.4    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    479.  11.4    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0     958.0    1475.5 *    2055.   267. AG    217. 100.0    .0 12.0 1.55 104.4
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG   1786.  11.4    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG   1786.  11.4    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG   1786.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Opt 1/2  2014 AM - 7B1AM14.DAT                RUN: Site 7 Opt 1/2  2014 AM
      DATE: 05/11/2009   TIME: 01:42:30.88

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       61       2.0       827       1770     102.20      1        3
       5. SW        Rt1 left  *     120       95       2.0       472       1717     102.20      1        3
       9. NE        Rt1 thru  *     120       61       2.0       488       1770     102.20      1        3
      12. NE        Rt1 right *     120       61       2.0       264       1583     102.20      1        3
      20. NW        Rt2A left *     120       95       2.0       479       1770     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)           *
         RECEPTOR             *      X          Y          Z         *
     -------------------------*--------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0     *
      2. NE 164 E             *      2845.0     1555.0       5.0     *
      3. NE 82 E              *      2928.0     1555.0       5.0     *
      4. NE CNR               *      2987.0     1532.0       5.0     *
      5. NE 82 N              *      3024.0     1485.0       5.0     *
      6. NE 164 N             *      3039.0     1404.0       5.0     *
      7. NE MID N             *      3051.0     1276.0       5.0     *
      8. NW MID N             *      3162.0     1314.0       5.0     *
      9. NW 164 N             *      3147.0     1453.0       5.0     *
     10. NW 82 N              *      3139.0     1534.0       5.0     *
     11. W CNR                *      3129.0     1614.0       5.0     *
     12. SW 82 S              *      3116.0     1698.0       5.0     *
     13. SW 164 S             *      3106.0     1778.0       5.0     *
     14. SW MID S             *      3088.0     1931.0       5.0     *
     15. SE MID S             *      2992.0     1909.0       5.0     *
     16. SE 164 S             *      2999.0     1830.0       5.0     *
     17. SE 82 S              *      2995.0     1748.0       5.0     *
     18. SE CNR               *      2974.0     1708.0       5.0     *
     19. SE 82 E              *      2942.0     1675.0       5.0     *
     20. SE 164 E             *      2862.0     1644.0       5.0     *
     21. SE MID E             *      2679.0     1632.0       5.0     *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Opt 1/2  2014 AM - 7B1AM14.DAT                RUN: Site 7 Opt 1/2  2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.2   1.2   1.4   1.3   1.6   1.5   1.5    .8    .7    .3    .4    .5    .6    .7    .5    .5    .4    .2    .2    .0
   5.  *   1.2   1.3   1.3   1.4   1.6   1.6   1.6    .5    .3    .3    .2    .3    .3    .4    .6    .6    .4    .3    .2    .2
  10.  *   1.2   1.4   1.2   1.5   1.7   2.0   1.9    .2    .3    .2    .1    .2    .2    .3    .6    .6    .5    .3    .3    .2
  15.  *   1.3   1.3   1.3   1.3   1.5   1.9   1.9    .1    .1    .1    .1    .1    .1    .2    .6    .6    .6    .3    .3    .2
  20.  *   1.3   1.3   1.7   1.3   1.6   2.1   1.6    .1    .0    .0    .0    .1    .1    .1    .6    .6    .5    .4    .3    .2
  25.  *   1.4   1.4   1.5   1.3   1.7   2.1   1.7    .0    .0    .0    .0    .0    .1    .1    .6    .6    .6    .4    .3    .2
```

```
  30.  *   1.3   1.2   1.7   1.3   1.8   2.1   1.5    .0    .0    .0    .0    .0    .0    .1    .6    .6    .6    .5    .4    .2
  35.  *   1.4   1.3   1.6   1.3   2.0   2.1   1.4    .0    .0    .0    .0    .0    .0    .1    .6    .6    .7    .6    .5    .2
  40.  *   1.4   1.4   1.6   1.2   2.0   2.0   1.4    .0    .0    .0    .0    .0    .0    .1    .6    .6    .5    .7    .5    .1
  45.  *   1.4   1.4   1.5   1.2   2.1   1.9   1.1    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .7    .6    .1
  50.  *   1.6   1.5   1.4   1.2   2.2   1.9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .6    .9    .7    .3
  55.  *   1.6   1.4   1.4   1.6   2.2   1.8   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .7    .9    .7    .3
  60.  *   1.6   1.5   1.4   1.5   2.2   1.6   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .7    .9    .8    .3
  65.  *   1.7   1.5   1.2   1.5   2.3   1.4    .9    .0    .0    .0    .0    .0    .0    .0    .5    .4    .7   1.0    .7    .3
  70.  *   1.7   1.5   1.3   1.6   2.3   1.4   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .9   1.0    .7    .3
  75.  *   1.5   1.4   1.3   1.7   2.3   1.3   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .9   1.0    .7    .2
  80.  *   1.6   1.3   1.4   1.8   2.3   1.1   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.0   1.0    .7    .2
  85.  *   1.4   1.6   1.5   1.8   2.3   1.1   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4    .9   1.0    .5    .2
  90.  *   1.2   1.4   1.5   1.9   2.3   1.1   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1   1.0    .4    .4
  95.  *   1.1   1.2   1.4   1.9   2.3    .9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1   1.0    .4    .5
 100.  *    .7   1.0   1.6   1.8   2.2    .9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1   1.0    .4    .6
 105.  *    .6    .9   1.5   2.1   2.1    .9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1    .8    .4    .9
 110.  *    .4    .9   1.5   1.9   2.0    .9   1.1    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.2    .8    .6   1.1
 115.  *    .4    .6   1.4   1.8   1.9    .9   1.1    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.2    .6    .6   1.3
 120.  *    .3    .6   1.1   1.7   1.9   1.0   1.1    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1    .7    .7   1.3
 125.  *    .2    .4   1.1   1.7   1.6   1.0   1.2    .0    .0    .0    .0    .0    .0    .0    .5    .6   1.1    .9    .9   1.4
 130.  *    .3    .3    .8   1.5   1.6   1.0   1.1    .0    .0    .0    .0    .0    .0    .1    .5    .6   1.1    .8   1.2   1.4
 135.  *    .3    .2    .7   1.4   1.4   1.1   1.1    .0    .0    .0    .0    .0    .0    .1    .5    .6   1.4   1.1   1.3   1.4
 140.  *    .3    .3    .6   1.3   1.3   1.2   1.3    .0    .0    .0    .0    .0    .0    .1    .5    .8   1.3   1.1   1.3   1.4
 145.  *    .3    .3    .5   1.1   1.3   1.3   1.3    .0    .0    .0    .1    .0    .1    .1    .7   1.1   1.3   1.0   1.4   1.3
 150.  *    .2    .3    .5   1.0   1.2   1.3   1.4    .0    .1    .1    .1    .0    .1    .1    .9   1.3   1.5   1.2   1.6   1.3
 155.  *    .1    .3    .4    .9   1.2   1.4   1.4    .2    .1    .1    .2    .2    .1    .2   1.0   1.4   1.6   1.5   1.5   1.1
 160.  *    .1    .3    .4    .6   1.2   1.4   1.4    .2    .2    .3    .4    .5    .6    .4   1.0   1.3   1.7   1.6   1.3   1.0
 165.  *    .0    .2    .4    .6    .9   1.2   1.4    .4    .4    .5    .7    .6    .6    .6   1.1   1.4   1.6   1.4   1.3   1.1
 170.  *    .0    .1    .3    .5    .8   1.1   1.2    .6    .6    .8   1.2   1.2   1.0   1.1   1.2   1.4   1.7   1.1   1.1    .8
 175.  *    .0    .1    .1    .4    .7    .9    .9    .7    .9   1.2   1.6   1.5   1.3   1.3    .9   1.1   1.2    .9    .9    .8
 180.  *    .0    .0    .1    .2    .5    .7    .7    .9   1.1   1.5   1.9   1.7   1.5   1.6    .6    .8   1.1    .8    .7    .7
 185.  *    .0    .0    .0    .1    .3    .5    .4   1.1   1.1   1.8   2.2   1.8   1.7   1.4    .3    .5    .8    .7    .8    .8
 190.  *    .0    .0    .0    .1    .2    .2    .3   1.0   1.2   2.0   2.6   1.9   1.8   1.3    .2    .4    .6    .7    .7    .7
 195.  *    .0    .0    .0    .0    .1    .1    .2   1.2   1.2   2.3   2.6   1.7   1.5   1.2    .2    .4    .6    .6    .6    .8
 200.  *    .0    .0    .0    .0    .0    .1    .1   1.1   1.3   2.5   2.5   1.5   1.4   1.3    .2    .3    .4    .6    .7    .8
 205.  *    .0    .0    .0    .0    .0    .0    .1   1.2   1.2   2.6   2.4   1.5   1.4   1.2    .2    .3    .4    .6    .7    .8
1
                                                                                                                 PAGE  4
      JOB: Site 7 Opt 1/2  2014 AM - 7B1AM14.DAT                RUN: Site 7 Opt 1/2  2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   2.5   2.1   1.4   1.3    .9    .2    .2    .4    .6    .7    .8
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.4   2.7   2.0   1.4   1.3    .9    .2    .2    .4    .5    .7    .8
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.0   1.5   2.6   1.8   1.2   1.3    .9    .2    .3    .5    .5    .6    .8
 225.  *    .0    .1    .0    .0    .0    .0    .0    .8   1.4   2.6   1.5   1.0   1.4    .9    .2    .3    .4    .5    .8    .9
 230.  *    .0    .1    .0    .0    .0    .0    .0    .8   1.5   2.6   1.4   1.2   1.4    .9    .2    .3    .4    .4    .7    .9
 235.  *    .1    .1    .0    .0    .0    .0    .0    .8   1.7   2.6   1.3   1.4   1.4    .9    .2    .2    .4    .5    .6   1.0
 240.  *    .1    .1    .0    .0    .0    .0    .0    .8   1.8   2.6   1.3   1.2   1.3    .9    .1    .3    .4    .5    .7    .9
 245.  *    .1    .2    .1    .0    .0    .0    .0    .8   1.9   2.6   1.4   1.1   1.3    .8    .1    .4    .5    .6    .7   1.0
 250.  *    .4    .3    .3    .0    .0    .0    .0    .8   2.0   2.6   1.4   1.3   1.2    .8    .1    .1    .4    .6    .7    .9
 255.  *    .5    .7    .5    .2    .0    .0    .0    .8   2.1   2.7   1.4   1.3   1.2    .8    .1    .1    .4    .5    .7   1.0
 260.  *    .9    .9    .8    .3    .1    .0    .0    .8   2.3   2.9   1.6   1.3   1.1    .8    .1    .1    .3    .4    .7    .9
 265.  *   1.2   1.3   1.1    .5    .2    .1    .0    .8   2.5   3.0   1.6   1.2    .9    .7    .0    .1    .1    .3    .5    .7
 270.  *   1.4   1.6   1.5    .8    .3    .1    .1    .9   2.7   3.3   1.7   1.3    .9    .7    .0    .0    .1    .1    .3    .5
 275.  *   1.8   1.8   1.7    .9    .5    .1    .1    .9   2.8   3.1   1.1   1.2    .7    .7    .0    .0    .0    .1    .1    .3
 280.  *   1.9   1.9   1.6   1.2    .6    .3    .1    .9   2.9   3.1   1.1   1.1    .6    .7    .0    .0    .0    .0    .1    .1
 285.  *   1.8   1.9   1.7   1.2    .6    .4    .1    .9   2.9   3.0    .9   1.0    .6    .7    .0    .0    .0    .0    .0    .0
 290.  *   1.7   1.7   1.7   1.0    .5    .4    .1   1.0   3.1   2.8    .6   1.1    .6    .7    .0    .0    .0    .0    .0    .0
 295.  *   1.6   1.6   1.6   1.2    .5    .4    .2   1.0   3.1   2.6    .6   1.1    .6    .7    .0    .0    .0    .0    .0    .0
 300.  *   1.6   1.5   1.6   1.2    .6    .4    .2   1.0   3.1   2.3    .6   1.0    .7    .7    .0    .0    .0    .0    .0    .0
 305.  *   1.5   1.5   1.5   1.2    .6    .4    .2   1.0   3.1   2.0    .8   1.0    .7    .8    .0    .0    .0    .0    .0    .0
 310.  *   1.3   1.4   1.4   1.2    .6    .4    .2   1.2   3.0   1.8    .9   1.0    .8    .8    .0    .0    .0    .0    .0    .0
 315.  *   1.3   1.3   1.3   1.2    .7    .3    .2   1.4   2.9   1.7    .9   1.0    .7    .8    .0    .0    .0    .0    .0    .0
 320.  *   1.3   1.3   1.3   1.2    .8    .4    .2   1.5   2.9   1.7   1.0   1.0    .7    .9    .0    .0    .0    .0    .0    .0
 325.  *   1.2   1.3   1.3   1.1    .8    .4    .2   1.4   2.5   1.3   1.0    .9    .9    .9    .0    .0    .0    .0    .0    .0
 330.  *   1.2   1.2   1.2   1.1    .9    .4    .3   1.5   2.4   1.3   1.0   1.0    .9    .9    .0    .0    .0    .0    .0    .0
 335.  *   1.2   1.2   1.2   1.2    .9    .5    .3   1.7   2.2   1.3   1.1    .9   1.0   1.0    .0    .0    .0    .0    .0    .0
 340.  *   1.2   1.2   1.0   1.2    .8    .4    .3   1.6   2.2   1.1   1.0    .8   1.0   1.0    .1    .1    .0    .0    .0    .0
 345.  *   1.2   1.2   1.0   1.1    .9    .7    .7   1.3   1.9   1.1    .8    .8   1.0   1.0    .2    .2    .1    .0    .0    .0
 350.  *   1.2   1.2   1.2   1.2   1.3    .9    .9   1.4   1.5    .9    .7    .8    .8    .9    .3    .3    .2    .2    .0    .0
 355.  *   1.2   1.2   1.3   1.2   1.4   1.4   1.0   1.0   1.0    .6    .6    .7    .7    .8    .4    .4    .3    .2    .2    .0
 360.  *   1.2   1.2   1.4   1.3   1.6   1.5   1.5    .8    .7    .3    .4    .5    .6    .7    .5    .5    .4    .2    .2    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.9   1.9   1.7   2.1   2.3   2.1   1.9   1.7   3.1   3.3   2.6   1.9   1.8   1.6   1.2   1.4   1.7   1.6   1.6   1.4
 DEGR. *  280   280    20   105    65    20    10   335   290   270   190   190   190   180   170   155   170   160   150   125

1
                                                                                                                 PAGE  5
      JOB: Site 7 Opt 1/2  2014 AM - 7B1AM14.DAT                RUN: Site 7 Opt 1/2  2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
  30.  *    .1
  35.  *    .1
  40.  *    .1
```

```
  45.  *    .1
  50.  *    .1
  55.  *    .1
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .1
  80.  *    .2
  85.  *    .3
  90.  *    .4
  95.  *    .7
 100.  *   1.0
 105.  *   1.1
 110.  *   1.1
 115.  *   1.1
 120.  *   1.0
 125.  *    .9
 130.  *   1.1
 135.  *   1.1
 140.  *   1.1
 145.  *   1.0
 150.  *   1.0
 155.  *    .9
 160.  *    .9
 165.  *    .8
 170.  *    .8
 175.  *    .8
 180.  *    .8
 185.  *    .8
 190.  *    .8
 195.  *    .8
 200.  *    .8
 205.  *    .8
1
                                                                                                                               PAGE  6
      JOB: Site 7 Opt 1/2  2014 AM - 7B1AM14.DAT                RUN: Site 7 Opt 1/2  2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .8
 215.  *    .9
 220.  *    .9
 225.  *    .8
 230.  *    .9
 235.  *    .9
 240.  *    .9
 245.  *   1.0
 250.  *    .9
 255.  *    .9
 260.  *    .7
 265.  *    .6
 270.  *    .4
 275.  *    .4
 280.  *    .2
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.1
 DEGR. *  105

 THE HIGHEST CONCENTRATION IS    3.30 PPM AT  270 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    3.10 PPM AT  290 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    2.60 PPM AT  190 DEGREES FROM REC11.
```

```
Site 7 Opt 1/2  2030 AM - 7B1AM30.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 1/2  2030 AM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    1300 9.2  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     835 9.2  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        35       2.0  835   84.1 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     465 9.2  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        95       2.0  465   84.1 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.    1350 9.2  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.     810 9.2  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     500 9.2  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        64       2.0  500   84.1 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     310 9.2  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     310 9.2  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        64       2.0  310   84.1 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     310 9.2  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     310 9.2  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    2150 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    2165 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    2165 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    2165 9.2  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     515 9.2  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120        93       2.0  515   84.1 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.    1650 9.2  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.    1650 9.2  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.    1650 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 7 Opt 1/2  2030 AM - 7B1AM30.DAT               RUN: Site 7 Opt 1/2  2030 AM
      DATE: 05/11/2009   TIME: 02:36:17.86


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   1300.   9.2    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    835.   9.2    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3118.5    1487.6 *      80.   174. AG    132. 100.0    .0 24.0  .35   4.1
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG    465.   9.2    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3102.8    1434.9 *     130.   174. AG    357. 100.0    .0 24.0  .77   6.6
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   1350.   9.2    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG    810.   9.2    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    500.   9.2    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3045.8    1766.1 *      87.   355. AG    241. 100.0    .0 24.0  .33   4.4
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    310.   9.2    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    310.   9.2    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3043.3    1792.6 *     108.    27. AG    120. 100.0    .0 12.0  .45   5.5
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    310.   9.2    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    310.   9.2    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   2150.   9.2    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   2165.   9.2    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   2165.   9.2    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   2165.   9.2    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    515.   9.2    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0     882.5    1471.0 *    2130.   267. AG    175. 100.0    .0 12.0 1.52 108.2
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG   1650.   9.2    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG   1650.   9.2    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG   1650.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Opt 1/2  2030 AM - 7B1AM30.DAT               RUN: Site 7 Opt 1/2  2030 AM
      DATE: 05/11/2009   TIME: 02:36:17.86

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       35       2.0       835       1770      84.10      1        3
       5. SW        Rt1 left  *     120       95       2.0       465       1717      84.10      1        3
       9. NE        Rt1 thru  *     120       64       2.0       500       1770      84.10      1        3
      12. NE        Rt1 right *     120       64       2.0       310       1583      84.10      1        3
      20. NW        Rt2A left *     120       93       2.0       515       1770      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0    *
      2. NE 164 E             *      2845.0     1555.0       5.0    *
      3. NE 82 E              *      2928.0     1555.0       5.0    *
      4. NE CNR               *      2987.0     1532.0       5.0    *
      5. NE 82 N              *      3024.0     1485.0       5.0    *
      6. NE 164 N             *      3039.0     1404.0       5.0    *
      7. NE MID N             *      3051.0     1276.0       5.0    *
      8. NW MID N             *      3162.0     1314.0       5.0    *
      9. NW 164 N             *      3147.0     1453.0       5.0    *
     10. NW 82 N              *      3139.0     1534.0       5.0    *
     11. W CNR                *      3129.0     1614.0       5.0    *
     12. SW 82 S              *      3116.0     1698.0       5.0    *
     13. SW 164 S             *      3106.0     1778.0       5.0    *
     14. SW MID S             *      3088.0     1931.0       5.0    *
     15. SE MID S             *      2992.0     1909.0       5.0    *
     16. SE 164 S             *      2999.0     1830.0       5.0    *
     17. SE 82 S              *      2995.0     1748.0       5.0    *
     18. SE CNR               *      2974.0     1708.0       5.0    *
     19. SE 82 E              *      2942.0     1675.0       5.0    *
     20. SE 164 E             *      2862.0     1644.0       5.0    *
     21. SE MID E             *      2679.0     1632.0       5.0    *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Opt 1/2  2030 AM - 7B1AM30.DAT               RUN: Site 7 Opt 1/2  2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .9    .9   1.1   1.1   1.2   1.1   1.0    .4    .4    .3    .3    .5    .5    .6    .4    .4    .4    .2    .2    .0
   5.  *    .9   1.0   1.1   1.3   1.3   1.2   1.3    .3    .3    .2    .2    .3    .3    .3    .5    .5    .4    .3    .2    .1
  10.  *    .9   1.1   1.1   1.3   1.2   1.4   1.3    .1    .2    .2    .1    .2    .2    .2    .5    .5    .4    .3    .2    .2
  15.  *    .9   1.1   1.1   1.1   1.2   1.6   1.3    .1    .1    .0    .1    .1    .1    .2    .6    .6    .4    .3    .2    .2
  20.  *   1.0   1.0   1.3   1.1   1.3   1.6   1.2    .0    .0    .0    .0    .1    .1    .1    .6    .6    .4    .4    .3    .2
  25.  *   1.0   1.0   1.2   1.2   1.3   1.6   1.2    .0    .0    .0    .0    .0    .1    .1    .6    .5    .5    .4    .4    .2
```

```
 30.  *   1.0   1.0   1.2   1.2   1.5   1.6   1.0    .0    .0    .0    .0    .0    .0    .1    .4    .4    .6    .4    .4    .2
 35.  *   1.1   1.0   1.1   1.0   1.4   1.6   1.0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .6    .6    .3    .2
 40.  *   1.1   1.1   1.1    .8   1.5   1.4    .9    .0    .0    .0    .0    .0    .0    .0    .4    .4    .5    .7    .3    .1
 45.  *   1.2   1.3   1.1    .9   1.6   1.4    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .6    .7    .4    .1
 50.  *   1.3   1.2   1.2    .9   1.7   1.3    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7    .9    .5    .3
 55.  *   1.3   1.2   1.1   1.1   1.7   1.2    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7    .9    .6    .3
 60.  *   1.3   1.3   1.0   1.0   1.7   1.1    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7    .9    .6    .3
 65.  *   1.3   1.2   1.1   1.1   1.8    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .9   1.0    .6    .3
 70.  *   1.4   1.2    .9   1.3   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .9   1.0    .6    .2
 75.  *   1.1   1.1   1.0   1.3   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.0   1.0    .6    .2
 80.  *   1.1   1.1   1.1   1.4   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.0   1.0    .6    .2
 85.  *   1.0    .9   1.0   1.4   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3    .9   1.0    .4    .2
 90.  *    .9    .9   1.1   1.5   1.7    .8    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1   1.0    .4    .2
 95.  *    .6    .7   1.1   1.5   1.7    .8    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.1    .9    .4    .3
100.  *    .5    .8   1.0   1.5   1.6    .7    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.1    .8    .4    .5
105.  *    .3    .7   1.1   1.5   1.5    .8    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1    .7    .2    .6
110.  *    .3    .5    .9   1.5   1.5    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1    .7    .3    .8
115.  *    .2    .5    .8   1.2   1.3    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1    .6    .4   1.0
120.  *    .1    .4    .7   1.2   1.3    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.1    .5    .4   1.0
125.  *    .1    .3    .7   1.2   1.2    .8    .7    .0    .0    .0    .0    .0    .0    .0    .4    .6   1.1    .8    .6   1.0
130.  *    .1    .2    .5   1.1   1.1    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .6   1.0    .7    .8   1.1
135.  *    .2    .2    .6   1.1   1.1    .9    .9    .0    .0    .0    .0    .0    .0    .1    .4    .7   1.0    .5    .9   1.1
140.  *    .2    .3    .4    .9   1.0   1.0    .9    .0    .0    .0    .0    .0    .0    .1    .4    .7   1.1    .5   1.2   1.0
145.  *    .2    .3    .4    .8   1.0   1.0   1.0    .0    .0    .0    .0    .0    .0    .1    .5    .7   1.1    .7   1.1    .8
150.  *    .2    .3    .4    .8    .9   1.1   1.0    .0    .1    .0    .1    .0    .1    .1    .7   1.0   1.1    .9   1.0    .8
155.  *    .1    .3    .4    .7    .9   1.1   1.1    .1    .1    .1    .1    .1    .1    .2    .7   1.0   1.3    .9   1.1    .9
160.  *    .1    .2    .3    .5   1.0   1.0   1.1    .2    .2    .1    .1    .4    .2    .2    .9   1.1   1.4   1.2   1.1    .9
165.  *    .0    .1    .3    .5    .7   1.0   1.0    .2    .4    .4    .6    .4    .5    .4    .9   1.0   1.2   1.2   1.0    .6
170.  *    .0    .1    .3    .4    .6    .8   1.0    .4    .4    .4    .8   1.0    .8    .6    .8   1.1   1.0   1.0    .8    .6
175.  *    .0    .0    .1    .3    .5    .7    .7    .7    .6    .8   1.0   1.2    .9   1.0    .7    .7   1.1    .7    .8    .6
180.  *    .0    .0    .1    .2    .4    .5    .6    .7    .8   1.0   1.4   1.3   1.2   1.1    .4    .6    .7    .6    .7    .6
185.  *    .0    .0    .0    .1    .2    .3    .3    .8    .8   1.3   1.6   1.5   1.2   1.1    .2    .3    .6    .6    .7    .5
190.  *    .0    .0    .0    .0    .1    .2    .2    .9   1.0   1.4   1.7   1.5   1.1   1.1    .2    .3    .5    .5    .5    .5
195.  *    .0    .0    .0    .0    .1    .1    .1   1.0    .9   1.5   1.6   1.2   1.2   1.0    .1    .1    .5    .5    .5    .6
200.  *    .0    .0    .0    .0    .0    .1    .1   1.0    .8   1.4   1.8   1.3   1.1   1.2    .2    .1    .3    .4    .5    .6
205.  *    .0    .0    .0    .0    .0    .0    .0    .9    .8   1.6   1.6   1.1    .9   1.0    .2    .2    .2    .3    .6    .6
1
                                                                                                                   PAGE  4
      JOB: Site 7 Opt 1/2  2030 AM - 7B1AM30.DAT               RUN: Site 7 Opt 1/2  2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .9    .8   1.7   1.5    .8   1.1    .8    .2    .2    .3    .5    .6    .6
 215.  *    .0    .0    .0    .0    .0    .0    .0    .9    .8   1.7   1.4    .9   1.0    .8    .2    .2    .3    .4    .5    .6
 220.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.9   1.3    .9   1.0    .8    .2    .2    .2    .4    .6    .7
 225.  *    .0    .0    .0    .0    .0    .0    .0    .7    .9   1.9   1.2    .9   1.1    .8    .2    .2    .2    .5    .6    .7
 230.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.9   1.2    .9   1.1    .7    .2    .2    .3    .4    .5    .7
 235.  *    .0    .1    .0    .0    .0    .0    .0    .6    .9   1.8   1.0   1.0   1.1    .7    .1    .2    .4    .4    .5    .7
 240.  *    .1    .1    .0    .0    .0    .0    .0    .6    .8   1.8   1.1   1.1   1.1    .6    .1    .2    .4    .4    .5    .7
 245.  *    .1    .1    .1    .0    .0    .0    .0    .6    .9   1.9   1.1    .9   1.2    .6    .1    .2    .3    .4    .5    .8
 250.  *    .2    .3    .2    .0    .0    .0    .0    .6   1.0   1.9   1.1   1.0   1.2    .6    .1    .1    .3    .4    .6    .7
 255.  *    .5    .5    .4    .2    .0    .0    .0    .6   1.0   2.0   1.2   1.0   1.0    .6    .1    .1    .3    .4    .6    .7
 260.  *    .6    .7    .6    .2    .1    .0    .0    .7   1.2   2.2   1.2   1.0    .9    .6    .1    .1    .1    .3    .4    .7
 265.  *   1.0   1.0    .8    .4    .1    .1    .0    .7   1.5   2.3   1.2   1.1    .8    .5    .0    .1    .1    .1    .3    .7
 270.  *   1.2   1.3   1.1    .6    .3    .1    .0    .8   1.6   2.3   1.0   1.1    .8    .5    .0    .0    .1    .1    .2    .4
 275.  *   1.3   1.5   1.3    .7    .3    .1    .1    .7   1.5   2.2   1.0   1.0    .7    .5    .0    .0    .0    .1    .1    .2
 280.  *   1.5   1.6   1.3    .7    .4    .2    .1    .7   1.7   2.1    .9    .9    .6    .5    .0    .0    .0    .0    .0    .1
 285.  *   1.5   1.5   1.3    .8    .4    .2    .1    .7   1.8   2.2    .6    .9    .6    .5    .0    .0    .0    .0    .0    .0
 290.  *   1.3   1.3   1.2    .8    .5    .2    .1    .8   1.9   1.9    .5    .9    .5    .5    .0    .0    .0    .0    .0    .0
 295.  *   1.2   1.2   1.3    .9    .5    .2    .1    .9   1.9   1.8    .5    .9    .5    .5    .0    .0    .0    .0    .0    .0
 300.  *   1.2   1.2   1.3    .9    .6    .2    .2    .9   2.0   1.6    .6    .9    .6    .5    .0    .0    .0    .0    .0    .0
 305.  *   1.1   1.2   1.1    .9    .5    .2    .2    .9   1.9   1.5    .6    .9    .6    .7    .0    .0    .0    .0    .0    .0
 310.  *   1.1   1.1   1.1    .9    .5    .2    .2    .9   1.8   1.2    .8    .9    .6    .7    .0    .0    .0    .0    .0    .0
 315.  *   1.0   1.0   1.0    .9    .6    .3    .2   1.1   1.8   1.3    .9    .9    .6    .7    .0    .0    .0    .0    .0    .0
 320.  *   1.0   1.0   1.0    .8    .7    .3    .2   1.0   1.7   1.1    .9    .9    .6    .8    .0    .0    .0    .0    .0    .0
 325.  *    .9   1.0    .9    .9    .6    .4    .2   1.1   1.5   1.1    .9    .8    .7    .8    .0    .0    .0    .0    .0    .0
 330.  *    .9    .9    .9    .9    .6    .3    .2   1.1   1.5   1.1   1.0    .9    .8    .8    .0    .0    .0    .0    .0    .0
 335.  *    .9    .9    .9    .9    .6    .3    .2   1.3   1.4    .9    .9    .7    .8    .9    .0    .0    .0    .0    .0    .0
 340.  *    .9    .9    .9    .8    .7    .4    .2   1.2   1.3    .9    .8    .7    .9    .9    .1    .1    .0    .0    .0    .0
 345.  *    .9    .9    .9    .8    .8    .5    .3   1.2   1.3    .8    .7    .7    .8    .8    .1    .2    .1    .0    .0    .0
 350.  *    .9    .9    .9    .9   1.0    .7    .6    .9   1.0    .7    .7    .7    .7    .8    .3    .2    .2    .2    .0    .0
 355.  *    .9    .9    .9   1.0   1.1   1.0    .8    .7    .6    .5    .5    .6    .6    .7    .3    .3    .2    .2    .2    .0
 360.  *    .9    .9   1.1   1.1   1.2   1.1   1.0    .4    .4    .3    .3    .5    .5    .6    .4    .4    .4    .2    .2    .0
 ------*-------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.5   1.6   1.3   1.5   1.8   1.6   1.3   1.3   2.0   2.3   1.8   1.5   1.2   1.2    .9   1.1   1.4   1.2   1.2   1.1
 DEGR. *  280   280    20    90    65    15     5   335   300   265   200   185   180   200   160   170   160   160   140   130

