US 6 Bridges Design Build Project

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List of Abbreviated Terms

AADT	Annual Average Daily Traffic
AM	morning
APCD	CDPHE Air Pollution Control Division
CAA	Clean Air Act
CDOT	Colorado Department of Transportation
CDPHE	Colorado Department of Public Health and Environment
CFR	Code of Federal Regulations
CO	carbon monoxide
DPM	Diesel Particulate Matter
DRCOG	Denver Regional Council of Governments
EB	eastbound
EIS	Environmental Impact Statement
EPA	US Environmental Protection Agency
FEIS	Final Environmental Impact Statement
FHWA	Federal Highway Administration
GHG	Greenhouse Gas
HEI	Health Effects Institute
I-25	Interstate 25
IRIS	Integrate Risk Information System
LOS	level of service
MMT	Million Metric Tons
MSAT	Mobile Source Air Toxic
MVRTP	Metro Vision Region Transportation Plan
NAAQS	National Ambient Air Quality Standard
NATA	National Air Toxics Assessment
NCHRP	National Cooperative Highway Research Program
NO_2	Nitrogen dioxide
O_3	Ozone
OAQPS	Office of Air Quality Planning and Standards
Pb	Lead
PM	afternoon/evening
$PM_{2.5}$	Particulate matter smaller than 2.5 microns in diameter
PM_{10}	particulate matter less than 10 microns in size
POM	Polycyclic Organic Matter
PPM	parts per million
RAQC	Denver Regional Air Quality Council
ROD	Record of Decision
ROD2	Record of Decision 2
RTD	Regional Transportation District
RTP	Regional Transportation Plan
SB	southbound
SIP	State Implementation Plan
SO_2	Sulfur dioxide
TDM	Transportation Demand Management

TIP	Transportation Improvement Program
US 6	6th Avenue
VMT	Vehicle-Miles Traveled
WB	westbound

Project Background

The Project includes modifications to the roadway, interchanges, and bridges along 6th Avenue (US 6) between Sheridan Boulevard and the BNSF Railway in Denver, Colorado. The Colorado Department of Transportation (CDOT) is preparing a Reevaluation and Record of Decision (ROD2) to document the impacts of and mitigation for the Project.

The Valley Highway Project

The Federal Highway Administration (FHWA) and CDOT prepared a Final Environmental Impact Statement (FEIS) in 2006 and a ROD in 2007 for the Interstate 25 (I-25) Valley Highway Project, located in Denver, Colorado. The Valley Highway Project includes the reconstruction of I-25 and reconfiguration of interchanges from Logan Street to United States Highway (US) 6, US 6 from I-25 to Federal Boulevard, and the crossing of Santa Fe Drive and Kalamath Street at the Consolidated Main Line railroad. The Preferred Alternative, as described in the FEIS, includes the following elements:

- I-25 Mainline: Widening of I-25 to provide a consistent section with four through lanes plus auxiliary lanes in each direction throughout the project area
- I-25/Broadway: Tight diamond interchange
- I-25/Santa Fe Drive: Single point urban interchange with a flyover ramp for northbound Santa Fe Drive to northbound I-25
- I-25/Alameda/Santa Fe/Kalamath: Offset partial urban interchange at I-25 and Alameda Avenue; Santa Fe Drive and Kalamath Street grade separated under the railroad close to their current alignments
- US 6: Ramp improvements at the I-25/US 6 interchange; closure of the Bryant Street interchange; diamond interchange at US 6/Federal Boulevard with slip ramps to Bryant Street and a braided ramp from Federal Boulevard to eastbound US 6; reconstruction of US 6 with collector-distributor roads/auxiliary lanes throughout the project area

The Preferred Alternative of the Valley Highway Project is shown in Figure 1.