1
                                                                                                                   PAGE  5
      JOB: Site 7 Opt 1/2  2030 AM - 7B1AM30.DAT               RUN: Site 7 Opt 1/2  2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .1
  30.  *    .1
  35.  *    .1
  40.  *    .1
```

```
  45.  *    .1
  50.  *    .1
  55.  *    .1
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .1
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .6
 100.  *    .6
 105.  *    .8
 110.  *    .8
 115.  *    .9
 120.  *    .9
 125.  *    .8
 130.  *    .8
 135.  *    .8
 140.  *    .7
 145.  *    .8
 150.  *    .7
 155.  *    .7
 160.  *    .7
 165.  *    .6
 170.  *    .6
 175.  *    .6
 180.  *    .6
 185.  *    .6
 190.  *    .6
 195.  *    .6
 200.  *    .6
 205.  *    .6
1
                                                                                                                       PAGE  6
      JOB: Site 7 Opt 1/2  2030 AM - 7B1AM30.DAT                RUN: Site 7 Opt 1/2  2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .6
 215.  *    .6
 220.  *    .8
 225.  *    .7
 230.  *    .7
 235.  *    .7
 240.  *    .7
 245.  *    .7
 250.  *    .7
 255.  *    .7
 260.  *    .6
 265.  *    .5
 270.  *    .4
 275.  *    .3
 280.  *    .1
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .9
 DEGR. *  115

 THE HIGHEST CONCENTRATION IS    2.30 PPM AT  265 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    2.00 PPM AT  300 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT  200 DEGREES FROM REC11.
```

```
Site 7 Opt 1/2  2014 PM - 7B1PM14.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 1/2  2014 PM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    229311.4  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     68011.4  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        85       2.0  680  102.2 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.    161311.4  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        59       2.0 1613  102.2 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.     99011.4  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.    143611.4  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     89711.4  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        85       2.0  897  102.2 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     53911.4  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     53911.4  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        85       2.0  539  102.2 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     53911.4  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     53911.4  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    162711.4  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    104011.4  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    104011.4  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    104011.4  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     31011.4  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120       106       2.0  310  102.2 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.     73011.4  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.     73011.4  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.     73011.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 7 Opt 1/2  2014 PM - 7B1PM14.DAT                RUN: Site 7 Opt 1/2  2014 PM
      DATE: 05/11/2009   TIME: 02:31:04.79


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1         Y1         X2         Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*-----------------------------------------*-----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   2293.  11.4    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    680.  11.4    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3127.1    1407.5 *     160.   174. AG    388. 100.0    .0 24.0  .74   8.1
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG   1613.  11.4    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3127.6    1184.0 *     382.   174. AG    270. 100.0    .0 24.0  .99  19.4
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG    990.  11.4    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG   1436.  11.4    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    897.  11.4    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3026.4    1972.1 *     294.   355. AG    388. 100.0    .0 24.0  .98  15.0
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    539.  11.4    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    539.  11.4    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3753.3    3183.0 *    1670.    27. AG    194. 100.0    .0 12.0 1.32  84.8
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    539.  11.4    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    539.  11.4    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1627.  11.4    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   1040.  11.4    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   1040.  11.4    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   1040.  11.4    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    310.  11.4    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    1103.6    1484.1 *    1909.   267. AG    242. 100.0    .0 12.0 2.11  97.0
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG    730.  11.4    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG    730.  11.4    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG    730.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Opt 1/2  2014 PM - 7B1PM14.DAT                RUN: Site 7 Opt 1/2  2014 PM
      DATE: 05/11/2009   TIME: 02:31:04.79

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       85       2.0       680       1770     102.20      1        3
       5. SW        Rt1 left  *     120       59       2.0      1613       1717     102.20      1        3
       9. NE        Rt1 thru  *     120       85       2.0       897       1770     102.20      1        3
      12. NE        Rt1 right *     120       85       2.0       539       1583     102.20      1        3
      20. NW        Rt2A left *     120      106       2.0       310       1770     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z          *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0    *
      2. NE 164 E             *      2845.0     1555.0       5.0    *
      3. NE 82 E              *      2928.0     1555.0       5.0    *
      4. NE CNR               *      2987.0     1532.0       5.0    *
      5. NE 82 N              *      3024.0     1485.0       5.0    *
      6. NE 164 N             *      3039.0     1404.0       5.0    *
      7. NE MID N             *      3051.0     1276.0       5.0    *
      8. NW MID N             *      3162.0     1314.0       5.0    *
      9. NW 164 N             *      3147.0     1453.0       5.0    *
     10. NW 82 N              *      3139.0     1534.0       5.0    *
     11. W CNR                *      3129.0     1614.0       5.0    *
     12. SW 82 S              *      3116.0     1698.0       5.0    *
     13. SW 164 S             *      3106.0     1778.0       5.0    *
     14. SW MID S             *      3088.0     1931.0       5.0    *
     15. SE MID S             *      2992.0     1909.0       5.0    *
     16. SE 164 S             *      2999.0     1830.0       5.0    *
     17. SE 82 S              *      2995.0     1748.0       5.0    *
     18. SE CNR               *      2974.0     1708.0       5.0    *
     19. SE 82 E              *      2942.0     1675.0       5.0    *
     20. SE 164 E             *      2862.0     1644.0       5.0    *
     21. SE MID E             *      2679.0     1632.0       5.0    *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Opt 1/2  2014 PM - 7B1PM14.DAT                RUN: Site 7 Opt 1/2  2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .8    .9   1.2   1.4   1.2   1.3   1.5   1.1   1.0    .6    .7    .7    .9    .5    .8   1.0    .8    .5    .4    .1
   5.  *    .8    .9   1.3   1.5   1.5   1.6   2.0    .8    .6    .5    .6    .5    .7    .5    .9   1.2   1.2    .8    .4    .2
  10.  *    .9   1.0   1.5   1.6   1.6   2.0   1.9    .3    .4    .3    .3    .3    .5    .3   1.0   1.3   1.3    .9    .6    .2
  15.  *    .9   1.1   1.5   1.7   1.5   2.0   2.2    .3    .3    .1    .3    .3    .4    .3   1.0   1.6   1.5   1.1    .7    .3
  20.  *   1.0   1.1   1.6   1.5   1.5   1.9   2.0    .1    .1    .1    .1    .3    .4    .4   1.2   1.6   1.7   1.4    .8    .5
  25.  *   1.1   1.3   1.6   1.4   1.5   1.9   2.0    .0    .1    .1    .1    .2    .3    .6   1.3   1.8   1.9   1.7   1.0    .5
```

```
  30.  *   1.3   1.4   1.7   1.2   1.6   2.0   1.8    .0    .0    .0    .1    .1    .2    .6   1.4   1.8   2.1   1.8   1.1    .6
  35.  *   1.3   1.6   1.5   1.1   1.6   1.9   1.8    .0    .0    .0    .0    .1    .1    .6   1.5   1.9   2.1   1.8   1.2    .6
  40.  *   1.3   1.7   1.4   1.0   1.5   2.0   1.6    .0    .0    .0    .0    .0    .1    .6   1.6   2.0   2.0   1.8   1.2    .7
  45.  *   1.4   1.6   1.3    .8   1.6   1.9   1.6    .0    .0    .0    .0    .0    .0    .6   1.6   1.9   2.0   1.8   1.1    .8
  50.  *   1.4   1.5   1.2    .7   1.8   1.9   1.5    .0    .0    .0    .0    .0    .0    .6   1.6   1.7   1.9   1.8   1.2    .7
  55.  *   1.4   1.4   1.0   1.0   1.8   1.8   1.4    .0    .0    .0    .0    .0    .0    .6   1.7   1.7   1.9   1.6   1.1    .7
  60.  *   1.3   1.4   1.2   1.1   1.9   1.8   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.7   1.8   1.5   1.1    .7
  65.  *   1.3   1.3   1.0   1.1   1.9   1.7   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.7   1.9   1.5   1.0    .5
  70.  *   1.1   1.3    .8   1.0   1.8   1.7   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.7   1.8   1.5   1.0    .5
  75.  *   1.0   1.0    .8   1.2   1.8   1.7   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.6   1.8   1.5    .9    .7
  80.  *   1.1   1.1   1.0   1.3   2.0   1.6   1.3    .0    .0    .0    .0    .0    .0    .4   1.6   1.7   1.8   1.4    .8    .5
  85.  *   1.0   1.0   1.0   1.4   2.0   1.6   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.7   1.7   1.4    .7    .4
  90.  *    .8    .7   1.0   1.5   2.0   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.4    .6    .5
  95.  *    .7    .9   1.2   1.5   1.9   1.5   1.3    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.3    .5    .5
 100.  *    .6    .7   1.2   1.6   1.9   1.4   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.5   1.7   1.3    .5    .5
 105.  *    .5    .7   1.2   1.5   1.9   1.4   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.1    .6    .8
 110.  *    .4    .8   1.2   1.5   1.9   1.3   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.1    .7    .9
 115.  *    .4    .7   1.1   1.5   1.9   1.3   1.6    .0    .0    .0    .0    .0    .0    .4   1.7   1.6   1.6   1.1    .8   1.2
 120.  *    .3    .7   1.1   1.5   1.8   1.4   1.5    .0    .0    .0    .0    .0    .0    .4   1.7   1.5   1.6   1.1    .9   1.4
 125.  *    .4    .6   1.0   1.5   1.7   1.5   1.5    .0    .0    .0    .0    .0    .0    .4   1.8   1.6   1.6   1.1   1.2   1.6
 130.  *    .4    .6    .9   1.4   1.6   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.8   1.7   1.6   1.1   1.2   1.5
 135.  *    .3    .5    .9   1.4   1.6   1.6   1.5    .0    .0    .0    .0    .0    .0    .4   1.9   1.8   1.6   1.1   1.2   1.4
 140.  *    .2    .5    .9   1.4   1.7   1.5   1.4    .0    .0    .0    .0    .0    .0    .5   1.8   1.8   1.8   1.3   1.2   1.2
 145.  *    .2    .5    .7   1.3   1.6   1.7   1.5    .0    .0    .0    .0    .0    .0    .5   1.8   2.1   1.9   1.2   1.6   1.0
 150.  *    .2    .5    .8   1.2   1.6   1.7   1.4    .1    .1    .1    .2    .0    .1    .5   2.1   2.3   2.0   1.4   1.6   1.0
 155.  *    .2    .4    .6   1.1   1.5   1.6   1.5    .1    .2    .2    .2    .2    .2    .5   2.2   2.2   2.0   1.5   1.6   1.0
 160.  *    .2    .2    .6    .9   1.5   1.6   1.4    .3    .2    .5    .6    .6    .7    .8   2.2   2.4   1.9   1.3   1.3    .9
 165.  *    .0    .2    .4    .7   1.3   1.3   1.3    .4    .7    .8   1.0   1.0    .8   1.4   2.1   2.0   1.9   1.3   1.2    .7
 170.  *    .0    .2    .2    .7   1.0   1.2   1.1    .7   1.0   1.3   1.5   1.3   1.2   1.6   1.6   1.8   1.8   1.0   1.1    .7
 175.  *    .0    .0    .2    .3    .8    .9    .9   1.0   1.3   1.7   2.0   1.8   1.3   2.0   1.3   1.4   1.3   1.0    .8    .6
 180.  *    .0    .0    .1    .2    .5    .6    .7   1.2   1.7   2.2   2.5   1.9   1.6   2.1   1.0   1.3   1.2    .9    .8    .5
 185.  *    .0    .0    .0    .1    .3    .4    .4   1.4   1.9   2.7   2.8   2.0   1.7   2.2    .6    .7    .8    .5    .6    .5
 190.  *    .0    .0    .0    .0    .1    .2    .2   1.7   2.3   3.1   2.8   2.0   1.7   2.2    .4    .3    .6    .4    .6    .5
 195.  *    .0    .0    .0    .0    .1    .1    .1   1.6   2.5   3.1   2.7   1.8   1.5   2.3    .1    .2    .4    .4    .5    .5
 200.  *    .0    .0    .0    .0    .0    .1    .1   1.8   2.6   3.1   2.5   1.4   1.4   2.0    .1    .1    .5    .6    .6    .5
 205.  *    .0    .0    .0    .0    .0    .0    .0   1.8   2.7   3.0   2.2   1.3   1.3   1.9    .1    .1    .5    .5    .6    .5
1
                                                                                                                     PAGE  4
      JOB: Site 7 Opt 1/2  2014 PM - 7B1PM14.DAT                RUN: Site 7 Opt 1/2  2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.7   2.7   3.0   2.1   1.0   1.2   1.9    .2    .2    .3    .5    .7    .5
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.6   2.7   3.0   1.9    .9   1.2   1.9    .2    .2    .4    .5    .7    .5
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.6   2.7   2.9   1.8    .9   1.3   1.6    .2    .2    .3    .5    .5    .6
 225.  *    .0    .0    .0    .0    .0    .0    .0   1.6   2.6   2.7   1.6    .9   1.5   1.6    .2    .2    .3    .5    .5    .7
 230.  *    .0    .0    .0    .0    .0    .0    .0   1.5   2.6   2.7   1.4   1.0   1.6   1.5    .1    .3    .3    .4    .5    .7
 235.  *    .0    .0    .0    .0    .0    .0    .0   1.4   2.6   2.7   1.2    .8   1.8   1.4    .1    .3    .3    .4    .6    .7
 240.  *    .0    .0    .0    .0    .0    .0    .0   1.4   2.5   2.6   1.1    .9   1.8   1.4    .1    .2    .3    .4    .6    .6
 245.  *    .2    .2    .0    .0    .0    .0    .0   1.4   2.5   2.6   1.1   1.1   1.7   1.4    .1    .2    .3    .4    .5    .6
 250.  *    .2    .2    .2    .0    .0    .0    .0   1.4   2.5   2.6   1.3   1.2   1.6   1.4    .1    .2    .3    .4    .5    .7
 255.  *    .3    .4    .3    .1    .0    .0    .0   1.5   2.6   2.7   1.3   1.3   1.7   1.4    .1    .1    .2    .4    .4    .6
 260.  *    .6    .5    .5    .3    .1    .0    .0   1.5   2.7   2.9   1.5   1.4   1.7   1.4    .1    .1    .2    .2    .4    .5
 265.  *    .7    .8    .7    .4    .2    .1    .0   1.5   2.7   2.9   1.4   1.3   1.6   1.3    .0    .1    .1    .2    .4    .4
 270.  *   1.0   1.1    .8    .4    .2    .1    .1   1.6   2.8   3.0   1.4   1.4   1.6   1.3    .0    .0    .1    .1    .2    .4
 275.  *   1.1   1.2   1.0    .5    .4    .2    .1   1.5   2.8   3.0   1.2   1.3   1.5   1.3    .0    .0    .0    .1    .1    .2
 280.  *   1.2   1.1   1.1    .7    .4    .2    .1   1.5   2.9   2.9    .9   1.2   1.5   1.3    .0    .0    .0    .0    .1    .1
 285.  *   1.1   1.1   1.1    .7    .4    .2    .1   1.5   2.9   2.7    .8   1.3   1.4   1.3    .0    .0    .0    .0    .0    .0
 290.  *   1.1   1.1    .9    .7    .4    .3    .1   1.5   2.9   2.5    .8   1.3   1.6   1.2    .0    .0    .0    .0    .0    .0
 295.  *   1.1   1.1   1.0    .7    .4    .3    .1   1.6   3.0   2.6    .7   1.4   1.5   1.2    .0    .0    .0    .0    .0    .0
 300.  *    .9   1.0   1.1    .7    .3    .3    .1   1.6   2.9   2.4    .8   1.4   1.4   1.1    .0    .0    .0    .0    .0    .0
 305.  *    .9   1.0   1.0    .7    .4    .3    .1   1.7   3.1   2.2    .9   1.4   1.6   1.0    .0    .0    .0    .0    .0    .0
 310.  *    .9    .9   1.0    .7    .5    .3    .2   1.8   3.0   2.3   1.0   1.5   1.6   1.1    .0    .0    .0    .0    .0    .0
 315.  *    .9    .9    .9    .7    .4    .3    .2   1.9   2.9   2.0   1.1   1.6   1.6   1.1    .0    .0    .0    .0    .0    .0
 320.  *    .9    .9    .8    .7    .3    .2    .2   1.9   3.0   2.1   1.2   1.7   1.7   1.0    .0    .0    .0    .0    .0    .0
 325.  *    .8    .9    .8    .7    .4    .1    .1   2.0   2.9   1.9   1.4   1.7   1.6   1.0    .0    .0    .0    .0    .0    .0
 330.  *    .8    .8    .8    .7    .4    .1    .1   2.3   3.0   2.0   1.4   1.6   1.6   1.0    .0    .0    .0    .0    .0    .0
 335.  *    .8    .8    .9    .7    .4    .1    .2   2.3   2.9   1.7   1.4   1.7   1.7   1.0    .1    .1    .0    .0    .0    .0
 340.  *    .8    .8    .9    .7    .5    .4    .2   2.3   2.4   1.5   1.4   1.7   1.7   1.0    .1    .1    .1    .0    .0    .0
 345.  *    .8    .8    .9    .9    .7    .6    .5   2.4   2.4   1.5   1.4   1.5   1.5    .9    .2    .3    .2    .1    .0    .0
 350.  *    .8    .8   1.0   1.0   1.1   1.0   1.0   1.8   1.9   1.3   1.2   1.2   1.3    .9    .4    .5    .4    .2    .1    .0
 355.  *    .8    .8   1.0   1.2   1.2   1.2   1.1   1.6   1.4    .7    .8   1.0   1.1    .7    .5    .7    .6    .4    .1    .0
 360.  *    .8    .9   1.2   1.4   1.2   1.3   1.5   1.1   1.0    .6    .7    .7    .9    .5    .8   1.0    .8    .5    .4    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.4   1.7   1.7   1.7   2.0   2.0   2.2   2.4   3.1   3.1   2.8   2.0   1.8   2.3   2.2   2.4   2.1   1.8   1.6   1.6
 DEGR. *   45    40    30    15    80    10    15   345   305   190   185   185   235   195   160   160    30    30   150   125

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                                                                                                                     PAGE  5
      JOB: Site 7 Opt 1/2  2014 PM - 7B1PM14.DAT                RUN: Site 7 Opt 1/2  2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .2
  30.  *    .3
  35.  *    .3
  40.  *    .4
```

```
  45.  *    .4
  50.  *    .4
  55.  *    .4
  60.  *    .4
  65.  *    .4
  70.  *    .3
  75.  *    .3
  80.  *    .2
  85.  *    .2
  90.  *    .4
  95.  *    .6
 100.  *    .8
 105.  *    .9
 110.  *   1.0
 115.  *   1.0
 120.  *   1.0
 125.  *   1.0
 130.  *   1.1
 135.  *    .9
 140.  *    .7
 145.  *    .7
 150.  *    .7
 155.  *    .7
 160.  *    .7
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                             PAGE  6
      JOB: Site 7 Opt 1/2  2014 PM - 7B1PM14.DAT                RUN: Site 7 Opt 1/2  2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .6
 225.  *    .7
 230.  *    .7
 235.  *    .6
 240.  *    .6
 245.  *    .6
 250.  *    .7
 255.  *    .6
 260.  *    .6
 265.  *    .5
 270.  *    .5
 275.  *    .2
 280.  *    .1
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.1
 DEGR. *  130

 THE HIGHEST CONCENTRATION IS    3.10 PPM AT  305 DEGREES FROM REC9 .
 THE 2ND HIGHEST CONCENTRATION IS    3.10 PPM AT  190 DEGREES FROM REC10.
 THE 3RD HIGHEST CONCENTRATION IS    2.80 PPM AT  185 DEGREES FROM REC11.
```

```
Site 7 Opt 1/2  2030 PM - 7B1PM30.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 1/2  2030 PM                  23  1   0
  1
SW         Rt1 aprch AG  3198.   626.  3134.  1223.    2220 9.2  0.  68   30.
  1
SW         Rt1 thru  AG  3147.  1222.  3104.  1622.     705 9.2  0.  44   30.
  2
SW         Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        23       2.0  705   84.1 1770 1 3
  1
SW         Rt1 left  AG  3124.  1222.  3084.  1620.    1515 9.2  0.  44   30.
  2
SW         Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        63       2.0 1515   84.1 1717 1 3
  1
SW         Rt1 departAG  3096.  1624.  2998.  2605.    1060 9.2  0.  44   30.
  1
NE         Rt1 aprch AG  2949.  2604.  3037.  1830.    1500 9.2  0.  44   30.
  1
NE         Rt1 thru  AG  3041.  1826.  3060.  1610.     910 9.2  0.  44   30.
  2
NE         Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        84       2.0  910   84.1 1770 1 3
  1
NE         Rt1 right AG  3024.  1819.  3021.  1749.     590 9.2  0.  32   30.
  1
NE         Rt1 right AG  3021.  1749.  2991.  1690.     590 9.2  0.  32   30.
  2
NE         Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        84       2.0  590   84.1 1583 1 3
  1
NE         Rt1 right AG  2991.  1690.  2948.  1649.     590 9.2  0.  32   30.
  1
NE         Rt1 right AG  2948.  1649.  2891.  1621.     590 9.2  0.  32   30.
```

```
  1
NE         Rt1 departAG  3058.  1610.  3129.   619.    1615 9.2  0.  44   30.
  1
NW         Rt2A aprchAG  2285.  1598.  2444.  1576.    1060 9.2  0.  44   30.
  1
NW         Rt2A aprchAG  2444.  1576.  2590.  1567.    1060 9.2  0.  44   30.
  1
NW         Rt2A aprchAG  2590.  1567.  2870.  1583.    1060 9.2  0.  44   30.
  1
NW         Rt2A left AG  2873.  1589.  3076.  1601.     355 9.2  0.  32   30.
  2
NW         Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120       105       2.0  355   84.1 1770 1 3
  1
NW         Rt2A rightAG  2874.  1576.  2947.  1576.     705 9.2  0.  32   30.
  1
NW         Rt2A rightAG  2947.  1576.  3015.  1544.     705 9.2  0.  32   30.
  1
NW         Rt2A rightAG  3015.  1544.  3065.  1467.     705 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 7 Opt 1/2  2030 PM - 7B1PM30.DAT                RUN: Site 7 Opt 1/2  2030 PM
      DATE: 05/11/2009   TIME: 02:40:14.98


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   2220.   9.2    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    705.   9.2    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3114.7    1523.0 *      44.   174. AG     86. 100.0    .0 24.0  .26   2.2
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG   1515.   9.2    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3128.6    1173.3 *     393.   174. AG    237. 100.0    .0 24.0 1.00  19.9
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   1060.   9.2    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG   1500.   9.2    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    910.   9.2    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3027.4    1961.0 *     283.   355. AG    316. 100.0    .0 24.0  .96  14.4
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    590.   9.2    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    590.   9.2    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3932.7    3534.4 *    2064.    27. AG    158. 100.0    .0 12.0 1.40 104.9
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    590.   9.2    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    590.   9.2    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1615.   9.2    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   1060.   9.2    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   1060.   9.2    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   1060.   9.2    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    355.   9.2    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0     773.5    1464.5 *    2239.   267. AG    197. 100.0    .0 12.0 2.19 113.8
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG    705.   9.2    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG    705.   9.2    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG    705.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Opt 1/2  2030 PM - 7B1PM30.DAT                RUN: Site 7 Opt 1/2  2030 PM
      DATE: 05/11/2009   TIME: 02:40:14.98

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *      120      23       2.0       705       1770      84.10      1        3
       5. SW        Rt1 left  *      120      63       2.0      1515       1717      84.10      1        3
       9. NE        Rt1 thru  *      120      84       2.0       910       1770      84.10      1        3
      12. NE        Rt1 right *      120      84       2.0       590       1583      84.10      1        3
      20. NW        Rt2A left *      120     105       2.0       355       1770      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0        5.0   *
      2. NE 164 E             *      2845.0     1555.0        5.0   *
      3. NE 82 E              *      2928.0     1555.0        5.0   *
      4. NE CNR               *      2987.0     1532.0        5.0   *
      5. NE 82 N              *      3024.0     1485.0        5.0   *
      6. NE 164 N             *      3039.0     1404.0        5.0   *
      7. NE MID N             *      3051.0     1276.0        5.0   *
      8. NW MID N             *      3162.0     1314.0        5.0   *
      9. NW 164 N             *      3147.0     1453.0        5.0   *
     10. NW 82 N              *      3139.0     1534.0        5.0   *
     11. W CNR                *      3129.0     1614.0        5.0   *
     12. SW 82 S              *      3116.0     1698.0        5.0   *
     13. SW 164 S             *      3106.0     1778.0        5.0   *
     14. SW MID S             *      3088.0     1931.0        5.0   *
     15. SE MID S             *      2992.0     1909.0        5.0   *
     16. SE 164 S             *      2999.0     1830.0        5.0   *
     17. SE 82 S              *      2995.0     1748.0        5.0   *
     18. SE CNR               *      2974.0     1708.0        5.0   *
     19. SE 82 E              *      2942.0     1675.0        5.0   *
     20. SE 164 E             *      2862.0     1644.0        5.0   *
     21. SE MID E             *      2679.0     1632.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Opt 1/2  2030 PM - 7B1PM30.DAT                RUN: Site 7 Opt 1/2  2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-----------------------------------------------------------------------------------------------------------------------
   0.  *    .6    .8   1.0   1.0   1.0   1.2   1.2    .8    .6    .6    .5    .7    .6    .5    .6    .7    .6    .4    .3    .1
   5.  *    .6    .7   1.1   1.2   1.2   1.3   1.4    .5    .4    .4    .3    .5    .6    .5    .7   1.0   1.0    .6    .4    .1
  10.  *    .6    .8   1.1   1.3   1.3   1.4   1.5    .2    .2    .2    .2    .3    .5    .3    .8   1.1   1.1    .7    .5    .2
  15.  *    .7   1.0   1.2   1.2   1.3   1.4   1.6    .2    .1    .1    .1    .3    .4    .3    .8   1.3   1.4    .8    .6    .3
  20.  *    .8   1.1   1.3   1.2   1.1   1.5   1.5    .1    .1    .1    .1    .2    .4    .4   1.0   1.4   1.5   1.2    .8    .4
  25.  *   1.0   1.1   1.4   1.0   1.3   1.4   1.5    .0    .1    .1    .1    .1    .2    .5   1.0   1.5   1.6   1.2    .8    .4
```

```
  30.  *   1.1   1.2   1.4   1.0   1.2   1.3   1.4    .0    .0    .0    .1    .1    .2    .5   1.2   1.5   1.7   1.5    .9    .6
  35.  *   1.1   1.2   1.2    .7   1.1   1.3   1.3    .0    .0    .0    .0    .1    .1    .5   1.2   1.6   1.7   1.5   1.0    .6
  40.  *   1.1   1.2   1.1    .8   1.1   1.3   1.3    .0    .0    .0    .0    .0    .1    .5   1.3   1.6   1.8   1.5   1.2    .6
  45.  *   1.1   1.4   1.1    .7   1.1   1.3   1.3    .0    .0    .0    .0    .0    .0    .5   1.3   1.6   1.8   1.3    .9    .6
  50.  *   1.1   1.3    .9    .6   1.2   1.2   1.3    .0    .0    .0    .0    .0    .0    .5   1.4   1.6   1.7   1.3   1.0    .6
  55.  *   1.1   1.2    .9    .5   1.3   1.2   1.3    .0    .0    .0    .0    .0    .0    .5   1.4   1.6   1.7   1.3   1.0    .6
  60.  *   1.1   1.0    .9    .8   1.2   1.2   1.2    .0    .0    .0    .0    .0    .0    .4   1.4   1.4   1.4   1.2    .9    .5
  65.  *    .9    .9    .9    .8   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.3   1.2    .9    .5
  70.  *    .9    .6    .7    .8   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.2    .8    .5
  75.  *    .7    .8    .7    .8   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.2    .8    .5
  80.  *    .6    .7    .6    .9   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.2    .7    .4
  85.  *    .8    .8    .6    .9   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.3   1.4   1.1    .7    .4
  90.  *    .7    .5    .7   1.1   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.1    .5    .3
  95.  *    .5    .5    .7   1.1   1.2   1.1   1.0    .0    .0    .0    .0    .0    .0    .3   1.4   1.3   1.4   1.0    .5    .3
 100.  *    .5    .4    .8   1.0   1.2   1.1   1.0    .0    .0    .0    .0    .0    .0    .3   1.4   1.2   1.2   1.0    .5    .4
 105.  *    .4    .3    .8   1.0   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .3   1.4   1.3   1.2   1.0    .5    .6
 110.  *    .3    .3    .8   1.1   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .3   1.4   1.5   1.3    .8    .5    .7
 115.  *    .3    .3    .8   1.1   1.1   1.2   1.1    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .7    .6    .7
 120.  *    .3    .3    .7   1.1   1.1   1.2   1.3    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .7    .7    .7
 125.  *    .4    .4    .7   1.1   1.3   1.3   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .7    .6   1.0
 130.  *    .3    .3    .6   1.0   1.3   1.3   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.2   1.0    .9   1.0
 135.  *    .3    .4    .6   1.0   1.3   1.4   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .8   1.0   1.0
 140.  *    .2    .4    .6   1.0   1.3   1.4   1.1    .0    .0    .0    .0    .0    .0    .3   1.6   1.4   1.5    .9   1.0   1.1
 145.  *    .2    .3    .6   1.1   1.4   1.3   1.2    .0    .0    .0    .0    .0    .0    .5   1.5   1.5   1.5   1.0   1.0   1.0
 150.  *    .2    .3    .5   1.0   1.2   1.4   1.1    .0    .0    .0    .1    .0    .1    .5   1.4   1.5   1.6   1.0   1.0   1.0
 155.  *    .2    .2    .5    .7   1.3   1.3   1.1    .1    .1    .1    .1    .0    .1    .5   1.6   1.6   1.5   1.1   1.0    .7
 160.  *    .0    .2    .4    .8   1.2   1.2   1.2    .3    .2    .3    .4    .3    .3    .6   1.5   1.6   1.5   1.1   1.1    .5
 165.  *    .0    .2    .3    .7   1.0   1.2   1.0    .4    .4    .5    .6    .6    .7   1.1   1.4   1.7   1.5    .9   1.0    .6
 170.  *    .0    .1    .2    .4    .8    .9    .9    .6    .7    .8    .8    .8    .8   1.2   1.3   1.2   1.4    .8    .9    .7
 175.  *    .0    .0    .2    .3    .6    .7    .7    .7    .8   1.1   1.2   1.0   1.1   1.5   1.1   1.1   1.1    .8    .6    .4
 180.  *    .0    .0    .0    .2    .3    .4    .5   1.1   1.2   1.3   1.4   1.4   1.1   1.6    .9   1.0   1.0    .5    .5    .4
 185.  *    .0    .0    .0    .1    .3    .3    .4   1.2   1.5   1.5   1.6   1.4   1.4   1.7    .4    .5    .6    .5    .5    .4
 190.  *    .0    .0    .0    .0    .1    .1    .2   1.4   1.5   1.5   1.7   1.3   1.4   1.8    .3    .3    .6    .4    .4    .5
 195.  *    .0    .0    .0    .0    .0    .1    .1   1.4   1.5   1.6   1.7   1.2   1.0   1.7    .1    .2    .4    .4    .4    .5
 200.  *    .0    .0    .0    .0    .0    .0    .1   1.4   1.6   1.5   1.6   1.1   1.0   1.6    .1    .1    .4    .3    .4    .5
 205.  *    .0    .0    .0    .0    .0    .0    .0   1.3   1.5   1.5   1.5   1.0   1.2   1.7    .1    .1    .3    .4    .4    .5
1
                                                                                                                PAGE  4
      JOB: Site 7 Opt 1/2  2030 PM - 7B1PM30.DAT                RUN: Site 7 Opt 1/2  2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   1.5   1.5    .8   1.1   1.6    .1    .1    .2    .4    .4    .5
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   1.5   1.4    .6   1.1   1.4    .1    .2    .1    .4    .4    .5
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.4   1.4   1.2    .7   1.1   1.4    .1    .2    .3    .5    .4    .5
 225.  *    .0    .0    .0    .0    .0    .0    .0   1.3   1.3   1.3   1.1    .6   1.2   1.3    .1    .2    .3    .4    .4    .5
 230.  *    .0    .0    .0    .0    .0    .0    .0   1.2   1.3   1.4   1.0    .6   1.2   1.2    .1    .2    .3    .3    .4    .5
 235.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.5    .9    .8   1.4   1.2    .1    .1    .3    .3    .5    .5
 240.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.2   1.5    .9    .8   1.5   1.2    .1    .1    .3    .3    .5    .5
 245.  *    .0    .1    .0    .0    .0    .0    .0   1.1   1.1   1.4    .8   1.0   1.5   1.2    .1    .1    .3    .3    .4    .6
 250.  *    .2    .2    .1    .0    .0    .0    .0   1.1   1.1   1.4   1.0   1.1   1.4   1.2    .1    .1    .2    .3    .4    .6
 255.  *    .3    .3    .3    .1    .0    .0    .0   1.1   1.1   1.7   1.2   1.2   1.4   1.2    .1    .1    .2    .3    .4    .5
 260.  *    .5    .5    .4    .2    .1    .0    .0   1.1   1.2   1.6   1.3   1.1   1.4   1.2    .1    .1    .2    .2    .4    .4
 265.  *    .7    .7    .6    .3    .1    .1    .0   1.1   1.2   1.7   1.3   1.2   1.4   1.1    .0    .1    .1    .2    .2    .4
 270.  *    .8    .8    .7    .4    .2    .1    .1   1.2   1.2   1.9   1.2   1.1   1.4   1.1    .0    .0    .1    .1    .2    .2
 275.  *    .9    .9    .8    .4    .3    .1    .1   1.2   1.3   1.8   1.1   1.1   1.3   1.1    .0    .0    .0    .1    .1    .1
 280.  *    .9    .9    .8    .4    .3    .2    .1   1.2   1.4   1.7    .8   1.0   1.3   1.0    .0    .0    .0    .0    .0    .1
 285.  *    .9    .9    .9    .5    .3    .2    .1   1.2   1.5   1.6    .5   1.1   1.2   1.0    .0    .0    .0    .0    .0    .0
 290.  *   1.0    .9    .8    .5    .3    .3    .1   1.2   1.5   1.4    .7   1.1   1.2    .9    .0    .0    .0    .0    .0    .0
 295.  *   1.0    .9    .8    .6    .3    .3    .1   1.2   1.5   1.4    .6   1.1   1.2    .9    .0    .0    .0    .0    .0    .0
 300.  *    .8    .8    .7    .6    .3    .2    .1   1.3   1.4   1.3    .5   1.1   1.2    .8    .0    .0    .0    .0    .0    .0
 305.  *    .8    .8    .8    .6    .3    .2    .1   1.4   1.5   1.2    .8   1.1   1.3    .9    .0    .0    .0    .0    .0    .0
 310.  *    .7    .8    .8    .6    .3    .2    .1   1.5   1.5   1.3    .9   1.2   1.4    .8    .0    .0    .0    .0    .0    .0
 315.  *    .7    .7    .8    .7    .3    .1    .1   1.6   1.4   1.1   1.0   1.3   1.4    .8    .0    .0    .0    .0    .0    .0
 320.  *    .7    .7    .6    .6    .3    .1    .1   1.6   1.5   1.3   1.1   1.2   1.3    .8    .0    .0    .0    .0    .0    .0
 325.  *    .7    .7    .6    .5    .3    .1    .1   1.6   1.4   1.2   1.1   1.2   1.4    .8    .0    .0    .0    .0    .0    .0
 330.  *    .7    .7    .6    .5    .4    .1    .1   1.6   1.5   1.2   1.1   1.3   1.4    .8    .0    .0    .0    .0    .0    .0
 335.  *    .7    .7    .6    .5    .3    .1    .2   1.5   1.7   1.3   1.1   1.4   1.4    .8    .1    .1    .0    .0    .0    .0
 340.  *    .6    .6    .7    .5    .4    .3    .2   1.5   1.5   1.2   1.2   1.4   1.3    .8    .1    .1    .1    .0    .0    .0
 345.  *    .6    .6    .7    .6    .5    .5    .4   1.4   1.5   1.1   1.1   1.2   1.2    .8    .2    .2    .1    .1    .0    .0
 350.  *    .6    .6    .7    .7   1.0    .8    .8   1.3   1.2   1.0    .9   1.0   1.0    .7    .4    .5    .4    .1    .1    .0
 355.  *    .6    .7    .8    .9   1.1   1.0   1.0   1.1    .8    .7    .7    .9    .9    .7    .5    .6    .5    .4    .1    .0
 360.  *    .6    .8   1.0   1.0   1.0   1.2   1.2    .8    .6    .6    .5    .7    .6    .5    .6    .7    .6    .4    .3    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.1   1.4   1.4   1.3   1.4   1.5   1.6   1.6   1.7   1.9   1.7   1.4   1.5   1.8   1.6   1.7   1.8   1.5   1.2   1.1
 DEGR. *   30    45    25    10   145    20    15   330   335   270   190   180   240   190   155   165    40    30    40   140

1
                                                                                                                PAGE  5
      JOB: Site 7 Opt 1/2  2030 PM - 7B1PM30.DAT                RUN: Site 7 Opt 1/2  2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
  30.  *    .2
  35.  *    .3
  40.  *    .3
```

```
  45.  *    .4
  50.  *    .4
  55.  *    .4
  60.  *    .3
  65.  *    .2
  70.  *    .2
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .3
  95.  *    .3
 100.  *    .6
 105.  *    .7
 110.  *    .8
 115.  *    .8
 120.  *    .8
 125.  *    .8
 130.  *    .8
 135.  *    .8
 140.  *    .7
 145.  *    .7
 150.  *    .7
 155.  *    .7
 160.  *    .5
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                             PAGE  6
      JOB: Site 7 Opt 1/2  2030 PM - 7B1PM30.DAT                RUN: Site 7 Opt 1/2  2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .5
 225.  *    .6
 230.  *    .5
 235.  *    .5
 240.  *    .5
 245.  *    .6
 250.  *    .5
 255.  *    .5
 260.  *    .5
 265.  *    .5
 270.  *    .2
 275.  *    .1
 280.  *    .1
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .8
 DEGR. *  110

 THE HIGHEST CONCENTRATION IS    1.90 PPM AT  270 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    1.80 PPM AT  190 DEGREES FROM REC14.
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT   40 DEGREES FROM REC17.
```

```
Site 7 Opt 3    2014 AM - 7B3AM14.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 3    2014 AM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    129911.4  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     82611.4  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        61       2.0  826  102.2 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     47311.4  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        95       2.0  473  102.2 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.    128711.4  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.     74311.4  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     48911.4  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        61       2.0  489  102.2 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     25411.4  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     25411.4  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        61       2.0  254  102.2 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     25411.4  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     25411.4  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    228011.4  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    225211.4  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    225211.4  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    225211.4  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     46111.4  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120        95        2.0  461  102.2 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.    179111.4  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.    179111.4  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.    179111.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 7 Opt 3    2014 AM - 7B3AM14.DAT                RUN: Site 7 Opt 3    2014 AM
      DATE: 05/11/2009   TIME: 02:48:52.10


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*---------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   1299.  11.4    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    826.  11.4    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3124.7    1430.0 *     138.   174. AG    279. 100.0    .0 24.0  .51   7.0
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG    473.  11.4    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3103.1    1431.2 *     133.   174. AG    434. 100.0    .0 24.0  .79   6.8
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   1287.  11.4    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG    743.  11.4    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    489.  11.4    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3046.4    1760.0 *      81.   355. AG    279. 100.0    .0 24.0  .30   4.1
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    254.  11.4    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    254.  11.4    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3032.5    1771.5 *      85.    27. AG    139. 100.0    .0 12.0  .35   4.3
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    254.  11.4    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    254.  11.4    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   2280.  11.4    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   2252.  11.4    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   2252.  11.4    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   2252.  11.4    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    461.  11.4    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    1149.2    1486.8 *    1863.   267. AG    217. 100.0    .0 12.0 1.49  94.6
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG   1791.  11.4    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG   1791.  11.4    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG   1791.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Opt 3    2014 AM - 7B3AM14.DAT                RUN: Site 7 Opt 3    2014 AM
      DATE: 05/11/2009   TIME: 02:48:52.10

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       61       2.0       826       1770     102.20      1        3
       5. SW        Rt1 left  *     120       95       2.0       473       1717     102.20      1        3
       9. NE        Rt1 thru  *     120       61       2.0       489       1770     102.20      1        3
      12. NE        Rt1 right *     120       61       2.0       254       1583     102.20      1        3
      20. NW        Rt2A left *     120       95       2.0       461       1770     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0        5.0   *
      2. NE 164 E             *      2845.0     1555.0        5.0   *
      3. NE 82 E              *      2928.0     1555.0        5.0   *
      4. NE CNR               *      2987.0     1532.0        5.0   *
      5. NE 82 N              *      3024.0     1485.0        5.0   *
      6. NE 164 N             *      3039.0     1404.0        5.0   *
      7. NE MID N             *      3051.0     1276.0        5.0   *
      8. NW MID N             *      3162.0     1314.0        5.0   *
      9. NW 164 N             *      3147.0     1453.0        5.0   *
     10. NW 82 N              *      3139.0     1534.0        5.0   *
     11. W CNR                *      3129.0     1614.0        5.0   *
     12. SW 82 S              *      3116.0     1698.0        5.0   *
     13. SW 164 S             *      3106.0     1778.0        5.0   *
     14. SW MID S             *      3088.0     1931.0        5.0   *
     15. SE MID S             *      2992.0     1909.0        5.0   *
     16. SE 164 S             *      2999.0     1830.0        5.0   *
     17. SE 82 S              *      2995.0     1748.0        5.0   *
     18. SE CNR               *      2974.0     1708.0        5.0   *
     19. SE 82 E              *      2942.0     1675.0        5.0   *
     20. SE 164 E             *      2862.0     1644.0        5.0   *
     21. SE MID E             *      2679.0     1632.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Opt 3    2014 AM - 7B3AM14.DAT                RUN: Site 7 Opt 3    2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *   1.2   1.2   1.4   1.2   1.6   1.5   1.5    .7    .7    .3    .4    .5    .6    .6    .5    .5    .4    .2    .2    .0
   5.  *   1.2   1.3   1.3   1.4   1.6   1.5   1.6    .5    .3    .3    .2    .3    .3    .4    .6    .6    .4    .3    .2    .2
  10.  *   1.2   1.4   1.2   1.5   1.5   2.0   1.9    .2    .3    .2    .1    .2    .2    .3    .6    .6    .5    .3    .3    .2
  15.  *   1.3   1.3   1.3   1.3   1.5   1.9   1.9    .1    .1    .1    .1    .1    .1    .2    .6    .6    .6    .3    .3    .2
  20.  *   1.3   1.3   1.7   1.3   1.7   2.1   1.6    .1    .0    .0    .0    .1    .1    .1    .6    .6    .5    .3    .3    .2
  25.  *   1.3   1.4   1.5   1.3   1.7   2.1   1.7    .0    .0    .0    .0    .0    .1    .1    .6    .6    .6    .4    .3    .2
```

```
  30.  *   1.3   1.2   1.7   1.3   1.9   2.1   1.5    .0    .0    .0    .0    .0    .0    .1    .6    .6    .6    .5    .4    .2
  35.  *   1.4   1.3   1.6   1.3   2.0   2.1   1.4    .0    .0    .0    .0    .0    .0    .1    .6    .6    .6    .6    .5    .2
  40.  *   1.4   1.4   1.5   1.2   2.0   2.0   1.4    .0    .0    .0    .0    .0    .0    .1    .6    .5    .5    .7    .5    .1
  45.  *   1.4   1.4   1.5   1.2   2.1   1.9   1.1    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .7    .5    .1
  50.  *   1.6   1.5   1.4   1.2   2.2   1.9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .9    .7    .3
  55.  *   1.6   1.4   1.4   1.5   2.2   1.8   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4    .7    .9    .7    .3
  60.  *   1.6   1.5   1.4   1.5   2.2   1.6   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4    .7    .9    .8    .3
  65.  *   1.7   1.5   1.2   1.5   2.3   1.4    .9    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7   1.0    .7    .3
  70.  *   1.7   1.5   1.3   1.6   2.3   1.4   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4    .9   1.0    .7    .3
  75.  *   1.5   1.4   1.3   1.7   2.3   1.3   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4    .9   1.0    .7    .2
  80.  *   1.6   1.3   1.4   1.8   2.3   1.1   1.0    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.0   1.0    .7    .2
  85.  *   1.4   1.7   1.4   1.9   2.3   1.1   1.0    .0    .0    .0    .0    .0    .0    .0    .4    .3    .9   1.0    .5    .2
  90.  *   1.2   1.4   1.5   1.9   2.3   1.1   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.1   1.0    .4    .4
  95.  *   1.1   1.2   1.5   1.9   2.3    .9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.1   1.0    .4    .5
 100.  *    .7   1.0   1.6   1.8   2.2    .9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.1   1.0    .4    .6
 105.  *    .6    .9   1.5   2.1   2.1    .9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.1    .8    .4    .9
 110.  *    .4    .9   1.5   1.9   2.0    .9   1.1    .0    .0    .0    .0    .0    .0    .0    .5    .3   1.2    .8    .6   1.1
 115.  *    .4    .6   1.4   1.8   1.9    .9   1.1    .0    .0    .0    .0    .0    .0    .0    .5    .3   1.2    .6    .6   1.3
 120.  *    .3    .6   1.1   1.7   1.9   1.0   1.1    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1    .7    .6   1.3
 125.  *    .2    .4   1.1   1.7   1.6   1.0   1.2    .0    .0    .0    .0    .0    .0    .0    .5    .6   1.1    .9    .9   1.5
 130.  *    .3    .3    .8   1.5   1.6   1.0   1.1    .0    .0    .0    .0    .0    .0    .1    .5    .6   1.1    .8   1.2   1.4
 135.  *    .3    .2    .7   1.4   1.4   1.1   1.1    .0    .0    .0    .0    .0    .0    .1    .5    .6   1.4   1.0   1.3   1.4
 140.  *    .3    .3    .6   1.3   1.3   1.2   1.3    .0    .0    .0    .0    .0    .0    .1    .5    .7   1.3   1.0   1.3   1.4
 145.  *    .3    .3    .6   1.1   1.3   1.3   1.3    .0    .0    .0    .1    .0    .1    .1    .7   1.1   1.4   1.0   1.4   1.3
 150.  *    .2    .3    .5   1.0   1.2   1.3   1.4    .0    .1    .1    .1    .0    .1    .1    .8   1.3   1.5   1.2   1.6   1.3
 155.  *    .1    .3    .4    .9   1.2   1.4   1.4    .2    .1    .1    .2    .2    .1    .2   1.0   1.4   1.6   1.5   1.5   1.1
 160.  *    .1    .3    .4    .6   1.2   1.4   1.4    .2    .2    .3    .4    .5    .6    .4   1.0   1.3   1.7   1.6   1.3   1.0
 165.  *    .0    .2    .4    .6    .9   1.2   1.4    .4    .4    .5    .7    .6    .6    .6   1.1   1.4   1.6   1.4   1.3   1.1
 170.  *    .0    .1    .3    .5    .8   1.1   1.2    .6    .6    .8   1.2   1.2   1.0   1.1   1.2   1.4   1.7   1.1   1.1    .8
 175.  *    .0    .1    .1    .4    .7    .9    .9    .7    .9   1.2   1.6   1.5   1.3   1.3    .9   1.1   1.2    .9    .9    .8
 180.  *    .0    .0    .1    .2    .5    .7    .7    .9   1.1   1.5   1.9   1.7   1.5   1.6    .6    .8   1.0    .8    .7    .7
 185.  *    .0    .0    .0    .1    .3    .5    .4   1.1   1.1   1.8   2.2   1.8   1.6   1.4    .3    .5    .7    .7    .8    .8
 190.  *    .0    .0    .0    .1    .2    .2    .3   1.0   1.2   2.0   2.6   1.9   1.8   1.3    .2    .4    .6    .7    .7    .7
 195.  *    .0    .0    .0    .0    .1    .1    .2   1.2   1.2   2.3   2.6   1.7   1.5   1.2    .2    .4    .6    .6    .6    .8
 200.  *    .0    .0    .0    .0    .0    .1    .1   1.1   1.3   2.5   2.5   1.5   1.4   1.2    .2    .3    .4    .6    .7    .8
 205.  *    .0    .0    .0    .0    .0    .0    .1   1.2   1.2   2.6   2.4   1.5   1.4   1.1    .2    .3    .4    .6    .7    .8
1
                                                                                                                      PAGE   4
      JOB: Site 7 Opt 3    2014 AM - 7B3AM14.DAT                RUN: Site 7 Opt 3    2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   2.5   2.1   1.4   1.3    .9    .2    .2    .4    .5    .7    .8
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.4   2.7   2.0   1.4   1.3    .9    .2    .2    .4    .4    .6    .8
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.0   1.5   2.6   1.8   1.2   1.4    .9    .2    .3    .5    .5    .6    .8
 225.  *    .0    .1    .0    .0    .0    .0    .0    .8   1.4   2.6   1.5   1.0   1.4    .9    .2    .3    .4    .5    .8    .9
 230.  *    .0    .1    .0    .0    .0    .0    .0    .8   1.5   2.6   1.4   1.2   1.4    .9    .2    .3    .4    .4    .7    .9
 235.  *    .1    .1    .0    .0    .0    .0    .0    .8   1.7   2.6   1.3   1.4   1.4    .9    .2    .2    .4    .5    .6   1.0
 240.  *    .1    .1    .0    .0    .0    .0    .0    .8   1.8   2.6   1.3   1.2   1.3    .9    .1    .3    .4    .5    .7    .9
 245.  *    .1    .2    .1    .0    .0    .0    .0    .8   1.9   2.6   1.4   1.0   1.3    .8    .1    .3    .5    .6    .7   1.0
 250.  *    .4    .3    .3    .0    .0    .0    .0    .8   2.0   2.6   1.4   1.3   1.2    .8    .1    .1    .4    .6    .7    .9
 255.  *    .5    .7    .5    .2    .0    .0    .0    .8   2.1   2.7   1.4   1.3   1.2    .8    .1    .1    .4    .5    .7   1.0
 260.  *    .8    .9    .8    .3    .1    .0    .0    .8   2.3   2.9   1.6   1.3   1.1    .8    .1    .1    .3    .4    .7    .9
 265.  *   1.2   1.3   1.1    .5    .2    .1    .0    .8   2.5   3.0   1.6   1.2    .9    .7    .0    .1    .1    .3    .5    .7
 270.  *   1.4   1.6   1.5    .8    .3    .1    .0    .9   2.7   3.3   1.7   1.3    .9    .7    .0    .0    .1    .1    .3    .5
 275.  *   1.7   1.8   1.7    .9    .5    .1    .1    .9   2.8   3.1   1.1   1.2    .6    .7    .0    .0    .0    .1    .1    .2
 280.  *   1.9   1.9   1.6   1.2    .5    .3    .1    .9   2.9   3.1   1.1   1.0    .6    .7    .0    .0    .0    .0    .0    .1
 285.  *   1.8   1.9   1.7   1.2    .6    .4    .1    .9   2.9   3.0    .9   1.0    .6    .7    .0    .0    .0    .0    .0    .0
 290.  *   1.7   1.7   1.6   1.0    .5    .4    .1   1.0   3.1   2.8    .6   1.1    .6    .7    .0    .0    .0    .0    .0    .0
 295.  *   1.6   1.6   1.6   1.2    .5    .4    .2   1.0   3.1   2.6    .6   1.1    .6    .7    .0    .0    .0    .0    .0    .0
 300.  *   1.6   1.5   1.6   1.2    .6    .4    .2   1.0   3.1   2.3    .6   1.0    .7    .7    .0    .0    .0    .0    .0    .0
 305.  *   1.5   1.5   1.5   1.2    .6    .4    .2   1.0   3.1   2.0    .7   1.0    .7    .7    .0    .0    .0    .0    .0    .0
 310.  *   1.3   1.3   1.4   1.2    .6    .4    .2   1.2   3.0   1.8    .9   1.0    .8    .8    .0    .0    .0    .0    .0    .0
 315.  *   1.3   1.3   1.3   1.2    .7    .3    .2   1.4   2.9   1.7    .9    .9    .7    .8    .0    .0    .0    .0    .0    .0
 320.  *   1.3   1.3   1.3   1.2    .8    .4    .2   1.5   2.9   1.6   1.0   1.0    .7    .9    .0    .0    .0    .0    .0    .0
 325.  *   1.2   1.2   1.3   1.1    .8    .4    .2   1.4   2.5   1.3   1.0    .9    .9    .9    .0    .0    .0    .0    .0    .0
 330.  *   1.2   1.2   1.2   1.1    .9    .4    .3   1.5   2.4   1.3   1.0   1.0    .9    .9    .0    .0    .0    .0    .0    .0
 335.  *   1.2   1.2   1.2   1.2    .9    .5    .3   1.7   2.2   1.3   1.1    .9   1.0   1.0    .0    .0    .0    .0    .0    .0
 340.  *   1.2   1.2   1.0   1.2    .8    .4    .3   1.6   2.2   1.1    .9    .8   1.0   1.0    .1    .1    .0    .0    .0    .0
 345.  *   1.2   1.2   1.0   1.1    .9    .7    .7   1.3   1.9   1.1    .8    .8   1.0   1.0    .2    .2    .1    .0    .0    .0
 350.  *   1.2   1.2   1.2   1.2   1.3    .8    .9   1.3   1.5    .8    .7    .8    .8    .9    .3    .3    .2    .2    .0    .0
 355.  *   1.2   1.2   1.3   1.2   1.4   1.4   1.0   1.0   1.0    .6    .5    .7    .7    .8    .4    .4    .3    .2    .2    .0
 360.  *   1.2   1.2   1.4   1.2   1.6   1.5   1.5    .7    .7    .3    .4    .5    .6    .6    .5    .5    .4    .2    .2    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.9   1.9   1.7   2.1   2.3   2.1   1.9   1.7   3.1   3.3   2.6   1.9   1.8   1.6   1.2   1.4   1.7   1.6   1.6   1.5
 DEGR. *  280   280    20   105    65    20    10   335   290   270   190   190   190   180   170   155   170   160   150   125

1
                                                                                                                      PAGE   5
      JOB: Site 7 Opt 3    2014 AM - 7B3AM14.DAT                RUN: Site 7 Opt 3    2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
  30.  *    .1
  35.  *    .1
  40.  *    .1
```

```
  45.  *    .1
  50.  *    .1
  55.  *    .1
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .1
  80.  *    .2
  85.  *    .3
  90.  *    .4
  95.  *    .7
 100.  *   1.0
 105.  *   1.1
 110.  *   1.1
 115.  *   1.1
 120.  *   1.0
 125.  *    .9
 130.  *   1.0
 135.  *   1.1
 140.  *   1.1
 145.  *   1.0
 150.  *   1.0
 155.  *    .9
 160.  *    .9
 165.  *    .8
 170.  *    .8
 175.  *    .8
 180.  *    .8
 185.  *    .8
 190.  *    .8
 195.  *    .8
 200.  *    .8
 205.  *    .8
1
                                                                                                                            PAGE  6
      JOB: Site 7 Opt 3    2014 AM - 7B3AM14.DAT                RUN: Site 7 Opt 3    2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .8
 215.  *    .9
 220.  *    .9
 225.  *    .8
 230.  *    .9
 235.  *    .9
 240.  *    .9
 245.  *   1.0
 250.  *    .9
 255.  *    .9
 260.  *    .7
 265.  *    .6
 270.  *    .4
 275.  *    .3
 280.  *    .2
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.1
 DEGR. *  105

 THE HIGHEST CONCENTRATION IS    3.30 PPM AT  270 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    3.10 PPM AT  290 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    2.60 PPM AT  190 DEGREES FROM REC11.
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```
Site 7 Opt 3    2030 AM - 7B3AM30.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 3    2030 AM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    1305 9.2  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     840 9.2  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        35       2.0  840   84.1 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     465 9.2  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        95       2.0  465   84.1 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.    1350 9.2  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.     800 9.2  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     500 9.2  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        64       2.0  500   84.1 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     300 9.2  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     300 9.2  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        64       2.0  300   84.1 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     300 9.2  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     300 9.2  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    2150 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    2155 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    2155 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    2155 9.2  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     510 9.2  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120        93       2.0  510   84.1 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.    1655 9.2  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.    1655 9.2  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.    1655 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 7 Opt 3    2030 AM - 7B3AM30.DAT                RUN: Site 7 Opt 3    2030 AM
      DATE: 05/11/2009   TIME: 02:54:20.34


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH     EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)             (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *      600.  354. AG   1305.   9.2    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *      402.  354. AG    840.   9.2    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3118.6    1487.1 *       80.  174. AG    132. 100.0    .0 24.0  .35   4.1
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *      400.  354. AG    465.   9.2    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3102.8    1434.9 *      130.  174. AG    357. 100.0    .0 24.0  .77   6.6
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *      986.  354. AG   1350.   9.2    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *      779.  174. AG    800.   9.2    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *      217.  175. AG    500.   9.2    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3045.8    1766.1 *       87.  355. AG    241. 100.0    .0 24.0  .33   4.4
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *       70.  182. AG    300.   9.2    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *       66.  207. AG    300.   9.2    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3041.7    1789.5 *      105.   27. AG    120. 100.0    .0 12.0  .44   5.3
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *       59.  226. AG    300.   9.2    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *       64.  244. AG    300.   9.2    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *      994.  176. AG   2150.   9.2    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *      161.   98. AG   2155.   9.2    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *      146.   94. AG   2155.   9.2    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *      280.   87. AG   2155.   9.2    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *      203.   87. AG    510.   9.2    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0     935.5    1474.1 *     2077.  267. AG    175. 100.0    .0 12.0 1.50 105.5
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *       73.   90. AG   1655.   9.2    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *       75.  115. AG   1655.   9.2    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *       92.  147. AG   1655.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Opt 3    2030 AM - 7B3AM30.DAT                RUN: Site 7 Opt 3    2030 AM
      DATE: 05/11/2009   TIME: 02:54:20.34

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*-------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       35       2.0       840       1770      84.10      1        3
       5. SW        Rt1 left  *     120       95       2.0       465       1717      84.10      1        3
       9. NE        Rt1 thru  *     120       64       2.0       500       1770      84.10      1        3
      12. NE        Rt1 right *     120       64       2.0       300       1583      84.10      1        3
      20. NW        Rt2A left *     120       93       2.0       510       1770      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0    *
      2. NE 164 E             *      2845.0     1555.0       5.0    *
      3. NE 82 E              *      2928.0     1555.0       5.0    *
      4. NE CNR               *      2987.0     1532.0       5.0    *
      5. NE 82 N              *      3024.0     1485.0       5.0    *
      6. NE 164 N             *      3039.0     1404.0       5.0    *
      7. NE MID N             *      3051.0     1276.0       5.0    *
      8. NW MID N             *      3162.0     1314.0       5.0    *
      9. NW 164 N             *      3147.0     1453.0       5.0    *
     10. NW 82 N              *      3139.0     1534.0       5.0    *
     11. W CNR                *      3129.0     1614.0       5.0    *
     12. SW 82 S              *      3116.0     1698.0       5.0    *
     13. SW 164 S             *      3106.0     1778.0       5.0    *
     14. SW MID S             *      3088.0     1931.0       5.0    *
     15. SE MID S             *      2992.0     1909.0       5.0    *
     16. SE 164 S             *      2999.0     1830.0       5.0    *
     17. SE 82 S              *      2995.0     1748.0       5.0    *
     18. SE CNR               *      2974.0     1708.0       5.0    *
     19. SE 82 E              *      2942.0     1675.0       5.0    *
     20. SE 164 E             *      2862.0     1644.0       5.0    *
     21. SE MID E             *      2679.0     1632.0       5.0    *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Opt 3    2030 AM - 7B3AM30.DAT                RUN: Site 7 Opt 3    2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .9    .9   1.1   1.1   1.2   1.1   1.0    .4    .4    .3    .3    .5    .5    .6    .4    .4    .4    .2    .2    .0
   5.  *    .9   1.0   1.1   1.3   1.3   1.2   1.3    .3    .3    .2    .2    .3    .3    .3    .5    .5    .4    .3    .2    .1
  10.  *    .9   1.1   1.1   1.3   1.2   1.4   1.3    .1    .2    .2    .1    .2    .2    .2    .5    .5    .4    .3    .2    .2
  15.  *    .9   1.1   1.1   1.1   1.2   1.6   1.3    .1    .1    .0    .1    .1    .1    .2    .6    .6    .4    .3    .2    .2
  20.  *   1.0   1.0   1.3   1.1   1.3   1.6   1.2    .0    .0    .0    .0    .1    .1    .1    .6    .6    .4    .4    .3    .2
  25.  *   1.0   1.0   1.2   1.2   1.3   1.6   1.2    .0    .0    .0    .0    .0    .1    .1    .6    .4    .5    .4    .4    .2
```

```
  30.  *  1.0   1.0   1.2   1.2   1.5   1.6   1.0    .0    .0    .0    .0    .0    .0    .1    .4    .4    .6    .4    .4    .2
  35.  *  1.1   1.0   1.1   1.0   1.4   1.6   1.0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .6    .6    .3    .2
  40.  *  1.1   1.1   1.1    .8   1.5   1.4    .9    .0    .0    .0    .0    .0    .0    .0    .4    .4    .5    .7    .3    .1
  45.  *  1.2   1.3   1.1    .9   1.6   1.4    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .6    .7    .4    .1
  50.  *  1.3   1.2   1.2    .9   1.7   1.3    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7    .9    .5    .3
  55.  *  1.3   1.2   1.1   1.1   1.7   1.2    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7    .9    .6    .3
  60.  *  1.3   1.3   1.0   1.0   1.7   1.1    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7    .9    .5    .3
  65.  *  1.3   1.2   1.1   1.1   1.8    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .9   1.0    .6    .3
  70.  *  1.4   1.2    .9   1.3   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .9   1.0    .6    .2
  75.  *  1.1   1.1   1.0   1.3   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.0   1.0    .6    .2
  80.  *  1.1   1.1   1.1   1.4   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.0   1.0    .6    .2
  85.  *  1.0    .9   1.0   1.4   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3    .9   1.0    .4    .2
  90.  *   .9    .9   1.1   1.5   1.7    .8    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.0   1.0    .4    .1
  95.  *   .6    .7   1.1   1.5   1.7    .8    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.1    .9    .4    .3
 100.  *   .5    .8   1.0   1.5   1.6    .7    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.1    .8    .4    .5
 105.  *   .3    .7   1.1   1.5   1.5    .8    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1    .7    .2    .6
 110.  *   .3    .5    .9   1.5   1.5    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1    .7    .3    .8
 115.  *   .2    .5    .8   1.2   1.3    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1    .6    .4    .9
 120.  *   .1    .4    .7   1.2   1.3    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.1    .5    .4   1.0
 125.  *   .1    .3    .7   1.2   1.2    .8    .7    .0    .0    .0    .0    .0    .0    .0    .4    .5   1.1    .8    .6   1.0
 130.  *   .1    .2    .5   1.1   1.1    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .6   1.0    .7    .8   1.1
 135.  *   .2    .2    .6   1.1   1.1    .9    .9    .0    .0    .0    .0    .0    .0    .1    .4    .7   1.0    .5    .9   1.1
 140.  *   .2    .3    .4    .9   1.0   1.0    .9    .0    .0    .0    .0    .0    .0    .1    .4    .7   1.1    .5   1.2   1.0
 145.  *   .2    .3    .4    .8   1.0   1.0   1.0    .0    .0    .0    .0    .0    .0    .1    .5    .7   1.1    .7   1.1    .8
 150.  *   .2    .3    .4    .8    .9   1.1   1.0    .0    .1    .0    .1    .0    .1    .1    .7   1.0   1.1    .9   1.0    .8
 155.  *   .1    .3    .4    .7    .9   1.1   1.1    .1    .1    .1    .1    .1    .1    .2    .7   1.0   1.3    .9   1.1    .9
 160.  *   .1    .2    .3    .5   1.0   1.0   1.1    .2    .2    .1    .1    .4    .3    .2    .9   1.0   1.4   1.2   1.1    .9
 165.  *   .0    .1    .3    .5    .7   1.0   1.0    .2    .4    .4    .6    .4    .5    .4    .9   1.1   1.2   1.2    .9    .7
 170.  *   .0    .1    .3    .4    .6    .8   1.0    .4    .4    .4    .8   1.0    .8    .6    .8   1.1   1.0   1.0    .8    .6
 175.  *   .0    .0    .1    .3    .5    .7    .7    .7    .6    .8   1.0   1.2    .9   1.0    .7    .7   1.1    .7    .8    .6
 180.  *   .0    .0    .1    .2    .4    .5    .6    .7    .8   1.0   1.4   1.3   1.2   1.1    .4    .6    .7    .6    .7    .6
 185.  *   .0    .0    .0    .1    .2    .3    .3    .8    .8   1.3   1.6   1.5   1.2   1.1    .2    .3    .6    .6    .7    .5
 190.  *   .0    .0    .0    .0    .1    .2    .2    .9   1.0   1.4   1.7   1.5   1.1   1.1    .2    .3    .5    .5    .5    .5
 195.  *   .0    .0    .0    .0    .1    .1    .1   1.0    .9   1.5   1.6   1.2   1.2   1.0    .1    .1    .5    .5    .5    .6
 200.  *   .0    .0    .0    .0    .0    .1    .1   1.0    .8   1.4   1.8   1.3   1.1   1.2    .2    .1    .3    .4    .5    .6
 205.  *   .0    .0    .0    .0    .0    .0    .0    .9    .8   1.6   1.6   1.1    .9   1.0    .2    .2    .2    .3    .6    .6
1
                                                                                                                   PAGE  4
      JOB: Site 7 Opt 3    2030 AM - 7B3AM30.DAT                RUN: Site 7 Opt 3    2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*----------------------------------------------------------------------------------------------------------------------
 210.  *   .0    .0    .0    .0    .0    .0    .0    .9    .8   1.7   1.5    .8   1.1    .8    .2    .2    .3    .5    .6    .6
 215.  *   .0    .0    .0    .0    .0    .0    .0    .9    .8   1.7   1.4    .9   1.0    .8    .2    .2    .3    .4    .5    .6
 220.  *   .0    .0    .0    .0    .0    .0    .0    .7    .8   1.9   1.3    .9   1.0    .8    .2    .2    .2    .4    .6    .7
 225.  *   .0    .0    .0    .0    .0    .0    .0    .7    .9   1.9   1.2    .9   1.1    .8    .2    .2    .2    .5    .6    .7
 230.  *   .0    .0    .0    .0    .0    .0    .0    .7    .8   1.9   1.2    .9   1.1    .7    .2    .2    .3    .4    .5    .7
 235.  *   .0    .1    .0    .0    .0    .0    .0    .6    .9   1.8   1.0   1.0   1.1    .7    .1    .2    .4    .4    .5    .7
 240.  *   .1    .1    .0    .0    .0    .0    .0    .6    .8   1.8   1.1   1.1   1.1    .6    .1    .2    .4    .4    .5    .7
 245.  *   .1    .1    .1    .0    .0    .0    .0    .6    .9   1.9   1.1    .9   1.2    .6    .1    .2    .3    .4    .5    .8
 250.  *   .2    .3    .2    .0    .0    .0    .0    .6   1.0   1.9   1.1   1.0   1.2    .6    .1    .1    .3    .4    .6    .7
 255.  *   .5    .5    .4    .2    .0    .0    .0    .7   1.1   2.0   1.2   1.0   1.0    .6    .1    .1    .3    .4    .6    .7
 260.  *   .6    .7    .6    .2    .1    .0    .0    .7   1.2   2.3   1.2   1.0    .9    .6    .1    .1    .1    .3    .4    .7
 265.  *  1.0   1.0    .8    .3    .1    .1    .0    .7   1.5   2.3   1.2   1.1    .8    .5    .0    .1    .1    .1    .3    .6
 270.  *  1.2   1.3   1.1    .6    .3    .1    .0    .8   1.6   2.3   1.0   1.1    .8    .5    .0    .0    .1    .1    .2    .4
 275.  *  1.3   1.5   1.3    .7    .3    .1    .1    .7   1.5   2.2   1.0   1.0    .7    .5    .0    .0    .0    .1    .1    .2
 280.  *  1.5   1.5   1.3    .7    .4    .2    .1    .7   1.7   2.1    .9    .9    .6    .5    .0    .0    .0    .0    .0    .1
 285.  *  1.5   1.5   1.3    .9    .4    .2    .1    .7   1.8   2.2    .6    .9    .6    .5    .0    .0    .0    .0    .0    .0
 290.  *  1.3   1.3   1.2    .8    .5    .2    .1    .8   1.9   1.9    .5    .9    .5    .5    .0    .0    .0    .0    .0    .0
 295.  *  1.2   1.2   1.3    .9    .5    .2    .1    .9   1.9   1.9    .5    .9    .5    .5    .0    .0    .0    .0    .0    .0
 300.  *  1.2   1.2   1.3    .9    .6    .2    .2    .9   2.0   1.6    .6    .9    .6    .5    .0    .0    .0    .0    .0    .0
 305.  *  1.1   1.2   1.1    .9    .5    .2    .2    .9   1.9   1.5    .6    .9    .6    .7    .0    .0    .0    .0    .0    .0
 310.  *  1.1   1.1   1.1    .9    .5    .2    .2    .9   1.8   1.2    .8    .9    .6    .7    .0    .0    .0    .0    .0    .0
 315.  *  1.0   1.0   1.0    .9    .6    .3    .2   1.1   1.9   1.3    .9    .9    .6    .7    .0    .0    .0    .0    .0    .0
 320.  *  1.0   1.0   1.0    .8    .6    .3    .2   1.0   1.7   1.1    .9    .9    .6    .8    .0    .0    .0    .0    .0    .0
 325.  *   .9   1.0    .9    .9    .6    .3    .2   1.1   1.5   1.1    .9    .8    .7    .8    .0    .0    .0    .0    .0    .0
 330.  *   .9    .9    .9    .9    .6    .3    .2   1.1   1.5   1.1    .9    .9    .8    .8    .0    .0    .0    .0    .0    .0
 335.  *   .9    .9    .9    .9    .6    .3    .2   1.3   1.4    .9    .9    .7    .8    .9    .0    .0    .0    .0    .0    .0
 340.  *   .9    .9    .9    .8    .7    .4    .2   1.2   1.3    .9    .8    .7    .9    .9    .1    .1    .0    .0    .0    .0
 345.  *   .9    .9    .9    .8    .8    .5    .3   1.2   1.3    .8    .7    .7    .7    .8    .1    .2    .1    .0    .0    .0
 350.  *   .9    .9    .9    .9   1.0    .7    .6    .9   1.0    .7    .7    .7    .7    .8    .3    .2    .2    .2    .0    .0
 355.  *   .9    .9    .9   1.0   1.1   1.0    .8    .7    .6    .5    .5    .6    .6    .7    .3    .3    .2    .2    .2    .0
 360.  *   .9    .9   1.1   1.1   1.2   1.1   1.0    .4    .4    .3    .3    .5    .5    .6    .4    .4    .4    .2    .2    .0
 ------*----------------------------------------------------------------------------------------------------------------------
 MAX   *  1.5   1.5   1.3   1.5   1.8   1.6   1.3   1.3   2.0   2.3   1.8   1.5   1.2   1.2    .9   1.1   1.4   1.2   1.2   1.1
 DEGR. *  280   275    20    90    65    15     5   335   300   260   200   185   180   200   160   170   160   160   140   130

1
                                                                                                                   PAGE  5
      JOB: Site 7 Opt 3    2030 AM - 7B3AM30.DAT                RUN: Site 7 Opt 3    2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .1
  30.  *    .1
  35.  *    .1
  40.  *    .1
```

```
  45.  *    .1
  50.  *    .1
  55.  *    .1
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .1
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .6
 100.  *    .7
 105.  *    .8
 110.  *    .8
 115.  *    .9
 120.  *    .9
 125.  *    .8
 130.  *    .8
 135.  *    .8
 140.  *    .7
 145.  *    .8
 150.  *    .7
 155.  *    .7
 160.  *    .7
 165.  *    .6
 170.  *    .6
 175.  *    .6
 180.  *    .6
 185.  *    .6
 190.  *    .6
 195.  *    .6
 200.  *    .6
 205.  *    .6
1
                                                                                                                             PAGE  6
      JOB: Site 7 Opt 3    2030 AM - 7B3AM30.DAT                RUN: Site 7 Opt 3    2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .6
 215.  *    .6
 220.  *    .8
 225.  *    .7
 230.  *    .7
 235.  *    .7
 240.  *    .7
 245.  *    .7
 250.  *    .7
 255.  *    .7
 260.  *    .6
 265.  *    .5
 270.  *    .4
 275.  *    .3
 280.  *    .1
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .9
 DEGR. *  115

 THE HIGHEST CONCENTRATION IS    2.30 PPM AT  260 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    2.00 PPM AT  300 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT  200 DEGREES FROM REC11.
```

```
Site 7 Opt 3    2014 PM - 7B3PM14.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 3    2014 PM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    230011.4  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     68511.4  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        85       2.0  685  102.2 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.    161511.4  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        59       2.0 1615  102.2 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.     98611.4  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.    140911.4  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     89311.4  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        85       2.0  893  102.2 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     51611.4  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     51611.4  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        85       2.0  516  102.2 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     51611.4  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     51611.4  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    162711.4  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    103511.4  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    103511.4  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    103511.4  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     30111.4  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120       106       2.0  301  102.2 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.     73411.4  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.     73411.4  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.     73411.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 7 Opt 3    2014 PM - 7B3PM14.DAT                RUN: Site 7 Opt 3    2014 PM
      DATE: 05/11/2009   TIME: 02:52:08.29


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   2300.  11.4    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    685.  11.4    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3127.2    1406.1 *     162.   174. AG    388. 100.0    .0 24.0  .75   8.2
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG   1615.  11.4    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3127.8    1181.9 *     384.   174. AG    270. 100.0    .0 24.0  .99  19.5
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG    986.  11.4    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG   1409.  11.4    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    893.  11.4    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3026.8    1967.6 *     290.   355. AG    388. 100.0    .0 24.0  .98  14.7
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    516.  11.4    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    516.  11.4    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3643.0    2966.9 *    1427.    27. AG    194. 100.0    .0 12.0 1.26  72.5
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    516.  11.4    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    516.  11.4    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1627.  11.4    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   1035.  11.4    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   1035.  11.4    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   1035.  11.4    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    301.  11.4    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    1200.9    1489.9 *    1811.   267. AG    242. 100.0    .0 12.0 2.05  92.0
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG    734.  11.4    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG    734.  11.4    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG    734.  11.4    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Opt 3    2014 PM - 7B3PM14.DAT                RUN: Site 7 Opt 3    2014 PM
      DATE: 05/11/2009   TIME: 02:52:08.29

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       85       2.0       685       1770     102.20      1        3
       5. SW        Rt1 left  *     120       59       2.0      1615       1717     102.20      1        3
       9. NE        Rt1 thru  *     120       85       2.0       893       1770     102.20      1        3
      12. NE        Rt1 right *     120       85       2.0       516       1583     102.20      1        3
      20. NW        Rt2A left *     120      106       2.0       301       1770     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0        5.0   *
      2. NE 164 E             *      2845.0     1555.0        5.0   *
      3. NE 82 E              *      2928.0     1555.0        5.0   *
      4. NE CNR               *      2987.0     1532.0        5.0   *
      5. NE 82 N              *      3024.0     1485.0        5.0   *
      6. NE 164 N             *      3039.0     1404.0        5.0   *
      7. NE MID N             *      3051.0     1276.0        5.0   *
      8. NW MID N             *      3162.0     1314.0        5.0   *
      9. NW 164 N             *      3147.0     1453.0        5.0   *
     10. NW 82 N              *      3139.0     1534.0        5.0   *
     11. W CNR                *      3129.0     1614.0        5.0   *
     12. SW 82 S              *      3116.0     1698.0        5.0   *
     13. SW 164 S             *      3106.0     1778.0        5.0   *
     14. SW MID S             *      3088.0     1931.0        5.0   *
     15. SE MID S             *      2992.0     1909.0        5.0   *
     16. SE 164 S             *      2999.0     1830.0        5.0   *
     17. SE 82 S              *      2995.0     1748.0        5.0   *
     18. SE CNR               *      2974.0     1708.0        5.0   *
     19. SE 82 E              *      2942.0     1675.0        5.0   *
     20. SE 164 E             *      2862.0     1644.0        5.0   *
     21. SE MID E             *      2679.0     1632.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Opt 3    2014 PM - 7B3PM14.DAT                RUN: Site 7 Opt 3    2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .8    .9   1.2   1.4   1.3   1.3   1.5   1.1   1.0    .6    .7    .7    .9    .5    .7   1.0    .7    .5    .4    .1
   5.  *    .8    .9   1.3   1.5   1.5   1.6   2.0    .8    .6    .5    .6    .5    .7    .5    .9   1.2   1.2    .8    .4    .2
  10.  *    .9   1.0   1.5   1.6   1.6   2.0   1.9    .3    .4    .3    .3    .3    .5    .3    .9   1.3   1.3    .9    .6    .2
  15.  *    .9   1.1   1.5   1.6   1.5   1.9   2.2    .3    .3    .1    .3    .3    .4    .3   1.0   1.5   1.5   1.0    .7    .3
  20.  *   1.0   1.1   1.5   1.4   1.5   1.9   2.0    .1    .1    .1    .1    .3    .4    .4   1.2   1.6   1.7   1.4    .8    .5
  25.  *   1.1   1.3   1.6   1.4   1.5   1.9   2.0    .0    .0    .1    .1    .1    .2    .5   1.3   1.7   1.8   1.5   1.0    .5
```

```
  30.  *   1.3   1.4   1.7   1.2   1.6   2.1   1.8    .0    .0    .0    .1    .1    .2    .6   1.4   1.8   2.1   1.7   1.1    .6
  35.  *   1.3   1.5   1.5   1.1   1.5   1.9   1.8    .0    .0    .0    .0    .1    .1    .6   1.5   1.9   2.1   1.8   1.2    .6
  40.  *   1.3   1.7   1.4   1.0   1.5   2.0   1.6    .0    .0    .0    .0    .0    .1    .6   1.5   1.9   2.0   1.8   1.2    .7
  45.  *   1.4   1.6   1.3    .8   1.6   1.9   1.6    .0    .0    .0    .0    .0    .0    .6   1.6   1.8   2.0   1.8   1.1    .8
  50.  *   1.3   1.5   1.2    .7   1.8   1.9   1.5    .0    .0    .0    .0    .0    .0    .6   1.6   1.7   1.9   1.7   1.2    .7
  55.  *   1.4   1.4   1.0   1.0   1.8   1.8   1.4    .0    .0    .0    .0    .0    .0    .6   1.6   1.7   1.9   1.6   1.1    .7
  60.  *   1.3   1.4   1.2   1.1   1.9   1.8   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.7   1.8   1.5   1.1    .7
  65.  *   1.3   1.2   1.0   1.1   2.0   1.7   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.7   1.8   1.5   1.0    .5
  70.  *   1.0   1.3    .8   1.0   1.8   1.7   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.7   1.8   1.5   1.0    .5
  75.  *   1.0   1.0    .8   1.2   1.8   1.7   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.6   1.8   1.5    .9    .6
  80.  *   1.1   1.1   1.0   1.3   2.0   1.6   1.3    .0    .0    .0    .0    .0    .0    .4   1.6   1.7   1.8   1.4    .8    .4
  85.  *   1.0   1.0   1.0   1.4   2.0   1.6   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.7   1.7   1.4    .7    .4
  90.  *    .8    .7   1.0   1.5   2.0   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.4    .6    .5
  95.  *    .7    .9   1.2   1.5   1.9   1.5   1.3    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.3    .5    .5
 100.  *    .6    .8   1.2   1.6   1.9   1.4   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.5   1.6   1.3    .5    .5
 105.  *    .5    .7   1.2   1.5   1.9   1.4   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.1    .6    .8
 110.  *    .4    .8   1.2   1.6   1.9   1.3   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.1    .7    .9
 115.  *    .4    .7   1.1   1.5   1.9   1.3   1.6    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.6   1.1    .8   1.2
 120.  *    .3    .7   1.1   1.5   1.8   1.4   1.5    .0    .0    .0    .0    .0    .0    .4   1.7   1.5   1.6   1.0    .9   1.4
 125.  *    .4    .7   1.0   1.5   1.7   1.5   1.5    .0    .0    .0    .0    .0    .0    .4   1.8   1.6   1.6   1.1   1.2   1.6
 130.  *    .4    .6    .9   1.4   1.6   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.8   1.7   1.6   1.1   1.2   1.5
 135.  *    .3    .5    .9   1.4   1.6   1.6   1.5    .0    .0    .0    .0    .0    .0    .4   1.8   1.7   1.6   1.1   1.2   1.4
 140.  *    .2    .5    .9   1.4   1.7   1.5   1.4    .0    .0    .0    .0    .0    .0    .5   1.8   1.8   1.8   1.3   1.2   1.2
 145.  *    .2    .5    .7   1.3   1.6   1.7   1.5    .0    .0    .0    .0    .0    .0    .5   1.8   2.1   1.9   1.2   1.5   1.0
 150.  *    .2    .5    .8   1.2   1.6   1.7   1.4    .1    .1    .1    .2    .0    .1    .5   2.1   2.3   2.0   1.4   1.4   1.0
 155.  *    .2    .4    .6   1.1   1.5   1.6   1.5    .1    .2    .2    .2    .2    .2    .5   2.2   2.2   2.0   1.4   1.4    .9
 160.  *    .2    .2    .6    .9   1.5   1.6   1.4    .3    .2    .5    .6    .7    .7    .8   2.1   2.3   1.9   1.2   1.3    .9
 165.  *    .0    .2    .4    .7   1.3   1.3   1.3    .4    .7    .8   1.0   1.0    .8   1.4   2.0   2.0   1.9   1.3   1.1    .7
 170.  *    .0    .2    .2    .7   1.0   1.2   1.1    .7   1.0   1.3   1.5   1.3   1.2   1.6   1.6   1.8   1.8   1.0   1.0    .7
 175.  *    .0    .0    .2    .3    .8    .9    .9   1.0   1.3   1.7   2.0   1.8   1.3   2.0   1.3   1.4   1.3   1.0    .7    .6
 180.  *    .0    .0    .1    .2    .5    .6    .7   1.2   1.7   2.2   2.5   1.9   1.6   2.1   1.0   1.3   1.2    .9    .7    .5
 185.  *    .0    .0    .0    .1    .3    .4    .4   1.4   1.9   2.7   2.8   2.0   1.7   2.2    .6    .7    .8    .5    .5    .5
 190.  *    .0    .0    .0    .0    .1    .2    .2   1.7   2.3   3.1   2.8   2.0   1.7   2.2    .4    .3    .6    .4    .4    .5
 195.  *    .0    .0    .0    .0    .1    .1    .1   1.7   2.7   3.1   2.7   1.8   1.5   2.3    .1    .2    .4    .4    .5    .5
 200.  *    .0    .0    .0    .0    .0    .1    .1   1.8   2.6   3.1   2.6   1.4   1.4   2.0    .1    .1    .5    .6    .6    .5
 205.  *    .0    .0    .0    .0    .0    .0    .0   1.8   2.7   3.0   2.2   1.3   1.3   1.9    .1    .1    .5    .5    .6    .5
1
                                                                                                                PAGE  4
      JOB: Site 7 Opt 3    2014 PM - 7B3PM14.DAT                RUN: Site 7 Opt 3    2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.7   2.7   3.0   2.1   1.0   1.2   1.9    .2    .2    .3    .5    .7    .5
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.6   2.8   3.0   1.9    .9   1.2   1.8    .2    .2    .3    .5    .7    .5
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.6   2.7   2.9   1.8    .8   1.3   1.6    .2    .2    .3    .5    .5    .6
 225.  *    .0    .0    .0    .0    .0    .0    .0   1.6   2.7   2.7   1.6    .9   1.5   1.6    .2    .2    .3    .5    .5    .7
 230.  *    .0    .0    .0    .0    .0    .0    .0   1.5   2.6   2.7   1.4   1.0   1.6   1.5    .1    .3    .3    .4    .5    .7
 235.  *    .0    .0    .0    .0    .0    .0    .0   1.5   2.6   2.7   1.2    .8   1.7   1.4    .1    .3    .3    .4    .6    .7
 240.  *    .0    .0    .0    .0    .0    .0    .0   1.4   2.5   2.6   1.2    .9   1.8   1.4    .1    .2    .3    .4    .6    .6
 245.  *    .2    .2    .0    .0    .0    .0    .0   1.4   2.5   2.6   1.1   1.1   1.6   1.4    .1    .2    .3    .4    .5    .6
 250.  *    .2    .2    .2    .0    .0    .0    .0   1.4   2.5   2.6   1.3   1.2   1.6   1.4    .1    .2    .3    .4    .4    .6
 255.  *    .3    .4    .3    .1    .0    .0    .0   1.5   2.6   2.8   1.3   1.2   1.6   1.4    .1    .1    .2    .4    .4    .6
 260.  *    .6    .5    .5    .3    .1    .0    .0   1.5   2.7   2.9   1.5   1.4   1.7   1.4    .1    .1    .2    .2    .4    .5
 265.  *    .7    .8    .7    .4    .1    .1    .0   1.5   2.7   2.9   1.4   1.3   1.6   1.3    .0    .1    .1    .2    .3    .4
 270.  *    .9   1.1    .8    .4    .2    .1    .0   1.6   2.8   3.0   1.4   1.4   1.6   1.3    .0    .0    .1    .1    .2    .4
 275.  *   1.1   1.2   1.0    .5    .4    .2    .1   1.5   2.8   3.0   1.2   1.2   1.5   1.3    .0    .0    .0    .1    .1    .2
 280.  *   1.2   1.1   1.1    .7    .4    .2    .1   1.5   2.9   2.9    .9   1.1   1.4   1.3    .0    .0    .0    .0    .1    .1
 285.  *   1.1   1.1   1.1    .7    .4    .2    .1   1.5   2.9   2.7    .8   1.2   1.4   1.2    .0    .0    .0    .0    .0    .0
 290.  *   1.1   1.1    .9    .7    .4    .3    .1   1.5   2.9   2.5    .8   1.3   1.6   1.2    .0    .0    .0    .0    .0    .0
 295.  *   1.1   1.1   1.0    .7    .4    .3    .1   1.6   3.0   2.5    .7   1.4   1.5   1.1    .0    .0    .0    .0    .0    .0
 300.  *    .9   1.0   1.1    .7    .3    .3    .1   1.6   2.9   2.4    .8   1.4   1.4   1.1    .0    .0    .0    .0    .0    .0
 305.  *    .9   1.0   1.0    .7    .4    .3    .1   1.7   3.1   2.2    .9   1.4   1.5   1.0    .0    .0    .0    .0    .0    .0
 310.  *    .9    .9   1.0    .7    .5    .3    .2   1.8   3.0   2.3   1.0   1.5   1.6    .9    .0    .0    .0    .0    .0    .0
 315.  *    .9    .9    .9    .7    .4    .3    .2   1.9   2.9   2.0   1.1   1.6   1.6   1.1    .0    .0    .0    .0    .0    .0
 320.  *    .9    .9    .8    .7    .3    .2    .2   1.9   3.0   2.1   1.2   1.7   1.7   1.0    .0    .0    .0    .0    .0    .0
 325.  *    .8    .9    .8    .7    .4    .1    .1   2.0   2.9   1.9   1.4   1.7   1.6   1.0    .0    .0    .0    .0    .0    .0
 330.  *    .8    .8    .8    .7    .4    .1    .1   2.3   3.0   2.0   1.4   1.6   1.5   1.0    .0    .0    .0    .0    .0    .0
 335.  *    .8    .8    .9    .7    .4    .1    .2   2.3   2.9   1.7   1.4   1.6   1.7   1.0    .1    .1    .0    .0    .0    .0
 340.  *    .8    .8    .9    .7    .5    .4    .2   2.3   2.4   1.5   1.4   1.7   1.7   1.0    .1    .1    .1    .0    .0    .0
 345.  *    .8    .8    .9    .9    .7    .6    .5   2.4   2.4   1.4   1.4   1.5   1.5    .9    .2    .3    .2    .1    .0    .0
 350.  *    .8    .8   1.0   1.0   1.1   1.0   1.0   1.8   1.9   1.3   1.2   1.2   1.3    .9    .4    .5    .4    .2    .1    .0
 355.  *    .8    .8   1.0   1.2   1.2   1.2   1.1   1.6   1.4    .8    .8   1.0   1.1    .7    .5    .7    .6    .4    .1    .0
 360.  *    .8    .9   1.2   1.4   1.3   1.3   1.5   1.1   1.0    .6    .7    .7    .9    .5    .7   1.0    .7    .5    .4    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.4   1.7   1.7   1.6   2.0   2.1   2.2   2.4   3.1   3.1   2.8   2.0   1.8   2.3   2.2   2.3   2.1   1.8   1.5   1.6
 DEGR. *   45    40    30    10    65    30    15   345   305   190   185   185   240   195   155   160    30    35   145   125

1
                                                                                                                PAGE  5
      JOB: Site 7 Opt 3    2014 PM - 7B3PM14.DAT                RUN: Site 7 Opt 3    2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .2
  30.  *    .3
  35.  *    .3
  40.  *    .4
```

```
  45.  *    .4
  50.  *    .4
  55.  *    .4
  60.  *    .4
  65.  *    .4
  70.  *    .3
  75.  *    .3
  80.  *    .2
  85.  *    .2
  90.  *    .4
  95.  *    .6
 100.  *    .8
 105.  *    .9
 110.  *   1.0
 115.  *   1.0
 120.  *   1.0
 125.  *    .9
 130.  *   1.1
 135.  *    .8
 140.  *    .7
 145.  *    .7
 150.  *    .7
 155.  *    .7
 160.  *    .7
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                          PAGE  6
      JOB: Site 7 Opt 3    2014 PM - 7B3PM14.DAT                RUN: Site 7 Opt 3    2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .6
 225.  *    .7
 230.  *    .7
 235.  *    .6
 240.  *    .6
 245.  *    .6
 250.  *    .7
 255.  *    .6
 260.  *    .6
 265.  *    .5
 270.  *    .5
 275.  *    .2
 280.  *    .1
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.1
 DEGR. *  130

 THE HIGHEST CONCENTRATION IS    3.10 PPM AT  305 DEGREES FROM REC9 .
 THE 2ND HIGHEST CONCENTRATION IS    3.10 PPM AT  190 DEGREES FROM REC10.
 THE 3RD HIGHEST CONCENTRATION IS    2.80 PPM AT  185 DEGREES FROM REC11.
```

```
Site 7 Opt 3    2030 PM - 7B3PM30.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 3    2030 PM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    2225 9.2  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     715 9.2  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        23       2.0  715   84.1 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.    1510 9.2  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        63       2.0 1510   84.1 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.    1065 9.2  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.    1475 9.2  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     905 9.2  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        84       2.0  905   84.1 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     570 9.2  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     570 9.2  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        84       2.0  570   84.1 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     570 9.2  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     570 9.2  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    1610 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    1055 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    1055 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    1055 9.2  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     350 9.2  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120       105       2.0  350   84.1 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.     705 9.2  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.     705 9.2  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.     705 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 7 Opt 3    2030 PM - 7B3PM30.DAT                RUN: Site 7 Opt 3    2030 PM
      DATE: 05/11/2009   TIME: 02:57:26.53


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   2225.   9.2    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    715.   9.2    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3114.8    1522.4 *      45.   174. AG     86. 100.0    .0 24.0  .26   2.3
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG   1510.   9.2    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3128.2    1177.8 *     388.   174. AG    237. 100.0    .0 24.0 1.00  19.7
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   1065.   9.2    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG   1475.   9.2    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    905.   9.2    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3028.0    1955.1 *     277.   355. AG    316. 100.0    .0 24.0  .96  14.1
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    570.   9.2    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    570.   9.2    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3836.9    3346.7 *    1853.    27. AG    158. 100.0    .0 12.0 1.35  94.2
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    570.   9.2    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    570.   9.2    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1610.   9.2    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   1055.   9.2    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   1055.   9.2    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   1055.   9.2    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    350.   9.2    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0     827.4    1467.7 *    2185.   267. AG    197. 100.0    .0 12.0 2.16 111.0
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG    705.   9.2    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG    705.   9.2    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG    705.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Opt 3    2030 PM - 7B3PM30.DAT                RUN: Site 7 Opt 3    2030 PM
      DATE: 05/11/2009   TIME: 02:57:26.53

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       23       2.0       715       1770      84.10      1        3
       5. SW        Rt1 left  *     120       63       2.0      1510       1717      84.10      1        3
       9. NE        Rt1 thru  *     120       84       2.0       905       1770      84.10      1        3
      12. NE        Rt1 right *     120       84       2.0       570       1583      84.10      1        3
      20. NW        Rt2A left *     120      105       2.0       350       1770      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0   *
      2. NE 164 E             *      2845.0     1555.0       5.0   *
      3. NE 82 E              *      2928.0     1555.0       5.0   *
      4. NE CNR               *      2987.0     1532.0       5.0   *
      5. NE 82 N              *      3024.0     1485.0       5.0   *
      6. NE 164 N             *      3039.0     1404.0       5.0   *
      7. NE MID N             *      3051.0     1276.0       5.0   *
      8. NW MID N             *      3162.0     1314.0       5.0   *
      9. NW 164 N             *      3147.0     1453.0       5.0   *
     10. NW 82 N              *      3139.0     1534.0       5.0   *
     11. W CNR                *      3129.0     1614.0       5.0   *
     12. SW 82 S              *      3116.0     1698.0       5.0   *
     13. SW 164 S             *      3106.0     1778.0       5.0   *
     14. SW MID S             *      3088.0     1931.0       5.0   *
     15. SE MID S             *      2992.0     1909.0       5.0   *
     16. SE 164 S             *      2999.0     1830.0       5.0   *
     17. SE 82 S              *      2995.0     1748.0       5.0   *
     18. SE CNR               *      2974.0     1708.0       5.0   *
     19. SE 82 E              *      2942.0     1675.0       5.0   *
     20. SE 164 E             *      2862.0     1644.0       5.0   *
     21. SE MID E             *      2679.0     1632.0       5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Opt 3    2030 PM - 7B3PM30.DAT                RUN: Site 7 Opt 3    2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .6    .8   1.0   1.0   1.0   1.2   1.2    .7    .6    .6    .5    .7    .6    .5    .5    .7    .6    .4    .3    .1
   5.  *    .6    .7   1.1   1.2   1.1   1.3   1.4    .5    .4    .4    .2    .5    .6    .5    .7   1.0   1.0    .6    .4    .1
  10.  *    .6    .8   1.1   1.3   1.3   1.4   1.5    .2    .2    .2    .2    .3    .5    .3    .8   1.1   1.1    .7    .5    .2
  15.  *    .7   1.0   1.2   1.2   1.3   1.4   1.6    .2    .1    .1    .1    .3    .4    .3    .8   1.3   1.4    .8    .6    .2
  20.  *    .8   1.1   1.3   1.2   1.0   1.5   1.5    .1    .1    .1    .1    .2    .3    .4    .9   1.4   1.5   1.3    .8    .4
  25.  *   1.0   1.1   1.4   1.0   1.3   1.4   1.5    .0    .0    .1    .1    .1    .2    .5   1.0   1.5   1.6   1.2    .8    .4
```

```
  30.  *   1.1   1.2   1.4   1.0   1.2   1.3   1.4    .0    .0    .0    .1    .1    .2    .5   1.1   1.5   1.6   1.5    .9    .6
  35.  *   1.1   1.2   1.2    .7   1.1   1.3   1.3    .0    .0    .0    .0    .1    .1    .5   1.1   1.6   1.7   1.5   1.0    .6
  40.  *   1.1   1.2   1.1    .7   1.1   1.3   1.3    .0    .0    .0    .0    .0    .1    .5   1.2   1.6   1.7   1.5   1.2    .6
  45.  *   1.1   1.3   1.1    .7   1.1   1.3   1.3    .0    .0    .0    .0    .0    .0    .5   1.3   1.6   1.8   1.3    .9    .6
  50.  *   1.1   1.3    .9    .6   1.2   1.2   1.3    .0    .0    .0    .0    .0    .0    .5   1.3   1.6   1.7   1.3   1.0    .6
  55.  *   1.1   1.2    .9    .5   1.3   1.2   1.2    .0    .0    .0    .0    .0    .0    .5   1.4   1.5   1.6   1.3   1.0    .6
  60.  *   1.1   1.0    .9    .8   1.3   1.2   1.2    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.2    .9    .5
  65.  *    .9    .9    .9    .8   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.3   1.2    .9    .5
  70.  *    .9    .6    .7    .8   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.2    .8    .5
  75.  *    .7    .8    .7    .8   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.5   1.2    .8    .5
  80.  *    .6    .7    .6    .9   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.2   1.4   1.2    .6    .4
  85.  *    .7    .8    .6    .9   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.3   1.4   1.1    .7    .4
  90.  *    .7    .5    .7   1.1   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.1    .5    .3
  95.  *    .5    .5    .7   1.1   1.2   1.1   1.0    .0    .0    .0    .0    .0    .0    .3   1.4   1.2   1.4   1.0    .5    .3
 100.  *    .5    .4    .8   1.0   1.2   1.1   1.0    .0    .0    .0    .0    .0    .0    .3   1.4   1.2   1.2   1.0    .5    .4
 105.  *    .4    .3    .8   1.0   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .3   1.4   1.3   1.2    .9    .5    .6
 110.  *    .3    .3    .8   1.1   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .3   1.4   1.5   1.2    .7    .5    .7
 115.  *    .3    .3    .8   1.1   1.1   1.2   1.1    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .7    .6    .7
 120.  *    .3    .3    .7   1.1   1.1   1.2   1.3    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .7    .7    .7
 125.  *    .4    .3    .7   1.1   1.3   1.3   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .7    .6   1.0
 130.  *    .3    .3    .6   1.0   1.3   1.3   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.2   1.0    .8   1.0
 135.  *    .3    .4    .6   1.0   1.3   1.4   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .8   1.0   1.0
 140.  *    .2    .4    .6   1.0   1.3   1.4   1.2    .0    .0    .0    .0    .0    .0    .3   1.6   1.4   1.5    .9   1.0   1.0
 145.  *    .2    .3    .6   1.1   1.4   1.3   1.2    .0    .0    .0    .0    .0    .0    .5   1.5   1.5   1.5   1.0    .9   1.0
 150.  *    .2    .3    .5    .9   1.2   1.4   1.1    .0    .0    .0    .1    .0    .1    .5   1.4   1.5   1.6   1.0   1.0   1.0
 155.  *    .2    .2    .5    .8   1.3   1.3   1.1    .1    .1    .1    .1    .0    .1    .5   1.6   1.6   1.5   1.1   1.0    .7
 160.  *    .0    .2    .4    .8   1.2   1.2   1.2    .3    .2    .3    .4    .3    .3    .6   1.5   1.6   1.5   1.1   1.1    .5
 165.  *    .0    .2    .3    .7   1.0   1.2   1.0    .4    .4    .5    .6    .6    .7   1.1   1.4   1.7   1.5    .9   1.0    .6
 170.  *    .0    .1    .2    .4    .8    .9    .9    .6    .7    .8    .8    .8    .8   1.2   1.3   1.2   1.4    .8    .9    .7
 175.  *    .0    .0    .2    .3    .6    .7    .7    .7    .8   1.1   1.2   1.0   1.1   1.5   1.0   1.1   1.1    .8    .6    .4
 180.  *    .0    .0    .0    .2    .3    .4    .5   1.1   1.2   1.2   1.4   1.4   1.1   1.6    .9   1.0    .9    .5    .5    .4
 185.  *    .0    .0    .0    .1    .3    .3    .4   1.2   1.5   1.5   1.6   1.4   1.4   1.7    .4    .5    .6    .5    .5    .4
 190.  *    .0    .0    .0    .0    .1    .1    .2   1.4   1.5   1.5   1.7   1.3   1.4   1.8    .3    .3    .6    .4    .4    .5
 195.  *    .0    .0    .0    .0    .0    .1    .1   1.4   1.5   1.6   1.7   1.2   1.0   1.7    .1    .2    .4    .4    .4    .5
 200.  *    .0    .0    .0    .0    .0    .0    .1   1.4   1.6   1.5   1.6   1.1   1.0   1.6    .1    .1    .4    .3    .4    .5
 205.  *    .0    .0    .0    .0    .0    .0    .0   1.3   1.5   1.5   1.5   1.0   1.2   1.7    .1    .1    .3    .4    .4    .5
1
                                                                                                                      PAGE  4
      JOB: Site 7 Opt 3    2030 PM - 7B3PM30.DAT                RUN: Site 7 Opt 3    2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   1.5   1.5    .8   1.1   1.6    .1    .1    .2    .4    .4    .5
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   1.5   1.4    .6   1.1   1.4    .1    .2    .1    .4    .4    .5
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.4   1.4   1.2    .7   1.1   1.4    .1    .2    .3    .5    .4    .5
 225.  *    .0    .0    .0    .0    .0    .0    .0   1.3   1.3   1.3   1.1    .6   1.2   1.2    .1    .2    .3    .4    .4    .5
 230.  *    .0    .0    .0    .0    .0    .0    .0   1.2   1.3   1.4   1.0    .6   1.2   1.2    .1    .2    .3    .3    .4    .5
 235.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.2   1.5    .9    .8   1.4   1.2    .1    .1    .3    .3    .5    .5
 240.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.2   1.5    .9    .8   1.5   1.2    .1    .1    .3    .3    .5    .5
 245.  *    .0    .1    .0    .0    .0    .0    .0   1.1   1.1   1.4    .8   1.0   1.5   1.2    .1    .1    .3    .3    .4    .6
 250.  *    .2    .2    .1    .0    .0    .0    .0   1.1   1.1   1.4   1.0   1.1   1.4   1.2    .1    .1    .2    .3    .4    .6
 255.  *    .3    .3    .3    .1    .0    .0    .0   1.1   1.1   1.7   1.2   1.2   1.4   1.2    .1    .1    .2    .3    .4    .5
 260.  *    .5    .5    .3    .2    .1    .0    .0   1.1   1.2   1.6   1.3   1.1   1.4   1.2    .1    .1    .2    .2    .4    .4
 265.  *    .7    .7    .6    .3    .1    .1    .0   1.1   1.2   1.7   1.3   1.2   1.4   1.1    .0    .1    .1    .2    .2    .4
 270.  *    .8    .8    .7    .4    .2    .1    .0   1.2   1.2   1.8   1.2   1.1   1.4   1.1    .0    .0    .1    .1    .2    .2
 275.  *    .9    .9    .8    .4    .3    .1    .1   1.2   1.3   1.7   1.1   1.1   1.3   1.0    .0    .0    .0    .1    .1    .1
 280.  *    .9    .9    .8    .4    .3    .2    .1   1.2   1.4   1.7    .8   1.0   1.3   1.0    .0    .0    .0    .0    .0    .1
 285.  *    .9    .9    .9    .5    .3    .2    .1   1.2   1.5   1.6    .5   1.1   1.2    .9    .0    .0    .0    .0    .0    .0
 290.  *   1.0    .9    .8    .5    .3    .3    .1   1.2   1.5   1.4    .7   1.1   1.1    .9    .0    .0    .0    .0    .0    .0
 295.  *   1.0    .9    .8    .6    .3    .3    .1   1.2   1.5   1.4    .6   1.1   1.2    .8    .0    .0    .0    .0    .0    .0
 300.  *    .8    .8    .7    .6    .3    .2    .1   1.3   1.4   1.3    .5   1.1   1.2    .8    .0    .0    .0    .0    .0    .0
 305.  *    .8    .8    .8    .6    .3    .2    .1   1.4   1.5   1.2    .8   1.1   1.3    .8    .0    .0    .0    .0    .0    .0
 310.  *    .7    .8    .8    .5    .3    .2    .1   1.6   1.5   1.3    .9   1.2   1.4    .8    .0    .0    .0    .0    .0    .0
 315.  *    .7    .7    .8    .7    .3    .1    .1   1.6   1.4   1.1   1.0   1.3   1.4    .8    .0    .0    .0    .0    .0    .0
 320.  *    .7    .7    .6    .6    .3    .1    .1   1.6   1.5   1.3   1.1   1.2   1.3    .7    .0    .0    .0    .0    .0    .0
 325.  *    .7    .7    .6    .5    .3    .1    .1   1.6   1.4   1.2   1.1   1.2   1.4    .8    .0    .0    .0    .0    .0    .0
 330.  *    .7    .7    .6    .5    .4    .1    .1   1.6   1.5   1.2   1.1   1.3   1.4    .8    .0    .0    .0    .0    .0    .0
 335.  *    .7    .7    .6    .5    .3    .1    .2   1.5   1.7   1.3   1.1   1.3   1.4    .8    .1    .1    .0    .0    .0    .0
 340.  *    .6    .6    .7    .5    .4    .3    .2   1.5   1.5   1.2   1.2   1.4   1.3    .8    .1    .1    .1    .0    .0    .0
 345.  *    .6    .6    .7    .6    .5    .5    .4   1.4   1.5   1.1   1.1   1.2   1.2    .8    .2    .2    .1    .1    .0    .0
 350.  *    .6    .6    .7    .7   1.0    .8    .8   1.3   1.2   1.0    .9   1.0   1.0    .7    .4    .5    .4    .1    .1    .0
 355.  *    .6    .7    .8    .9   1.1   1.0   1.0   1.1    .8    .7    .7    .9    .9    .7    .5    .6    .5    .4    .1    .0
 360.  *    .6    .8   1.0   1.0   1.0   1.2   1.2    .7    .6    .6    .5    .7    .6    .5    .5    .7    .6    .4    .3    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.1   1.3   1.4   1.3   1.4   1.5   1.6   1.6   1.7   1.8   1.7   1.4   1.5   1.8   1.6   1.7   1.8   1.5   1.2   1.0
 DEGR. *   30    45    25    10   145    20    15   330   335   270   190   180   240   190   155   165    45    30    40   125

1
                                                                                                                      PAGE  5
      JOB: Site 7 Opt 3    2030 PM - 7B3PM30.DAT                RUN: Site 7 Opt 3    2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
  30.  *    .3
  35.  *    .3
  40.  *    .3
```

```
  45.  *    .4
  50.  *    .4
  55.  *    .4
  60.  *    .3
  65.  *    .3
  70.  *    .2
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .3
  95.  *    .3
 100.  *    .6
 105.  *    .7
 110.  *    .8
 115.  *    .8
 120.  *    .8
 125.  *    .8
 130.  *    .8
 135.  *    .8
 140.  *    .7
 145.  *    .7
 150.  *    .7
 155.  *    .7
 160.  *    .5
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                             PAGE  6
      JOB: Site 7 Opt 3    2030 PM - 7B3PM30.DAT                RUN: Site 7 Opt 3    2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .5
 225.  *    .6
 230.  *    .5
 235.  *    .5
 240.  *    .5
 245.  *    .6
 250.  *    .5
 255.  *    .5
 260.  *    .5
 265.  *    .4
 270.  *    .2
 275.  *    .1
 280.  *    .1
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .8
 DEGR. *  110

 THE HIGHEST CONCENTRATION IS    1.80 PPM AT  270 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    1.80 PPM AT  190 DEGREES FROM REC14.
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT   45 DEGREES FROM REC17.
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Site 7 Opt 8    2014 AM - 7B8AM14.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 8    2014 AM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    130011.4  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     82511.4  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        61       2.0  825  102.2 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     47511.4  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        95       2.0  475  102.2 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.    129511.4  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.     75011.4  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     49011.4  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        61       2.0  490  102.2 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     26011.4  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     26011.4  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        61       2.0  260  102.2 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     26011.4  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     26011.4  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    228011.4  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    226011.4  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    226011.4  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    226011.4  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     47011.4  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120        95       2.0  470  102.2 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.    179011.4  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.    179011.4  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.    179011.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                        CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 7 Opt 8    2014 AM - 7B8AM14.DAT               RUN: Site 7 Opt 8    2014 AM
      DATE: 05/11/2009   TIME: 03:00:46.19


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2    *     (FT) (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*---------------------------------------*-----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   1300.  11.4    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    825.  11.4    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3124.6    1430.4 *     137.   174. AG    279. 100.0    .0 24.0  .51   7.0
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG    475.  11.4    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3103.2    1430.2 *     134.   174. AG    434. 100.0    .0 24.0  .79   6.8
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   1295.  11.4    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG    750.  11.4    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    490.  11.4    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3046.3    1760.4 *      82.   355. AG    279. 100.0    .0 24.0  .30   4.2
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    260.  11.4    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    260.  11.4    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3033.4    1773.2 *      87.    27. AG    139. 100.0    .0 12.0  .36   4.4
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    260.  11.4    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    260.  11.4    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   2280.  11.4    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   2260.  11.4    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   2260.  11.4    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   2260.  11.4    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    470.  11.4    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    1053.6    1481.1 *    1959.   267. AG    217. 100.0    .0 12.0 1.52  99.5
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG   1790.  11.4    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG   1790.  11.4    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG   1790.  11.4    .0 32.0
1
                                                                                                                    PAGE  2
      JOB: Site 7 Opt 8    2014 AM - 7B8AM14.DAT               RUN: Site 7 Opt 8    2014 AM
      DATE: 05/11/2009   TIME: 03:00:46.19

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       61       2.0       825       1770     102.20      1        3
       5. SW        Rt1 left  *     120       95       2.0       475       1717     102.20      1        3
       9. NE        Rt1 thru  *     120       61       2.0       490       1770     102.20      1        3
      12. NE        Rt1 right *     120       61       2.0       260       1583     102.20      1        3
      20. NW        Rt2A left *     120       95       2.0       470       1770     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0   *
      2. NE 164 E             *      2845.0     1555.0       5.0   *
      3. NE 82 E              *      2928.0     1555.0       5.0   *
      4. NE CNR               *      2987.0     1532.0       5.0   *
      5. NE 82 N              *      3024.0     1485.0       5.0   *
      6. NE 164 N             *      3039.0     1404.0       5.0   *
      7. NE MID N             *      3051.0     1276.0       5.0   *
      8. NW MID N             *      3162.0     1314.0       5.0   *
      9. NW 164 N             *      3147.0     1453.0       5.0   *
     10. NW 82 N              *      3139.0     1534.0       5.0   *
     11. W CNR                *      3129.0     1614.0       5.0   *
     12. SW 82 S              *      3116.0     1698.0       5.0   *
     13. SW 164 S             *      3106.0     1778.0       5.0   *
     14. SW MID S             *      3088.0     1931.0       5.0   *
     15. SE MID S             *      2992.0     1909.0       5.0   *
     16. SE 164 S             *      2999.0     1830.0       5.0   *
     17. SE 82 S              *      2995.0     1748.0       5.0   *
     18. SE CNR               *      2974.0     1708.0       5.0   *
     19. SE 82 E              *      2942.0     1675.0       5.0   *
     20. SE 164 E             *      2862.0     1644.0       5.0   *
     21. SE MID E             *      2679.0     1632.0       5.0   *
1
                                                                                                                    PAGE  3
      JOB: Site 7 Opt 8    2014 AM - 7B8AM14.DAT               RUN: Site 7 Opt 8    2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*-------------------------------------------------------------------------------------------------------------------------
   0.  *   1.2   1.2   1.4   1.2   1.6   1.5   1.5    .7    .7    .3    .4    .5    .6    .7    .5    .5    .4    .2    .2    .0
   5.  *   1.2   1.3   1.3   1.4   1.6   1.6   1.6    .5    .3    .3    .2    .3    .3    .4    .6    .6    .4    .3    .2    .2
  10.  *   1.2   1.4   1.2   1.5   1.6   2.0   1.9    .2    .3    .2    .1    .2    .2    .3    .6    .6    .5    .3    .3    .2
  15.  *   1.3   1.3   1.3   1.3   1.5   1.9   1.9    .1    .1    .1    .1    .1    .1    .2    .6    .6    .6    .3    .3    .2
  20.  *   1.3   1.3   1.7   1.3   1.8   2.1   1.6    .1    .0    .0    .0    .1    .1    .1    .6    .6    .5    .3    .3    .2
  25.  *   1.4   1.4   1.5   1.3   1.7   2.1   1.7    .0    .0    .0    .0    .0    .1    .1    .6    .6    .6    .4    .3    .2
```

```
  30.  *   1.3   1.2   1.7   1.3   1.9   2.1   1.5    .0    .0    .0    .0    .0    .0    .1    .6    .6    .6    .5    .4    .2
  35.  *   1.4   1.3   1.6   1.3   2.0   2.1   1.4    .0    .0    .0    .0    .0    .0    .1    .6    .6    .7    .6    .5    .2
  40.  *   1.4   1.4   1.5   1.2   2.0   2.0   1.4    .0    .0    .0    .0    .0    .0    .1    .6    .6    .5    .7    .5    .1
  45.  *   1.4   1.4   1.5   1.2   2.1   1.9   1.1    .0    .0    .0    .0    .0    .0    .0    .6    .5    .5    .7    .6    .1
  50.  *   1.6   1.5   1.4   1.2   2.2   1.9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .5    .9    .7    .3
  55.  *   1.6   1.4   1.5   1.5   2.2   1.8   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .7    .9    .7    .3
  60.  *   1.6   1.5   1.4   1.5   2.2   1.6   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .7    .9    .8    .3
  65.  *   1.7   1.5   1.2   1.5   2.3   1.4    .9    .0    .0    .0    .0    .0    .0    .0    .5    .4    .7   1.0    .7    .3
  70.  *   1.7   1.5   1.3   1.6   2.3   1.4   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .9   1.0    .7    .3
  75.  *   1.5   1.4   1.3   1.7   2.3   1.3   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5    .9   1.0    .7    .2
  80.  *   1.6   1.3   1.4   1.8   2.3   1.2   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.0   1.0    .7    .2
  85.  *   1.4   1.7   1.5   1.8   2.3   1.1   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .3    .9   1.0    .5    .2
  90.  *   1.2   1.4   1.5   1.9   2.3   1.0   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.1   1.0    .4    .4
  95.  *   1.1   1.2   1.5   1.9   2.3    .9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1   1.0    .4    .5
 100.  *    .7   1.0   1.6   1.8   2.2    .9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1   1.0    .4    .6
 105.  *    .6    .9   1.5   2.1   2.1    .9   1.0    .0    .0    .0    .0    .0    .0    .0    .5    .4   1.2    .8    .4    .9
 110.  *    .4    .9   1.5   2.0   2.0    .9   1.1    .0    .0    .0    .0    .0    .0    .0    .5    .3   1.2    .8    .6   1.1
 115.  *    .4    .6   1.4   1.8   2.0    .9   1.1    .0    .0    .0    .0    .0    .0    .0    .5    .3   1.2    .6    .6   1.3
 120.  *    .3    .6   1.1   1.7   1.9   1.0   1.1    .0    .0    .0    .0    .0    .0    .0    .5    .5   1.1    .7    .6   1.3
 125.  *    .2    .4   1.1   1.7   1.6   1.0   1.2    .0    .0    .0    .0    .0    .0    .0    .5    .6   1.1    .9    .9   1.5
 130.  *    .3    .3    .8   1.5   1.6   1.0   1.1    .0    .0    .0    .0    .0    .0    .1    .5    .6   1.1    .8   1.2   1.4
 135.  *    .3    .2    .7   1.4   1.4   1.1   1.1    .0    .0    .0    .0    .0    .0    .1    .5    .7   1.4   1.1   1.3   1.4
 140.  *    .3    .3    .6   1.3   1.3   1.2   1.3    .0    .0    .0    .0    .0    .0    .1    .5    .8   1.3   1.0   1.3   1.4
 145.  *    .3    .3    .6   1.1   1.3   1.3   1.3    .0    .0    .0    .1    .0    .1    .1    .7   1.1   1.4   1.0   1.4   1.3
 150.  *    .2    .3    .5   1.0   1.2   1.3   1.4    .0    .1    .1    .1    .0    .1    .1    .8   1.3   1.5   1.2   1.6   1.3
 155.  *    .1    .3    .4    .9   1.2   1.4   1.4    .2    .1    .1    .2    .2    .1    .2   1.0   1.4   1.6   1.5   1.5   1.1
 160.  *    .1    .3    .4    .6   1.2   1.4   1.4    .2    .2    .3    .4    .5    .6    .4   1.0   1.3   1.7   1.6   1.3   1.0
 165.  *    .0    .2    .4    .6    .9   1.2   1.4    .4    .4    .5    .7    .6    .6    .6   1.1   1.4   1.6   1.4   1.3   1.1
 170.  *    .0    .1    .3    .5    .8   1.1   1.2    .6    .6    .8   1.2   1.2   1.0   1.1   1.2   1.4   1.7   1.1   1.1    .8
 175.  *    .0    .1    .1    .4    .7    .9    .9    .7    .9   1.2   1.6   1.5   1.3   1.3    .9   1.1   1.2    .9    .9    .8
 180.  *    .0    .0    .1    .2    .5    .7    .7    .9   1.1   1.5   1.9   1.7   1.5   1.6    .6    .8   1.0    .8    .7    .7
 185.  *    .0    .0    .0    .1    .3    .5    .4   1.1   1.1   1.8   2.2   1.8   1.7   1.4    .3    .5    .7    .7    .8    .8
 190.  *    .0    .0    .0    .1    .2    .2    .3   1.0   1.2   2.0   2.6   1.9   1.8   1.3    .2    .4    .6    .7    .7    .7
 195.  *    .0    .0    .0    .0    .1    .1    .2   1.2   1.2   2.4   2.6   1.7   1.5   1.2    .2    .4    .6    .6    .6    .8
 200.  *    .0    .0    .0    .0    .0    .1    .1   1.1   1.3   2.5   2.5   1.5   1.4   1.3    .2    .3    .4    .6    .7    .8
 205.  *    .0    .0    .0    .0    .0    .0    .1   1.2   1.2   2.6   2.4   1.5   1.4   1.1    .2    .3    .4    .6    .7    .8
1
                                                                                                                 PAGE  4
      JOB: Site 7 Opt 8    2014 AM - 7B8AM14.DAT               RUN: Site 7 Opt 8    2014 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   2.5   2.1   1.4   1.3   1.0    .2    .2    .4    .5    .7    .8
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.4   2.7   2.0   1.4   1.3    .9    .2    .2    .4    .5    .6    .8
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.0   1.5   2.6   1.8   1.2   1.4    .9    .2    .3    .5    .5    .6    .8
 225.  *    .0    .1    .0    .0    .0    .0    .0    .8   1.5   2.6   1.5   1.0   1.4    .9    .2    .3    .4    .5    .8    .9
 230.  *    .0    .1    .0    .0    .0    .0    .0    .8   1.5   2.6   1.4   1.2   1.4    .9    .2    .3    .4    .4    .7    .9
 235.  *    .1    .1    .0    .0    .0    .0    .0    .8   1.6   2.6   1.3   1.4   1.4    .9    .2    .2    .4    .5    .6   1.0
 240.  *    .1    .1    .0    .0    .0    .0    .0    .8   1.8   2.6   1.3   1.2   1.3    .9    .1    .3    .4    .5    .7    .9
 245.  *    .1    .2    .1    .0    .0    .0    .0    .8   2.0   2.6   1.4   1.1   1.3    .8    .1    .4    .5    .6    .7   1.0
 250.  *    .4    .3    .3    .0    .0    .0    .0    .8   2.0   2.6   1.4   1.3   1.2    .8    .1    .1    .4    .6    .7    .9
 255.  *    .5    .7    .5    .2    .0    .0    .0    .8   2.1   2.7   1.4   1.3   1.2    .8    .1    .1    .4    .5    .7   1.0
 260.  *    .9    .9    .8    .3    .1    .0    .0    .8   2.3   2.9   1.6   1.3   1.1    .8    .1    .1    .3    .4    .7    .9
 265.  *   1.2   1.3   1.1    .5    .2    .1    .0    .8   2.5   3.0   1.6   1.2    .9    .7    .0    .1    .1    .3    .5    .7
 270.  *   1.4   1.6   1.5    .8    .3    .1    .0    .9   2.7   3.3   1.7   1.3    .9    .7    .0    .0    .1    .1    .3    .5
 275.  *   1.7   1.8   1.7    .9    .5    .1    .1    .9   2.8   3.1   1.1   1.2    .7    .7    .0    .0    .0    .1    .1    .3
 280.  *   1.9   1.9   1.6   1.2    .6    .3    .1    .9   2.9   3.1   1.1   1.0    .6    .7    .0    .0    .0    .0    .0    .1
 285.  *   1.8   1.9   1.7   1.2    .6    .4    .1    .9   2.9   3.0    .9   1.0    .6    .7    .0    .0    .0    .0    .0    .0
 290.  *   1.7   1.7   1.6   1.0    .5    .4    .1   1.0   3.1   2.8    .6   1.1    .6    .7    .0    .0    .0    .0    .0    .0
 295.  *   1.6   1.6   1.6   1.2    .5    .4    .2   1.0   3.1   2.6    .6   1.1    .6    .7    .0    .0    .0    .0    .0    .0
 300.  *   1.6   1.5   1.6   1.2    .6    .4    .2   1.0   3.1   2.3    .6   1.0    .7    .7    .0    .0    .0    .0    .0    .0
 305.  *   1.5   1.5   1.5   1.2    .6    .4    .2   1.0   3.1   2.0    .7   1.0    .7    .8    .0    .0    .0    .0    .0    .0
 310.  *   1.3   1.3   1.4   1.2    .6    .4    .2   1.2   3.0   1.8    .9   1.0    .8    .8    .0    .0    .0    .0    .0    .0
 315.  *   1.3   1.3   1.3   1.2    .7    .3    .2   1.4   2.9   1.7    .9   1.0    .7    .8    .0    .0    .0    .0    .0    .0
 320.  *   1.3   1.3   1.3   1.2    .8    .4    .2   1.5   2.9   1.6   1.0   1.0    .7    .9    .0    .0    .0    .0    .0    .0
 325.  *   1.2   1.3   1.3   1.1    .8    .4    .2   1.4   2.5   1.3   1.0    .9    .9    .9    .0    .0    .0    .0    .0    .0
 330.  *   1.2   1.2   1.2   1.1    .9    .4    .3   1.5   2.4   1.3   1.0   1.0    .9    .9    .0    .0    .0    .0    .0    .0
 335.  *   1.2   1.2   1.2   1.2    .9    .5    .3   1.7   2.2   1.3   1.1    .9   1.0   1.0    .0    .0    .0    .0    .0    .0
 340.  *   1.2   1.2   1.0   1.2    .8    .4    .3   1.6   2.2   1.1    .9    .8   1.0   1.0    .1    .1    .0    .0    .0    .0
 345.  *   1.2   1.2   1.0   1.1    .9    .7    .7   1.3   1.9   1.1    .8    .8   1.0   1.0    .2    .2    .1    .0    .0    .0
 350.  *   1.2   1.2   1.2   1.2   1.3    .9    .9   1.4   1.5    .8    .7    .8    .8    .9    .3    .3    .2    .2    .0    .0
 355.  *   1.2   1.2   1.3   1.2   1.4   1.4   1.0   1.0   1.0    .6    .6    .7    .7    .8    .4    .4    .3    .2    .2    .0
 360.  *   1.2   1.2   1.4   1.2   1.6   1.5   1.5    .7    .7    .3    .4    .5    .6    .7    .5    .5    .4    .2    .2    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.9   1.9   1.7   2.1   2.3   2.1   1.9   1.7   3.1   3.3   2.6   1.9   1.8   1.6   1.2   1.4   1.7   1.6   1.6   1.5
 DEGR. *  280   280    20   105    65    20    10   335   290   270   190   190   190   180   170   155   170   160   150   125

1
                                                                                                                 PAGE  5
      JOB: Site 7 Opt 8    2014 AM - 7B8AM14.DAT               RUN: Site 7 Opt 8    2014 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
  30.  *    .1
  35.  *    .1
  40.  *    .1
```

```
  45.  *    .1
  50.  *    .1
  55.  *    .1
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .1
  80.  *    .2
  85.  *    .3
  90.  *    .4
  95.  *    .7
 100.  *   1.0
 105.  *   1.1
 110.  *   1.1
 115.  *   1.1
 120.  *   1.0
 125.  *    .9
 130.  *   1.0
 135.  *   1.1
 140.  *   1.1
 145.  *   1.0
 150.  *   1.0
 155.  *    .9
 160.  *    .9
 165.  *    .8
 170.  *    .8
 175.  *    .8
 180.  *    .8
 185.  *    .8
 190.  *    .8
 195.  *    .8
 200.  *    .8
 205.  *    .8
1
                                                                                                                             PAGE  6
      JOB: Site 7 Opt 8    2014 AM - 7B8AM14.DAT                RUN: Site 7 Opt 8    2014 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .8
 215.  *    .9
 220.  *    .9
 225.  *    .8
 230.  *    .9
 235.  *    .9
 240.  *    .9
 245.  *   1.0
 250.  *    .9
 255.  *    .9
 260.  *    .7
 265.  *    .6
 270.  *    .4
 275.  *    .4
 280.  *    .2
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.1
 DEGR. *  105

 THE HIGHEST CONCENTRATION IS    3.30 PPM AT  270 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    3.10 PPM AT  290 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    2.60 PPM AT  190 DEGREES FROM REC11.
```

```
Site 7 Opt 8    2030 AM - 7B8AM30.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 8    2030 AM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    1305 9.2  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     840 9.2  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        35       2.0  840   84.1 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.     465 9.2  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        95       2.0  465   84.1 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.    1355 9.2  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.     810 9.2  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     500 9.2  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        64       2.0  500   84.1 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     310 9.2  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     310 9.2  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        64       2.0  310   84.1 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     310 9.2  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     310 9.2  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    2155 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    2170 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    2170 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    2170 9.2  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     515 9.2  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120        93       2.0  515   84.1 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.    1655 9.2  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.    1655 9.2  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.    1655 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                   PAGE  1

      JOB: Site 7 Opt 8    2030 AM - 7B8AM30.DAT               RUN: Site 7 Opt 8    2030 AM
      DATE: 05/11/2009   TIME: 03:06:42.54


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2    *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*---------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   1305.   9.2    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    840.   9.2    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3118.6    1487.1 *      80.   174. AG    132. 100.0    .0 24.0  .35   4.1
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG    465.   9.2    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3102.8    1434.9 *     130.   174. AG    357. 100.0    .0 24.0  .77   6.6
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   1355.   9.2    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG    810.   9.2    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    500.   9.2    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3045.8    1766.1 *      87.   355. AG    241. 100.0    .0 24.0  .33   4.4
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    310.   9.2    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    310.   9.2    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3043.3    1792.6 *     108.    27. AG    120. 100.0    .0 12.0  .45   5.5
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    310.   9.2    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    310.   9.2    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   2155.   9.2    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   2170.   9.2    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   2170.   9.2    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   2170.   9.2    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    515.   9.2    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0     882.5    1471.0 *    2130.   267. AG    175. 100.0    .0 12.0 1.52 108.2
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG   1655.   9.2    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG   1655.   9.2    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG   1655.   9.2    .0 32.0
1
                                                                                                                     PAGE  2
      JOB: Site 7 Opt 8    2030 AM - 7B8AM30.DAT               RUN: Site 7 Opt 8    2030 AM
      DATE: 05/11/2009   TIME: 03:06:42.54

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*-----------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       35       2.0       840       1770      84.10     1        3
       5. SW        Rt1 left  *     120       95       2.0       465       1717      84.10     1        3
       9. NE        Rt1 thru  *     120       64       2.0       500       1770      84.10     1        3
      12. NE        Rt1 right *     120       64       2.0       310       1583      84.10     1        3
      20. NW        Rt2A left *     120       93       2.0       515       1770      84.10     1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
      1. NE MID E             *      2716.0     1547.0       5.0   *
      2. NE 164 E             *      2845.0     1555.0       5.0   *
      3. NE 82 E              *      2928.0     1555.0       5.0   *
      4. NE CNR               *      2987.0     1532.0       5.0   *
      5. NE 82 N              *      3024.0     1485.0       5.0   *
      6. NE 164 N             *      3039.0     1404.0       5.0   *
      7. NE MID N             *      3051.0     1276.0       5.0   *
      8. NW MID N             *      3162.0     1314.0       5.0   *
      9. NW 164 N             *      3147.0     1453.0       5.0   *
     10. NW 82 N              *      3139.0     1534.0       5.0   *
     11. W CNR                *      3129.0     1614.0       5.0   *
     12. SW 82 S              *      3116.0     1698.0       5.0   *
     13. SW 164 S             *      3106.0     1778.0       5.0   *
     14. SW MID S             *      3088.0     1931.0       5.0   *
     15. SE MID S             *      2992.0     1909.0       5.0   *
     16. SE 164 S             *      2999.0     1830.0       5.0   *
     17. SE 82 S              *      2995.0     1748.0       5.0   *
     18. SE CNR               *      2974.0     1708.0       5.0   *
     19. SE 82 E              *      2942.0     1675.0       5.0   *
     20. SE 164 E             *      2862.0     1644.0       5.0   *
     21. SE MID E             *      2679.0     1632.0       5.0   *
1
                                                                                                                     PAGE  3
      JOB: Site 7 Opt 8    2030 AM - 7B8AM30.DAT               RUN: Site 7 Opt 8    2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*--------------------------------------------------------------------------------------------------------------------------
   0.  *    .9    .9   1.1   1.1   1.2   1.1   1.0    .4    .4    .3    .3    .5    .5    .6    .4    .4    .4    .2    .2    .0
   5.  *    .9   1.0   1.1   1.3   1.3   1.2   1.3    .3    .3    .2    .2    .3    .3    .3    .5    .5    .4    .3    .2    .1
  10.  *    .9   1.1   1.1   1.3   1.2   1.5   1.3    .1    .2    .2    .1    .2    .2    .2    .5    .5    .4    .3    .2    .2
  15.  *    .9   1.1   1.1   1.1   1.2   1.6   1.3    .1    .1    .0    .1    .1    .1    .2    .6    .6    .4    .3    .2    .2
  20.  *   1.0   1.0   1.3   1.1   1.3   1.6   1.2    .0    .0    .0    .0    .1    .1    .1    .6    .6    .4    .4    .3    .2
  25.  *   1.0   1.0   1.2   1.2   1.3   1.6   1.2    .0    .0    .0    .0    .0    .1    .1    .6    .6    .5    .4    .4    .2
```

```
  30.  *   1.1   1.0   1.2   1.2   1.5   1.6   1.0    .0    .0    .0    .0    .0    .0    .1    .4    .4    .6    .4    .4    .2
  35.  *   1.1   1.0   1.1   1.0   1.4   1.6   1.0    .0    .0    .0    .0    .0    .0    .0    .4    .4    .6    .6    .3    .2
  40.  *   1.1   1.1   1.1    .8   1.5   1.4    .9    .0    .0    .0    .0    .0    .0    .0    .4    .4    .5    .7    .3    .1
  45.  *   1.2   1.3   1.1    .9   1.6   1.4    .9    .0    .0    .0    .0    .0    .0    .0    .4    .4    .6    .7    .4    .1
  50.  *   1.3   1.2   1.2    .9   1.7   1.3    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7    .9    .5    .3
  55.  *   1.3   1.2   1.1   1.1   1.7   1.2    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7    .9    .6    .3
  60.  *   1.3   1.3   1.0   1.0   1.7   1.1    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .7    .9    .6    .3
  65.  *   1.3   1.2   1.1   1.1   1.8    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .9   1.0    .6    .3
  70.  *   1.4   1.2    .9   1.3   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4    .9   1.0    .6    .2
  75.  *   1.1   1.1   1.0   1.3   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.0   1.0    .6    .2
  80.  *   1.1   1.1   1.1   1.4   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.0   1.0    .6    .2
  85.  *   1.0    .9   1.0   1.4   1.7    .9    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3    .9   1.0    .4    .2
  90.  *    .9    .9   1.1   1.5   1.7    .8    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1   1.0    .4    .2
  95.  *    .6    .7   1.1   1.5   1.7    .8    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.1    .9    .4    .3
 100.  *    .5    .8   1.0   1.5   1.6    .8    .8    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.1    .8    .4    .5
 105.  *    .3    .7   1.1   1.5   1.5    .8    .8    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1    .7    .2    .6
 110.  *    .3    .5    .9   1.5   1.5    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1    .7    .3    .8
 115.  *    .2    .5    .8   1.2   1.3    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .3   1.1    .6    .4   1.0
 120.  *    .1    .4    .7   1.2   1.3    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .4   1.1    .5    .4   1.0
 125.  *    .1    .3    .7   1.2   1.2    .8    .7    .0    .0    .0    .0    .0    .0    .0    .4    .6   1.1    .8    .6   1.0
 130.  *    .1    .2    .5   1.1   1.1    .8    .9    .0    .0    .0    .0    .0    .0    .0    .4    .6   1.0    .7    .8   1.1
 135.  *    .2    .2    .6   1.1   1.1    .9    .9    .0    .0    .0    .0    .0    .0    .1    .4    .7   1.0    .5    .9   1.1
 140.  *    .2    .3    .4    .9   1.0   1.0    .9    .0    .0    .0    .0    .0    .0    .1    .4    .7   1.1    .5   1.2   1.0
 145.  *    .2    .3    .4    .8   1.0   1.0   1.0    .0    .0    .0    .0    .0    .0    .1    .5    .7   1.1    .7   1.1    .8
 150.  *    .2    .3    .4    .8    .9   1.1   1.0    .0    .1    .0    .1    .0    .1    .1    .7   1.0   1.1    .9   1.0    .8
 155.  *    .1    .3    .4    .7   1.0   1.1   1.1    .1    .1    .1    .1    .1    .1    .2    .7   1.0   1.3    .9   1.1    .9
 160.  *    .1    .2    .3    .5   1.0   1.0   1.1    .2    .2    .1    .1    .4    .3    .2    .9   1.1   1.4   1.2   1.1    .9
 165.  *    .0    .1    .3    .5    .7   1.0   1.0    .2    .4    .4    .6    .4    .5    .4    .9   1.1   1.2   1.2   1.0    .7
 170.  *    .0    .1    .3    .4    .6    .8   1.0    .4    .4    .4    .8   1.0    .8    .6    .8   1.1   1.0   1.0    .8    .6
 175.  *    .0    .0    .1    .3    .5    .7    .7    .7    .6    .8   1.0   1.2    .9   1.0    .7    .7   1.1    .7    .8    .6
 180.  *    .0    .0    .1    .2    .4    .5    .6    .7    .8   1.0   1.4   1.3   1.2   1.1    .4    .6    .7    .6    .7    .6
 185.  *    .0    .0    .0    .1    .2    .3    .3    .8    .8   1.3   1.6   1.5   1.2   1.1    .2    .3    .6    .6    .7    .5
 190.  *    .0    .0    .0    .0    .1    .2    .2    .9   1.0   1.4   1.7   1.5   1.1   1.1    .2    .3    .5    .5    .5    .5
 195.  *    .0    .0    .0    .0    .1    .1    .1   1.0    .9   1.5   1.6   1.2   1.2   1.0    .1    .1    .5    .5    .5    .6
 200.  *    .0    .0    .0    .0    .0    .1    .1   1.0    .8   1.4   1.8   1.3   1.1   1.2    .2    .1    .3    .4    .5    .6
 205.  *    .0    .0    .0    .0    .0    .0    .0    .9    .8   1.6   1.6   1.1    .9   1.0    .2    .2    .2    .3    .6    .6
1
                                                                                                                 PAGE  4
      JOB: Site 7 Opt 8    2030 AM - 7B8AM30.DAT                RUN: Site 7 Opt 8    2030 AM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0    .9    .8   1.7   1.5    .8   1.1    .8    .2    .2    .3    .5    .6    .6
 215.  *    .0    .0    .0    .0    .0    .0    .0    .9    .8   1.7   1.4    .9   1.0    .8    .2    .2    .3    .4    .5    .6
 220.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.9   1.3    .9   1.0    .8    .2    .2    .2    .4    .6    .7
 225.  *    .0    .0    .0    .0    .0    .0    .0    .7    .9   1.9   1.2    .9   1.1    .8    .2    .2    .2    .5    .6    .7
 230.  *    .0    .0    .0    .0    .0    .0    .0    .7    .8   1.9   1.2    .9   1.1    .7    .2    .2    .3    .4    .5    .7
 235.  *    .0    .1    .0    .0    .0    .0    .0    .6    .9   1.8   1.0   1.0   1.1    .7    .1    .2    .4    .4    .5    .7
 240.  *    .1    .1    .0    .0    .0    .0    .0    .6    .8   1.8   1.1   1.1   1.1    .6    .1    .2    .4    .4    .5    .7
 245.  *    .1    .1    .1    .0    .0    .0    .0    .6    .9   1.9   1.1    .9   1.2    .6    .1    .2    .3    .4    .5    .8
 250.  *    .2    .3    .2    .0    .0    .0    .0    .6   1.0   1.9   1.1   1.0   1.2    .6    .1    .1    .3    .4    .6    .7
 255.  *    .5    .5    .4    .2    .0    .0    .0    .7   1.1   2.0   1.2   1.0   1.0    .6    .1    .1    .3    .4    .6    .7
 260.  *    .6    .7    .6    .2    .1    .0    .0    .7   1.2   2.3   1.2   1.0    .9    .6    .1    .1    .1    .3    .4    .7
 265.  *   1.0   1.0    .8    .4    .1    .1    .0    .7   1.5   2.3   1.2   1.1    .8    .5    .0    .1    .1    .1    .3    .7
 270.  *   1.2   1.3   1.1    .6    .3    .1    .0    .8   1.6   2.3   1.0   1.1    .8    .5    .0    .0    .1    .1    .2    .4
 275.  *   1.3   1.5   1.3    .7    .3    .1    .1    .7   1.5   2.2   1.0   1.0    .7    .5    .0    .0    .0    .1    .1    .2
 280.  *   1.5   1.6   1.3    .7    .4    .2    .1    .7   1.7   2.1    .9    .9    .6    .5    .0    .0    .0    .0    .0    .1
 285.  *   1.5   1.5   1.3    .9    .4    .2    .1    .7   1.8   2.2    .6    .9    .6    .5    .0    .0    .0    .0    .0    .0
 290.  *   1.3   1.3   1.2    .8    .5    .2    .1    .8   1.9   1.9    .5    .9    .5    .5    .0    .0    .0    .0    .0    .0
 295.  *   1.2   1.2   1.3    .9    .5    .2    .1    .9   1.9   1.9    .5    .9    .5    .5    .0    .0    .0    .0    .0    .0
 300.  *   1.2   1.2   1.3    .9    .6    .2    .2    .9   2.0   1.6    .6    .9    .6    .5    .0    .0    .0    .0    .0    .0
 305.  *   1.1   1.2   1.1    .9    .5    .2    .2    .9   1.9   1.5    .6    .9    .6    .7    .0    .0    .0    .0    .0    .0
 310.  *   1.1   1.1   1.1    .9    .5    .2    .2    .9   1.8   1.2    .8    .9    .6    .7    .0    .0    .0    .0    .0    .0
 315.  *   1.0   1.0   1.0    .9    .6    .3    .2   1.1   1.9   1.3    .9    .9    .6    .7    .0    .0    .0    .0    .0    .0
 320.  *   1.0   1.0   1.0    .8    .7    .3    .2   1.0   1.7   1.1    .9    .9    .6    .8    .0    .0    .0    .0    .0    .0
 325.  *    .9   1.0    .9    .9    .6    .4    .2   1.1   1.5   1.1    .9    .8    .7    .8    .0    .0    .0    .0    .0    .0
 330.  *    .9    .9    .9    .9    .6    .3    .2   1.1   1.5   1.1   1.0    .9    .8    .8    .0    .0    .0    .0    .0    .0
 335.  *    .9    .9    .9    .9    .6    .3    .2   1.3   1.4    .9    .9    .7    .8    .9    .0    .0    .0    .0    .0    .0
 340.  *    .9    .9    .9    .8    .7    .4    .2   1.2   1.3    .9    .8    .7    .9    .9    .1    .1    .0    .0    .0    .0
 345.  *    .9    .9    .9    .8    .8    .5    .3   1.2   1.3    .8    .7    .7    .8    .8    .1    .2    .1    .0    .0    .0
 350.  *    .9    .9    .9    .9   1.0    .7    .6    .9   1.0    .7    .7    .7    .7    .8    .3    .2    .2    .2    .0    .0
 355.  *    .9    .9    .9   1.0   1.1   1.0    .8    .7    .6    .5    .5    .6    .6    .7    .3    .3    .2    .2    .2    .0
 360.  *    .9    .9   1.1   1.1   1.2   1.1   1.0    .4    .4    .3    .3    .5    .5    .6    .4    .4    .4    .2    .2    .0
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.5   1.6   1.3   1.5   1.8   1.6   1.3   1.3   2.0   2.3   1.8   1.5   1.2   1.2    .9   1.1   1.4   1.2   1.2   1.1
 DEGR. *  280   280    20    90    65    15     5   335   300   260   200   185   180   200   160   170   160   160   140   130

1
                                                                                                                 PAGE  5
      JOB: Site 7 Opt 8    2030 AM - 7B8AM30.DAT                RUN: Site 7 Opt 8    2030 AM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .0
  25.  *    .1
  30.  *    .1
  35.  *    .1
  40.  *    .1
```

```
  45.  *    .1
  50.  *    .1
  55.  *    .1
  60.  *    .1
  65.  *    .1
  70.  *    .1
  75.  *    .1
  80.  *    .2
  85.  *    .2
  90.  *    .2
  95.  *    .6
 100.  *    .7
 105.  *    .8
 110.  *    .8
 115.  *    .9
 120.  *    .9
 125.  *    .8
 130.  *    .8
 135.  *    .8
 140.  *    .7
 145.  *    .8
 150.  *    .7
 155.  *    .7
 160.  *    .7
 165.  *    .6
 170.  *    .6
 175.  *    .6
 180.  *    .6
 185.  *    .6
 190.  *    .6
 195.  *    .6
 200.  *    .6
 205.  *    .6
1
                                                                                                                              PAGE  6
      JOB: Site 7 Opt 8    2030 AM - 7B8AM30.DAT                RUN: Site 7 Opt 8    2030 AM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .6
 215.  *    .6
 220.  *    .8
 225.  *    .7
 230.  *    .7
 235.  *    .7
 240.  *    .7
 245.  *    .7
 250.  *    .7
 255.  *    .7
 260.  *    .6
 265.  *    .5
 270.  *    .4
 275.  *    .3
 280.  *    .1
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .9
 DEGR. *  115

 THE HIGHEST CONCENTRATION IS    2.30 PPM AT  260 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    2.00 PPM AT  300 DEGREES FROM REC9 .
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT  200 DEGREES FROM REC11.
```

```
Site 7 Opt 8    2014 PM - 7B8PM14.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 8    2014 PM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    229511.4  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     68011.4  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        85       2.0  680  102.2 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.    161511.4  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        59       2.0 1615  102.2 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.     98511.4  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.    142511.4  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     89511.4  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        85       2.0  895  102.2 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     53011.4  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     53011.4  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        85       2.0  530  102.2 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     53011.4  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     53011.4  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    162511.4  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    103511.4  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    103511.4  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    103511.4  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     30511.4  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120       106       2.0  305  102.2 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.     73011.4  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.     73011.4  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.     73011.4  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

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1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                    PAGE  1

      JOB: Site 7 Opt 8    2014 PM - 7B8PM14.DAT               RUN: Site 7 Opt 8    2014 PM
      DATE: 05/11/2009   TIME: 03:03:46.07


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *        LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)           (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*--------------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG  2295.  11.4    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG   680.  11.4    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3127.1    1407.5 *     160.   174. AG   388. 100.0    .0 24.0  .74   8.1
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG  1615.  11.4    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3127.8    1181.9 *     384.   174. AG   270. 100.0    .0 24.0  .99  19.5
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   985.  11.4    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG  1425.  11.4    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG   895.  11.4    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3026.6    1969.8 *     292.   355. AG   388. 100.0    .0 24.0  .98  14.8
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG   530.  11.4    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG   530.  11.4    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3710.1    3098.5 *    1575.    27. AG   194. 100.0    .0 12.0 1.30  80.0
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG   530.  11.4    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG   530.  11.4    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG  1625.  11.4    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG  1035.  11.4    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG  1035.  11.4    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG  1035.  11.4    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG   305.  11.4    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0    1157.7    1487.3 *    1855.   267. AG   242. 100.0    .0 12.0 2.07  94.2
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG   730.  11.4    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG   730.  11.4    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG   730.  11.4    .0 32.0
1
                                                                                                                PAGE  2
      JOB: Site 7 Opt 8    2014 PM - 7B8PM14.DAT               RUN: Site 7 Opt 8    2014 PM
      DATE: 05/11/2009   TIME: 03:03:46.07

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *    (SEC)   (SEC)     (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       85       2.0       680       1770     102.20      1        3
       5. SW        Rt1 left  *     120       59       2.0      1615       1717     102.20      1        3
       9. NE        Rt1 thru  *     120       85       2.0       895       1770     102.20      1        3
      12. NE        Rt1 right *     120       85       2.0       530       1583     102.20      1        3
      20. NW        Rt2A left *     120      106       2.0       305       1770     102.20      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *          COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z       *
     -------------------------*------------------------------------*
       1. NE MID E            *      2716.0     1547.0       5.0   *
       2. NE 164 E            *      2845.0     1555.0       5.0   *
       3. NE 82 E             *      2928.0     1555.0       5.0   *
       4. NE CNR              *      2987.0     1532.0       5.0   *
       5. NE 82 N             *      3024.0     1485.0       5.0   *
       6. NE 164 N            *      3039.0     1404.0       5.0   *
       7. NE MID N            *      3051.0     1276.0       5.0   *
       8. NW MID N            *      3162.0     1314.0       5.0   *
       9. NW 164 N            *      3147.0     1453.0       5.0   *
      10. NW 82 N             *      3139.0     1534.0       5.0   *
      11. W CNR               *      3129.0     1614.0       5.0   *
      12. SW 82 S             *      3116.0     1698.0       5.0   *
      13. SW 164 S            *      3106.0     1778.0       5.0   *
      14. SW MID S            *      3088.0     1931.0       5.0   *
      15. SE MID S            *      2992.0     1909.0       5.0   *
      16. SE 164 S            *      2999.0     1830.0       5.0   *
      17. SE 82 S             *      2995.0     1748.0       5.0   *
      18. SE CNR              *      2974.0     1708.0       5.0   *
      19. SE 82 E             *      2942.0     1675.0       5.0   *
      20. SE 164 E            *      2862.0     1644.0       5.0   *
      21. SE MID E            *      2679.0     1632.0       5.0   *
1
                                                                                                                PAGE  3
      JOB: Site 7 Opt 8    2014 PM - 7B8PM14.DAT               RUN: Site 7 Opt 8    2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .8    .9   1.2   1.4   1.2   1.3   1.5   1.1   1.0    .6    .7    .7    .9    .5    .7   1.0    .7    .5    .4    .1
   5.  *    .8    .9   1.3   1.5   1.5   1.6   2.0    .8    .6    .5    .6    .5    .7    .5    .9   1.2   1.2    .8    .4    .2
  10.  *    .9   1.0   1.5   1.6   1.6   2.0   1.9    .3    .4    .3    .3    .3    .5    .3    .9   1.3   1.3    .9    .6    .2
  15.  *    .9   1.1   1.5   1.6   1.5   1.9   2.2    .3    .3    .1    .3    .3    .4    .3   1.0   1.6   1.5   1.1    .7    .3
  20.  *   1.0   1.1   1.6   1.4   1.5   1.9   2.0    .1    .1    .1    .1    .3    .4    .4   1.2   1.6   1.7   1.4    .8    .5
  25.  *   1.1   1.3   1.6   1.4   1.5   1.9   2.0    .0    .1    .1    .1    .1    .2    .5   1.3   1.7   1.9   1.7   1.0    .5
```

```
  30.  *   1.3   1.4   1.7   1.2   1.6   2.0   1.8    .0    .0    .0    .1    .1    .2    .6   1.4   1.8   2.1   1.8   1.1    .6
  35.  *   1.3   1.6   1.5   1.1   1.6   1.9   1.8    .0    .0    .0    .0    .1    .1    .6   1.5   1.9   2.1   1.8   1.2    .6
  40.  *   1.3   1.7   1.4   1.0   1.5   2.0   1.6    .0    .0    .0    .0    .0    .1    .6   1.5   1.9   2.0   1.8   1.2    .7
  45.  *   1.4   1.6   1.3    .8   1.6   1.9   1.6    .0    .0    .0    .0    .0    .0    .6   1.6   1.9   2.0   1.8   1.1    .8
  50.  *   1.3   1.5   1.2    .7   1.8   1.9   1.5    .0    .0    .0    .0    .0    .0    .6   1.6   1.7   1.9   1.7   1.2    .7
  55.  *   1.4   1.4   1.0   1.0   1.8   1.8   1.4    .0    .0    .0    .0    .0    .0    .6   1.7   1.7   1.9   1.6   1.1    .7
  60.  *   1.3   1.4   1.2   1.1   1.9   1.8   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.7   1.8   1.5   1.1    .7
  65.  *   1.3   1.2   1.0   1.1   1.9   1.7   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.7   1.9   1.5   1.0    .5
  70.  *   1.0   1.3    .8   1.0   1.8   1.7   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.7   1.8   1.5   1.0    .5
  75.  *   1.0   1.0    .8   1.2   1.8   1.7   1.3    .0    .0    .0    .0    .0    .0    .5   1.6   1.6   1.8   1.5    .9    .7
  80.  *   1.1   1.1   1.0   1.3   2.0   1.6   1.3    .0    .0    .0    .0    .0    .0    .4   1.6   1.7   1.8   1.4    .8    .4
  85.  *   1.0   1.0   1.0   1.4   2.0   1.6   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.7   1.7   1.4    .7    .4
  90.  *    .8    .7   1.0   1.5   2.0   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.4    .6    .5
  95.  *    .7    .9   1.2   1.5   1.9   1.5   1.3    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.3    .5    .5
 100.  *    .6    .7   1.2   1.6   1.9   1.4   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.5   1.7   1.3    .5    .5
 105.  *    .5    .7   1.2   1.5   1.9   1.4   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.1    .6    .8
 110.  *    .4    .8   1.2   1.6   1.9   1.3   1.4    .0    .0    .0    .0    .0    .0    .4   1.6   1.6   1.7   1.1    .7    .9
 115.  *    .4    .7   1.1   1.5   1.9   1.3   1.6    .0    .0    .0    .0    .0    .0    .4   1.7   1.6   1.6   1.1    .8   1.2
 120.  *    .3    .7   1.1   1.5   1.8   1.4   1.5    .0    .0    .0    .0    .0    .0    .4   1.7   1.5   1.6   1.1    .9   1.4
 125.  *    .4    .6   1.0   1.5   1.7   1.5   1.5    .0    .0    .0    .0    .0    .0    .4   1.8   1.6   1.6   1.1   1.2   1.6
 130.  *    .4    .6    .9   1.4   1.6   1.5   1.4    .0    .0    .0    .0    .0    .0    .4   1.8   1.7   1.6   1.1   1.2   1.5
 135.  *    .3    .5    .9   1.4   1.6   1.6   1.5    .0    .0    .0    .0    .0    .0    .4   1.9   1.7   1.6   1.1   1.2   1.4
 140.  *    .2    .5    .9   1.4   1.6   1.5   1.4    .0    .0    .0    .0    .0    .0    .5   1.8   1.8   1.8   1.3   1.2   1.2
 145.  *    .2    .5    .6   1.3   1.6   1.7   1.5    .0    .0    .0    .0    .0    .0    .5   1.8   2.1   1.9   1.2   1.5   1.0
 150.  *    .2    .5    .8   1.2   1.6   1.7   1.4    .1    .1    .1    .2    .0    .1    .5   2.1   2.3   2.0   1.4   1.5   1.0
 155.  *    .2    .4    .6   1.1   1.5   1.6   1.5    .1    .2    .2    .2    .2    .2    .5   2.2   2.2   2.0   1.4   1.4    .9
 160.  *    .2    .2    .6    .9   1.5   1.6   1.4    .3    .2    .5    .6    .6    .7    .8   2.1   2.3   1.9   1.3   1.3    .9
 165.  *    .0    .2    .4    .7   1.3   1.3   1.3    .4    .7    .8   1.0   1.0    .8   1.4   2.0   2.0   1.9   1.3   1.1    .7
 170.  *    .0    .2    .2    .7   1.0   1.2   1.1    .7   1.0   1.3   1.5   1.3   1.2   1.6   1.6   1.8   1.8   1.0   1.1    .7
 175.  *    .0    .0    .2    .3    .8    .9    .9   1.0   1.3   1.7   2.0   1.8   1.3   2.0   1.3   1.4   1.3   1.0    .8    .6
 180.  *    .0    .0    .1    .2    .5    .6    .7   1.2   1.7   2.2   2.5   1.9   1.6   2.1   1.0   1.3   1.2    .9    .7    .5
 185.  *    .0    .0    .0    .1    .3    .4    .4   1.4   1.9   2.7   2.8   2.0   1.7   2.2    .6    .7    .8    .5    .5    .5
 190.  *    .0    .0    .0    .0    .1    .2    .2   1.7   2.3   3.1   2.8   2.0   1.6   2.2    .4    .3    .6    .4    .6    .5
 195.  *    .0    .0    .0    .0    .1    .1    .1   1.7   2.5   3.1   2.7   1.8   1.5   2.3    .1    .2    .4    .4    .5    .5
 200.  *    .0    .0    .0    .0    .0    .1    .1   1.8   2.6   3.1   2.6   1.4   1.4   2.0    .1    .1    .5    .6    .6    .5
 205.  *    .0    .0    .0    .0    .0    .0    .0   1.8   2.7   3.0   2.2   1.3   1.3   1.9    .1    .1    .5    .5    .6    .5
1
                                                                                                                 PAGE  4
      JOB: Site 7 Opt 8    2014 PM - 7B8PM14.DAT                RUN: Site 7 Opt 8    2014 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.7   2.7   3.0   2.1   1.0   1.2   1.9    .2    .2    .3    .5    .7    .5
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.6   2.7   3.0   1.9    .9   1.2   1.9    .2    .2    .4    .5    .7    .5
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.6   2.7   2.9   1.8    .9   1.3   1.6    .2    .2    .3    .5    .5    .6
 225.  *    .0    .0    .0    .0    .0    .0    .0   1.6   2.6   2.7   1.6    .9   1.5   1.6    .2    .2    .3    .5    .5    .7
 230.  *    .0    .0    .0    .0    .0    .0    .0   1.5   2.6   2.7   1.4   1.0   1.6   1.5    .1    .3    .3    .4    .5    .7
 235.  *    .0    .0    .0    .0    .0    .0    .0   1.4   2.6   2.7   1.2    .8   1.7   1.4    .1    .3    .3    .4    .6    .7
 240.  *    .0    .0    .0    .0    .0    .0    .0   1.4   2.5   2.6   1.1    .9   1.8   1.4    .1    .2    .3    .4    .6    .6
 245.  *    .2    .2    .0    .0    .0    .0    .0   1.4   2.5   2.6   1.1   1.1   1.7   1.4    .1    .2    .3    .4    .5    .6
 250.  *    .2    .2    .2    .0    .0    .0    .0   1.4   2.5   2.6   1.3   1.2   1.6   1.4    .1    .2    .3    .4    .5    .6
 255.  *    .3    .4    .3    .1    .0    .0    .0   1.5   2.6   2.7   1.3   1.2   1.7   1.4    .1    .1    .2    .4    .4    .6
 260.  *    .6    .5    .5    .3    .1    .0    .0   1.5   2.7   2.9   1.5   1.4   1.7   1.4    .1    .1    .2    .2    .4    .5
 265.  *    .7    .8    .7    .4    .1    .1    .0   1.5   2.7   2.9   1.4   1.3   1.6   1.3    .0    .1    .1    .2    .4    .4
 270.  *    .9   1.1    .8    .4    .2    .1    .1   1.6   2.8   3.0   1.4   1.4   1.6   1.3    .0    .0    .1    .1    .2    .4
 275.  *   1.1   1.2   1.0    .5    .4    .2    .1   1.5   2.8   3.0   1.2   1.2   1.5   1.3    .0    .0    .0    .1    .1    .2
 280.  *   1.2   1.1   1.1    .7    .4    .2    .1   1.5   2.9   2.9    .9   1.1   1.4   1.3    .0    .0    .0    .0    .1    .1
 285.  *   1.1   1.1   1.1    .7    .4    .2    .1   1.5   2.9   2.7    .8   1.2   1.4   1.2    .0    .0    .0    .0    .0    .0
 290.  *   1.1   1.1    .9    .7    .4    .3    .1   1.5   2.9   2.5    .8   1.3   1.6   1.2    .0    .0    .0    .0    .0    .0
 295.  *   1.1   1.1   1.0    .7    .4    .3    .1   1.6   3.0   2.5    .7   1.4   1.5   1.1    .0    .0    .0    .0    .0    .0
 300.  *    .9   1.0   1.1    .7    .3    .3    .1   1.6   2.9   2.4    .8   1.4   1.4   1.1    .0    .0    .0    .0    .0    .0
 305.  *    .9   1.0   1.0    .7    .4    .3    .1   1.7   3.1   2.2    .9   1.4   1.6   1.0    .0    .0    .0    .0    .0    .0
 310.  *    .9    .9   1.0    .7    .5    .3    .2   1.8   3.0   2.3   1.0   1.5   1.6   1.0    .0    .0    .0    .0    .0    .0
 315.  *    .9    .9    .9    .7    .4    .3    .2   1.9   2.9   2.0   1.1   1.6   1.6   1.1    .0    .0    .0    .0    .0    .0
 320.  *    .9    .9    .8    .7    .3    .2    .2   1.9   3.0   2.1   1.2   1.7   1.7   1.0    .0    .0    .0    .0    .0    .0
 325.  *    .8    .9    .8    .7    .4    .1    .1   2.0   2.9   1.9   1.4   1.7   1.6   1.0    .0    .0    .0    .0    .0    .0
 330.  *    .8    .8    .8    .7    .4    .1    .1   2.3   3.0   2.0   1.4   1.6   1.6   1.0    .0    .0    .0    .0    .0    .0
 335.  *    .8    .8    .9    .7    .4    .1    .2   2.3   2.9   1.7   1.4   1.6   1.7   1.0    .1    .1    .0    .0    .0    .0
 340.  *    .8    .8    .9    .7    .5    .4    .2   2.3   2.4   1.5   1.4   1.7   1.7   1.0    .1    .1    .1    .0    .0    .0
 345.  *    .8    .8    .9    .9    .7    .6    .5   2.4   2.4   1.5   1.4   1.5   1.5    .9    .2    .3    .2    .1    .0    .0
 350.  *    .8    .8   1.0   1.0   1.1   1.0   1.0   1.8   1.9   1.3   1.2   1.2   1.3    .9    .4    .5    .4    .2    .1    .0
 355.  *    .8    .8   1.0   1.2   1.2   1.2   1.1   1.6   1.4    .7    .8   1.0   1.1    .7    .5    .7    .6    .4    .1    .0
 360.  *    .8    .9   1.2   1.4   1.2   1.3   1.5   1.1   1.0    .6    .7    .7    .9    .5    .7   1.0    .7    .5    .4    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.4   1.7   1.7   1.6   2.0   2.0   2.2   2.4   3.1   3.1   2.8   2.0   1.8   2.3   2.2   2.3   2.1   1.8   1.5   1.6
 DEGR. *   45    40    30    10    80    10    15    345   305   190   185   185   240   195   155   160   30    30    150   125

1
                                                                                                                 PAGE  5
      JOB: Site 7 Opt 8    2014 PM - 7B8PM14.DAT                RUN: Site 7 Opt 8    2014 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .1
  20.  *    .1
  25.  *    .2
  30.  *    .3
  35.  *    .3
  40.  *    .4
```

```
  45.  *    .4
  50.  *    .4
  55.  *    .4
  60.  *    .4
  65.  *    .4
  70.  *    .3
  75.  *    .3
  80.  *    .2
  85.  *    .2
  90.  *    .4
  95.  *    .6
 100.  *    .8
 105.  *    .9
 110.  *   1.0
 115.  *   1.0
 120.  *   1.0
 125.  *    .9
 130.  *   1.1
 135.  *    .8
 140.  *    .7
 145.  *    .7
 150.  *    .7
 155.  *    .7
 160.  *    .7
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                               PAGE  6
      JOB: Site 7 Opt 8    2014 PM - 7B8PM14.DAT                RUN: Site 7 Opt 8    2014 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .6
 225.  *    .7
 230.  *    .7
 235.  *    .6
 240.  *    .6
 245.  *    .6
 250.  *    .7
 255.  *    .6
 260.  *    .6
 265.  *    .5
 270.  *    .5
 275.  *    .2
 280.  *    .1
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *   1.1
 DEGR. *  130

 THE HIGHEST CONCENTRATION IS    3.10 PPM AT  305 DEGREES FROM REC9 .
 THE 2ND HIGHEST CONCENTRATION IS    3.10 PPM AT  190 DEGREES FROM REC10.
 THE 3RD HIGHEST CONCENTRATION IS    2.80 PPM AT  185 DEGREES FROM REC11.
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```
Site 7 Opt 8    2030 PM - 7B8PM30.DAT   60.0321.0.0000.000210.30480000    1
1
NE MID E                 2716.     1547.       5.0
NE 164 E                 2845.     1555.       5.0
NE 82 E                  2928.     1555.       5.0
NE CNR                   2987.     1532.       5.0
NE 82 N                  3024.     1485.       5.0
NE 164 N                 3039.     1404.       5.0
NE MID N                 3051.     1276.       5.0
NW MID N                 3162.     1314.       5.0
NW 164 N                 3147.     1453.       5.0
NW 82 N                  3139.     1534.       5.0
W CNR                    3129.     1614.       5.0
SW 82 S                  3116.     1698.       5.0
SW 164 S                 3106.     1778.       5.0
SW MID S                 3088.     1931.       5.0
SE MID S                 2992.     1909.       5.0
SE 164 S                 2999.     1830.       5.0
SE 82 S                  2995.     1748.       5.0
SE CNR                   2974.     1708.       5.0
SE 82 E                  2942.     1675.       5.0
SE 164 E                 2862.     1644.       5.0
SE MID E                 2679.     1632.       5.0
Site 7 Opt 8    2030 PM                  23  1   0
  1
SW        Rt1 aprch AG  3198.   626.  3134.  1223.    2225 9.2  0.  68   30.
  1
SW        Rt1 thru  AG  3147.  1222.  3104.  1622.     705 9.2  0.  44   30.
  2
SW        Rt1 thru  AG  3110.  1567.  3131.  1371.      0.  24   2
       120        23       2.0  705   84.1 1770 1 3
  1
SW        Rt1 left  AG  3124.  1222.  3084.  1620.    1520 9.2  0.  44   30.
  2
SW        Rt1 left  AG  3090.  1564.  3108.  1382.      0.  24   2
       120        63       2.0 1520   84.1 1717 1 3
  1
SW        Rt1 departAG  3096.  1624.  2998.  2605.    1060 9.2  0.  44   30.
  1
NE        Rt1 aprch AG  2949.  2604.  3037.  1830.    1500 9.2  0.  44   30.
  1
NE        Rt1 thru  AG  3041.  1826.  3060.  1610.     910 9.2  0.  44   30.
  2
NE        Rt1 thru  AG  3054.  1679.  3041.  1817.      0.  24   2
       120        84       2.0  910   84.1 1770 1 3
  1
NE        Rt1 right AG  3024.  1819.  3021.  1749.     590 9.2  0.  32   30.
  1
NE        Rt1 right AG  3021.  1749.  2991.  1690.     590 9.2  0.  32   30.
  2
NE        Rt1 right AG  2994.  1696.  3018.  1743.      0.  12   1
       120        84       2.0  590   84.1 1583 1 3
  1
NE        Rt1 right AG  2991.  1690.  2948.  1649.     590 9.2  0.  32   30.
  1
NE        Rt1 right AG  2948.  1649.  2891.  1621.     590 9.2  0.  32   30.
```

```
  1
NE        Rt1 departAG  3058.  1610.  3129.   619.    1615 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2285.  1598.  2444.  1576.    1060 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2444.  1576.  2590.  1567.    1060 9.2  0.  44   30.
  1
NW        Rt2A aprchAG  2590.  1567.  2870.  1583.    1060 9.2  0.  44   30.
  1
NW        Rt2A left AG  2873.  1589.  3076.  1601.     355 9.2  0.  32   30.
  2
NW        Rt2A left AG  3009.  1597.  2874.  1589.      0.  12   1
       120       105       2.0  355   84.1 1770 1 3
  1
NW        Rt2A rightAG  2874.  1576.  2947.  1576.     705 9.2  0.  32   30.
  1
NW        Rt2A rightAG  2947.  1576.  3015.  1544.     705 9.2  0.  32   30.
  1
NW        Rt2A rightAG  3015.  1544.  3065.  1467.     705 9.2  0.  32   30.
1.0   04 1000.   0Y  5  0 72
```

```
1                         CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.2, JUNE 2000                     PAGE  1

      JOB: Site 7 Opt 8    2030 PM - 7B8PM30.DAT                RUN: Site 7 Opt 8    2030 PM
      DATE: 05/11/2009   TIME: 03:12:13.74


       SITE & METEOROLOGICAL VARIABLES
       -------------------------------
       VS =    .0 CM/S       VD =    .0 CM/S       Z0 = 321. CM
        U =  1.0 M/S         CLAS =   4  (D)     ATIM =  60. MINUTES     MIXH =  1000. M   AMB =   .0 PPM

       LINK VARIABLES
       --------------
         LINK DESCRIPTION     *         LINK COORDINATES (FT)          *    LENGTH  BRG TYPE   VPH    EF      H   W    V/C QUEUE
                              *   X1        Y1        X2        Y2     *     (FT)  (DEG)            (G/MI)  (FT) (FT)       (VEH)
      ------------------------*----------------------------------------*----------------------------------------------------------
       1. SW        Rt1 aprch *   3198.0     626.0    3134.0    1223.0 *     600.   354. AG   2225.   9.2    .0 68.0
       2. SW        Rt1 thru  *   3147.0    1222.0    3104.0    1622.0 *     402.   354. AG    705.   9.2    .0 44.0
       3. SW        Rt1 thru  *   3110.0    1567.0    3114.7    1523.0 *      44.   174. AG     86. 100.0    .0 24.0  .26   2.2
       4. SW        Rt1 left  *   3124.0    1222.0    3084.0    1620.0 *     400.   354. AG   1520.   9.2    .0 44.0
       5. SW        Rt1 left  *   3090.0    1564.0    3130.9    1150.3 *     416.   174. AG    237. 100.0    .0 24.0 1.00  21.1
       6. SW        Rt1 depart*   3096.0    1624.0    2998.0    2605.0 *     986.   354. AG   1060.   9.2    .0 44.0
       7. NE        Rt1 aprch *   2949.0    2604.0    3037.0    1830.0 *     779.   174. AG   1500.   9.2    .0 44.0
       8. NE        Rt1 thru  *   3041.0    1826.0    3060.0    1610.0 *     217.   175. AG    910.   9.2    .0 44.0
       9. NE        Rt1 thru  *   3054.0    1679.0    3027.4    1961.0 *     283.   355. AG    316. 100.0    .0 24.0  .96  14.4
      10. NE        Rt1 right *   3024.0    1819.0    3021.0    1749.0 *      70.   182. AG    590.   9.2    .0 32.0
      11. NE        Rt1 right *   3021.0    1749.0    2991.0    1690.0 *      66.   207. AG    590.   9.2    .0 32.0
      12. NE        Rt1 right *   2994.0    1696.0    3932.7    3534.4 *    2064.    27. AG    158. 100.0    .0 12.0 1.40 104.9
      13. NE        Rt1 right *   2991.0    1690.0    2948.0    1649.0 *      59.   226. AG    590.   9.2    .0 32.0
      14. NE        Rt1 right *   2948.0    1649.0    2891.0    1621.0 *      64.   244. AG    590.   9.2    .0 32.0
      15. NE        Rt1 depart*   3058.0    1610.0    3129.0     619.0 *     994.   176. AG   1615.   9.2    .0 44.0
      16. NW        Rt2A aprch*   2285.0    1598.0    2444.0    1576.0 *     161.    98. AG   1060.   9.2    .0 44.0
      17. NW        Rt2A aprch*   2444.0    1576.0    2590.0    1567.0 *     146.    94. AG   1060.   9.2    .0 44.0
      18. NW        Rt2A aprch*   2590.0    1567.0    2870.0    1583.0 *     280.    87. AG   1060.   9.2    .0 44.0
      19. NW        Rt2A left *   2873.0    1589.0    3076.0    1601.0 *     203.    87. AG    355.   9.2    .0 32.0
      20. NW        Rt2A left *   3009.0    1597.0     773.5    1464.5 *    2239.   267. AG    197. 100.0    .0 12.0 2.19 113.8
      21. NW        Rt2A right*   2874.0    1576.0    2947.0    1576.0 *      73.    90. AG    705.   9.2    .0 32.0
      22. NW        Rt2A right*   2947.0    1576.0    3015.0    1544.0 *      75.   115. AG    705.   9.2    .0 32.0
      23. NW        Rt2A right*   3015.0    1544.0    3065.0    1467.0 *      92.   147. AG    705.   9.2    .0 32.0
1
                                                                                                                 PAGE  2
      JOB: Site 7 Opt 8    2030 PM - 7B8PM30.DAT                RUN: Site 7 Opt 8    2030 PM
      DATE: 05/11/2009   TIME: 03:12:13.74

       ADDITIONAL QUEUE LINK PARAMETERS
       --------------------------------
         LINK DESCRIPTION     *    CYCLE    RED     CLEARANCE  APPROACH  SATURATION   IDLE   SIGNAL   ARRIVAL
                              *    LENGTH   TIME    LOST TIME    VOL     FLOW RATE   EM FAC   TYPE     RATE
                              *     (SEC)   (SEC)    (SEC)      (VPH)      (VPH)    (gm/hr)
      ------------------------*--------------------------------------------------------------------------------
       3. SW        Rt1 thru  *     120       23       2.0       705       1770      84.10      1        3
       5. SW        Rt1 left  *     120       63       2.0      1520       1717      84.10      1        3
       9. NE        Rt1 thru  *     120       84       2.0       910       1770      84.10      1        3
      12. NE        Rt1 right *     120       84       2.0       590       1583      84.10      1        3
      20. NW        Rt2A left *     120      105       2.0       355       1770      84.10      1        3

       RECEPTOR LOCATIONS
       ------------------
                              *           COORDINATES (FT)          *
         RECEPTOR             *      X          Y          Z        *
     -------------------------*-------------------------------------*
      1. NE MID E             *      2716.0     1547.0        5.0   *
      2. NE 164 E             *      2845.0     1555.0        5.0   *
      3. NE 82 E              *      2928.0     1555.0        5.0   *
      4. NE CNR               *      2987.0     1532.0        5.0   *
      5. NE 82 N              *      3024.0     1485.0        5.0   *
      6. NE 164 N             *      3039.0     1404.0        5.0   *
      7. NE MID N             *      3051.0     1276.0        5.0   *
      8. NW MID N             *      3162.0     1314.0        5.0   *
      9. NW 164 N             *      3147.0     1453.0        5.0   *
     10. NW 82 N              *      3139.0     1534.0        5.0   *
     11. W CNR                *      3129.0     1614.0        5.0   *
     12. SW 82 S              *      3116.0     1698.0        5.0   *
     13. SW 164 S             *      3106.0     1778.0        5.0   *
     14. SW MID S             *      3088.0     1931.0        5.0   *
     15. SE MID S             *      2992.0     1909.0        5.0   *
     16. SE 164 S             *      2999.0     1830.0        5.0   *
     17. SE 82 S              *      2995.0     1748.0        5.0   *
     18. SE CNR               *      2974.0     1708.0        5.0   *
     19. SE 82 E              *      2942.0     1675.0        5.0   *
     20. SE 164 E             *      2862.0     1644.0        5.0   *
     21. SE MID E             *      2679.0     1632.0        5.0   *
1
                                                                                                                 PAGE  3
      JOB: Site 7 Opt 8    2030 PM - 7B8PM30.DAT                RUN: Site 7 Opt 8    2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
   0.  *    .6    .8   1.0   1.0   1.0   1.2   1.2    .8    .6    .6    .5    .7    .6    .5    .6    .7    .6    .4    .3    .1
   5.  *    .6    .7   1.1   1.2   1.2   1.3   1.4    .5    .4    .4    .3    .5    .6    .5    .7   1.0   1.0    .6    .4    .1
  10.  *    .6    .8   1.1   1.3   1.3   1.4   1.5    .2    .2    .2    .2    .3    .5    .3    .8   1.1   1.1    .7    .5    .2
  15.  *    .7   1.0   1.2   1.2   1.3   1.4   1.6    .2    .1    .1    .1    .3    .4    .3    .8   1.3   1.4    .8    .6    .3
  20.  *    .8   1.1   1.3   1.2   1.1   1.5   1.5    .1    .1    .1    .1    .2    .4    .4   1.0   1.4   1.5   1.2    .8    .4
  25.  *   1.0   1.1   1.4   1.0   1.3   1.4   1.5    .0    .1    .1    .1    .1    .2    .5   1.0   1.5   1.6   1.2    .8    .4
```

```
  30.  *   1.1   1.2   1.4   1.0   1.2   1.3   1.4    .0    .0    .0    .1    .1    .2    .5   1.2   1.5   1.7   1.5    .9    .6
  35.  *   1.1   1.2   1.2    .7   1.1   1.3   1.3    .0    .0    .0    .0    .1    .1    .5   1.2   1.6   1.7   1.5   1.0    .6
  40.  *   1.1   1.2   1.1    .8   1.1   1.3   1.3    .0    .0    .0    .0    .0    .1    .5   1.3   1.6   1.8   1.5   1.2    .6
  45.  *   1.1   1.4   1.1    .7   1.1   1.3   1.3    .0    .0    .0    .0    .0    .0    .5   1.3   1.6   1.8   1.3    .9    .6
  50.  *   1.1   1.3    .9    .6   1.2   1.2   1.3    .0    .0    .0    .0    .0    .0    .5   1.4   1.6   1.7   1.3   1.0    .6
  55.  *   1.1   1.2    .9    .5   1.3   1.2   1.3    .0    .0    .0    .0    .0    .0    .5   1.4   1.6   1.7   1.3   1.0    .6
  60.  *   1.1   1.0    .9    .8   1.2   1.2   1.2    .0    .0    .0    .0    .0    .0    .4   1.4   1.4   1.4   1.2    .9    .5
  65.  *    .9    .9    .9    .8   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.3   1.2    .9    .5
  70.  *    .9    .6    .7    .8   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.2    .8    .5
  75.  *    .7    .8    .7    .8   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.2    .8    .5
  80.  *    .6    .7    .6    .9   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.2    .7    .4
  85.  *    .8    .8    .6    .9   1.2   1.2   1.1    .0    .0    .0    .0    .0    .0    .4   1.3   1.3   1.4   1.1    .7    .4
  90.  *    .7    .5    .7   1.1   1.2   1.1   1.1    .0    .0    .0    .0    .0    .0    .4   1.4   1.3   1.4   1.1    .5    .3
  95.  *    .5    .5    .7   1.1   1.2   1.1   1.0    .0    .0    .0    .0    .0    .0    .3   1.4   1.3   1.4   1.0    .5    .3
 100.  *    .5    .4    .8   1.0   1.2   1.1   1.0    .0    .0    .0    .0    .0    .0    .3   1.4   1.2   1.2   1.0    .5    .4
 105.  *    .4    .3    .8   1.0   1.2   1.2   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.3   1.2   1.0    .5    .6
 110.  *    .3    .3    .8   1.1   1.2   1.2   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.5   1.3    .8    .5    .7
 115.  *    .3    .3    .8   1.1   1.1   1.2   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .7    .6    .7
 120.  *    .3    .4    .7   1.1   1.1   1.2   1.4    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .7    .7    .7
 125.  *    .4    .4    .7   1.1   1.3   1.3   1.3    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .7    .6   1.0
 130.  *    .3    .3    .6   1.0   1.3   1.3   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.2   1.0    .9   1.0
 135.  *    .3    .4    .6   1.0   1.3   1.4   1.2    .0    .0    .0    .0    .0    .0    .3   1.4   1.4   1.3    .8   1.0   1.0
 140.  *    .2    .4    .6   1.0   1.3   1.4   1.3    .0    .0    .0    .0    .0    .0    .3   1.6   1.4   1.5    .9   1.0   1.1
 145.  *    .2    .3    .6   1.1   1.4   1.3   1.2    .0    .0    .0    .0    .0    .0    .5   1.5   1.5   1.5   1.0   1.0   1.0
 150.  *    .2    .3    .6   1.0   1.3   1.5   1.2    .0    .0    .0    .1    .0    .1    .5   1.5   1.5   1.6   1.0   1.0   1.0
 155.  *    .2    .2    .5    .8   1.3   1.3   1.1    .1    .1    .1    .1    .0    .1    .5   1.6   1.6   1.5   1.1   1.0    .7
 160.  *    .0    .2    .4    .8   1.2   1.3   1.2    .3    .2    .3    .4    .3    .3    .6   1.5   1.6   1.5   1.1   1.1    .6
 165.  *    .0    .2    .4    .7   1.0   1.2   1.1    .4    .4    .5    .6    .6    .7   1.1   1.4   1.7   1.5    .9   1.0    .6
 170.  *    .0    .1    .2    .4    .9    .9    .9    .7    .8    .8    .8    .8    .8   1.2   1.3   1.3   1.4    .8    .9    .7
 175.  *    .0    .0    .2    .3    .6    .7    .7    .7    .8   1.1   1.2   1.0   1.1   1.5   1.1   1.1   1.1    .8    .6    .4
 180.  *    .0    .0    .0    .2    .4    .4    .5   1.2   1.2   1.3   1.4   1.4   1.1   1.6    .9   1.0   1.0    .6    .5    .4
 185.  *    .0    .0    .0    .1    .3    .3    .4   1.2   1.5   1.5   1.6   1.4   1.4   1.7    .4    .5    .6    .5    .5    .4
 190.  *    .0    .0    .0    .0    .1    .1    .2   1.4   1.6   1.5   1.7   1.3   1.4   1.8    .3    .3    .6    .4    .4    .5
 195.  *    .0    .0    .0    .0    .0    .1    .1   1.5   1.5   1.6   1.7   1.2   1.0   1.8    .1    .2    .4    .4    .4    .5
 200.  *    .0    .0    .0    .0    .0    .0    .1   1.4   1.6   1.5   1.6   1.1   1.0   1.6    .1    .1    .4    .3    .4    .5
 205.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   1.5   1.5   1.0   1.2   1.7    .1    .1    .3    .4    .4    .5
1
                                                                                                                 PAGE  4
      JOB: Site 7 Opt 8    2030 PM - 7B8PM30.DAT                RUN: Site 7 Opt 8    2030 PM

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC1  REC2  REC3  REC4  REC5  REC6  REC7  REC8  REC9  REC10 REC11 REC12 REC13 REC14 REC15 REC16 REC17 REC18 REC19 REC20
 ------*------------------------------------------------------------------------------------------------------------------------
 210.  *    .0    .0    .0    .0    .0    .0    .0   1.5   1.5   1.5   1.5    .8   1.1   1.6    .1    .1    .2    .4    .4    .5
 215.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.5   1.5   1.4    .6   1.1   1.4    .1    .2    .1    .4    .4    .5
 220.  *    .0    .0    .0    .0    .0    .0    .0   1.4   1.4   1.4   1.2    .7   1.1   1.4    .1    .2    .3    .5    .4    .5
 225.  *    .0    .0    .0    .0    .0    .0    .0   1.3   1.3   1.3   1.1    .6   1.2   1.3    .1    .2    .3    .4    .4    .5
 230.  *    .0    .0    .0    .0    .0    .0    .0   1.2   1.3   1.4   1.0    .6   1.2   1.2    .1    .2    .3    .3    .4    .5
 235.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.3   1.5    .9    .8   1.4   1.2    .1    .1    .3    .3    .5    .5
 240.  *    .0    .0    .0    .0    .0    .0    .0   1.1   1.2   1.5    .9    .8   1.5   1.2    .1    .1    .3    .3    .5    .5
 245.  *    .0    .1    .0    .0    .0    .0    .0   1.1   1.1   1.4    .8   1.0   1.5   1.2    .1    .1    .3    .3    .4    .6
 250.  *    .2    .2    .1    .0    .0    .0    .0   1.1   1.1   1.4   1.0   1.1   1.4   1.2    .1    .1    .2    .3    .4    .6
 255.  *    .3    .3    .3    .1    .0    .0    .0   1.1   1.1   1.7   1.2   1.2   1.4   1.2    .1    .1    .2    .3    .4    .5
 260.  *    .5    .5    .4    .2    .1    .0    .0   1.1   1.2   1.6   1.3   1.1   1.4   1.2    .1    .1    .2    .2    .4    .4
 265.  *    .7    .7    .6    .3    .1    .1    .0   1.1   1.2   1.7   1.3   1.2   1.4   1.1    .0    .1    .1    .2    .2    .4
 270.  *    .8    .8    .7    .4    .2    .1    .1   1.2   1.2   1.9   1.2   1.1   1.4   1.1    .0    .0    .1    .1    .2    .2
 275.  *    .9    .9    .8    .4    .3    .1    .1   1.2   1.3   1.8   1.1   1.1   1.3   1.1    .0    .0    .0    .1    .1    .1
 280.  *    .9    .9    .8    .4    .3    .2    .1   1.2   1.4   1.7    .8   1.0   1.3   1.0    .0    .0    .0    .0    .0    .1
 285.  *    .9    .9    .9    .5    .3    .2    .1   1.2   1.5   1.6    .5   1.1   1.2   1.0    .0    .0    .0    .0    .0    .0
 290.  *   1.0    .9    .8    .5    .3    .3    .1   1.2   1.5   1.4    .7   1.1   1.2    .9    .0    .0    .0    .0    .0    .0
 295.  *   1.0    .9    .8    .6    .3    .3    .1   1.2   1.5   1.4    .6   1.1   1.2    .9    .0    .0    .0    .0    .0    .0
 300.  *    .8    .8    .7    .6    .3    .2    .1   1.3   1.4   1.3    .5   1.1   1.2    .8    .0    .0    .0    .0    .0    .0
 305.  *    .8    .8    .8    .6    .3    .2    .1   1.4   1.5   1.2    .8   1.1   1.3    .9    .0    .0    .0    .0    .0    .0
 310.  *    .7    .8    .8    .6    .3    .2    .1   1.5   1.5   1.3    .9   1.2   1.4    .8    .0    .0    .0    .0    .0    .0
 315.  *    .7    .7    .8    .7    .3    .1    .1   1.6   1.4   1.1   1.0   1.3   1.4    .8    .0    .0    .0    .0    .0    .0
 320.  *    .7    .7    .6    .6    .3    .1    .1   1.6   1.5   1.3   1.1   1.2   1.3    .8    .0    .0    .0    .0    .0    .0
 325.  *    .7    .7    .6    .5    .3    .1    .1   1.6   1.4   1.2   1.1   1.2   1.4    .8    .0    .0    .0    .0    .0    .0
 330.  *    .7    .7    .6    .5    .4    .1    .1   1.6   1.5   1.2   1.1   1.3   1.4    .8    .0    .0    .0    .0    .0    .0
 335.  *    .7    .7    .6    .5    .3    .1    .2   1.5   1.7   1.3   1.1   1.4   1.4    .8    .1    .1    .0    .0    .0    .0
 340.  *    .6    .6    .7    .5    .4    .3    .2   1.5   1.5   1.2   1.2   1.4   1.3    .8    .1    .1    .1    .0    .0    .0
 345.  *    .6    .6    .7    .6    .5    .5    .4   1.4   1.5   1.1   1.1   1.2   1.2    .8    .2    .2    .1    .1    .0    .0
 350.  *    .6    .6    .7    .7   1.0    .8    .8   1.3   1.2   1.0    .9   1.0   1.0    .7    .4    .5    .4    .1    .1    .0
 355.  *    .6    .7    .8    .9   1.1   1.0   1.0   1.1    .8    .7    .7    .9    .9    .7    .5    .6    .5    .4    .1    .0
 360.  *    .6    .8   1.0   1.0   1.0   1.2   1.2    .8    .6    .6    .5    .7    .6    .5    .6    .7    .6    .4    .3    .1
 ------*------------------------------------------------------------------------------------------------------------------------
 MAX   *   1.1   1.4   1.4   1.3   1.4   1.5   1.6   1.6   1.7   1.9   1.7   1.4   1.5   1.8   1.6   1.7   1.8   1.5   1.2   1.1
 DEGR. *   30    45    25    10   145    20    15   330   335   270   190   180   240   190   155   165    40    30    40   140

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                                                                                                                 PAGE  5
      JOB: Site 7 Opt 8    2030 PM - 7B8PM30.DAT                RUN: Site 7 Opt 8    2030 PM

       MODEL RESULTS
       -------------

       REMARKS : In search of the angle corresponding to
                 the maximum concentration, only the first
                 angle, of the angles with same maximum
                 concentrations, is indicated as maximum.

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
   0.  *    .0
   5.  *    .0
  10.  *    .0
  15.  *    .0
  20.  *    .1
  25.  *    .1
  30.  *    .2
  35.  *    .3
  40.  *    .3
```

```
  45.  *    .4
  50.  *    .4
  55.  *    .4
  60.  *    .3
  65.  *    .2
  70.  *    .2
  75.  *    .2
  80.  *    .2
  85.  *    .2
  90.  *    .3
  95.  *    .3
 100.  *    .6
 105.  *    .7
 110.  *    .8
 115.  *    .8
 120.  *    .8
 125.  *    .8
 130.  *    .8
 135.  *    .8
 140.  *    .8
 145.  *    .7
 150.  *    .7
 155.  *    .7
 160.  *    .5
 165.  *    .5
 170.  *    .5
 175.  *    .5
 180.  *    .5
 185.  *    .5
 190.  *    .5
 195.  *    .5
 200.  *    .5
 205.  *    .5
1
                                                                                                                             PAGE  6
      JOB: Site 7 Opt 8    2030 PM - 7B8PM30.DAT                RUN: Site 7 Opt 8    2030 PM

 WIND ANGLE RANGE:   0.-360.

 WIND  * CONCENTRATION
 ANGLE *      (PPM)
 (DEGR)* REC21
 ------*------
 210.  *    .5
 215.  *    .5
 220.  *    .5
 225.  *    .6
 230.  *    .5
 235.  *    .5
 240.  *    .5
 245.  *    .6
 250.  *    .5
 255.  *    .5
 260.  *    .5
 265.  *    .5
 270.  *    .2
 275.  *    .1
 280.  *    .1
 285.  *    .0
 290.  *    .0
 295.  *    .0
 300.  *    .0
 305.  *    .0
 310.  *    .0
 315.  *    .0
 320.  *    .0
 325.  *    .0
 330.  *    .0
 335.  *    .0
 340.  *    .0
 345.  *    .0
 350.  *    .0
 355.  *    .0
 360.  *    .0
 ------*------
 MAX   *    .8
 DEGR. *  110

 THE HIGHEST CONCENTRATION IS    1.90 PPM AT  270 DEGREES FROM REC10.
 THE 2ND HIGHEST CONCENTRATION IS    1.80 PPM AT  190 DEGREES FROM REC14.
 THE 3RD HIGHEST CONCENTRATION IS    1.80 PPM AT   40 DEGREES FROM REC17.
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