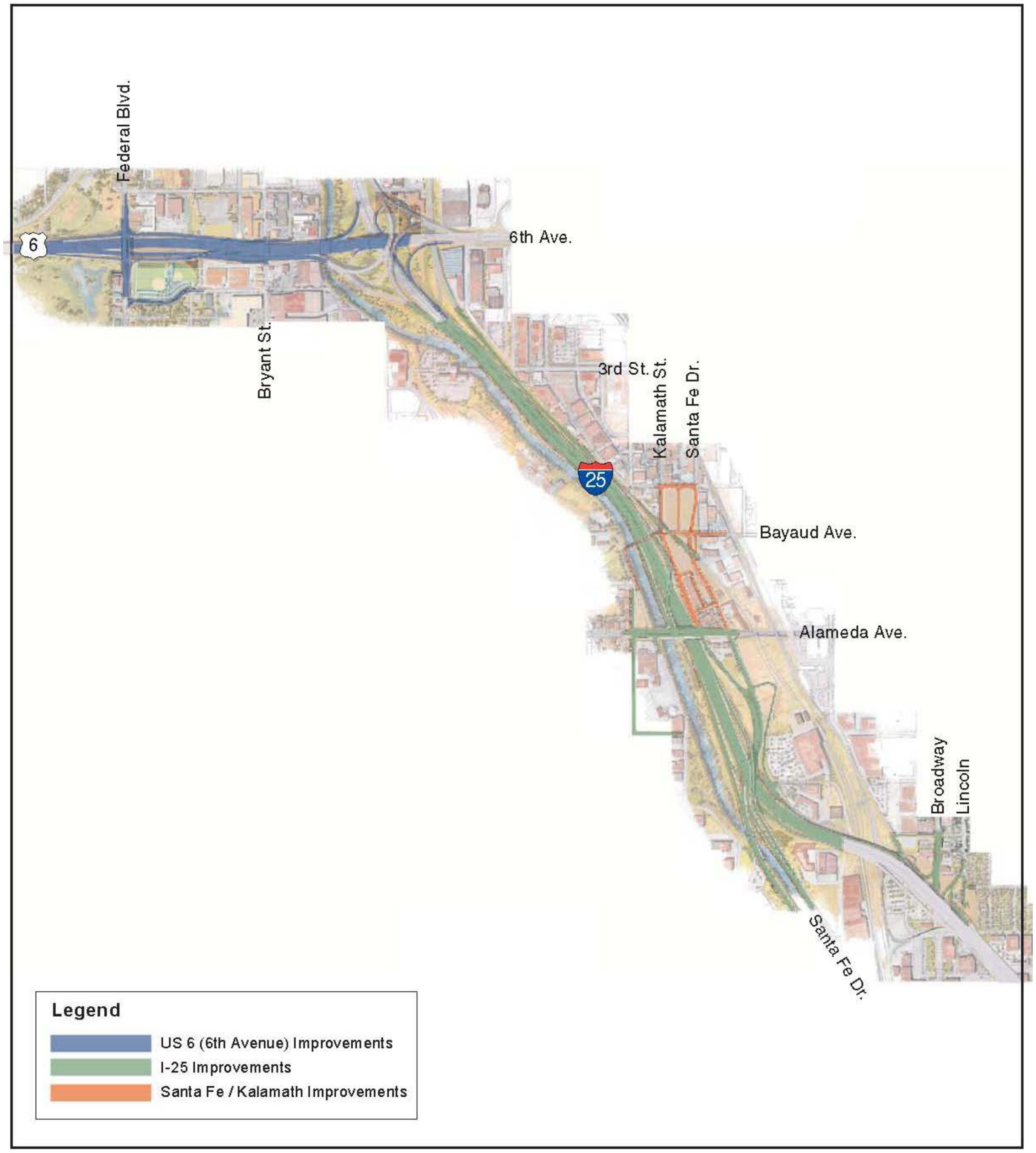

Figure 1: I-25 Valley Highway Project Preferred Alternative

US 6 Bridges Design Build Project

The Project includes the reconstruction of US 6, reconfiguration of interchanges from Federal Boulevard to I-25, and replacement of the US 6 bridges from Federal Boulevard to the bridge over the BNSF Railway. More specifically, the Project includes the following elements:

- The replacement of five bridges along US 6: Federal Boulevard, Bryant Street, South Platte River, I-25, and BNSF Railway. Three of these bridges are in poor condition and the other two are functionally obsolete. The project would also add a tunnel immediately east of I-25 under US 6 to separate traffic on northbound I-25 from traffic exiting the interstate to travel east and west on US 6.
- Ramp improvements at the I-25/US 6 interchange, closure of the westbound (WB) US 6 to Bryant Street ramp, a diamond interchange at US 6/Federal Boulevard with slip ramps to Bryant Street, and a braided ramp from Federal Boulevard to eastbound (EB) US 6.
- Reconstruction of US 6 with collector-distributor roads/auxiliary lanes from Federal Boulevard to the BNSF Railway bridge structure
- Conversion of 5th Avenue to two-way traffic from Federal Boulevard to Decatur Street
- Widening of Federal Boulevard, from five to six lanes, from 5th to 7th Avenues to accommodate current and future improvements
- Pavement resurfacing of US 6 from Knox Boulevard to Sheridan Boulevard
- In-kind replacement of impacted facilities for Barnum East Park
- A bicycle/pedestrian bridge structure over US 6, connecting Barnum North Park and Barnum Park (also known as Barnum Park South, and herein referred to as Barnum Park South)
- Upgrading portions of the South Platte River Trail to current standards

Figure 2 shows the Project.

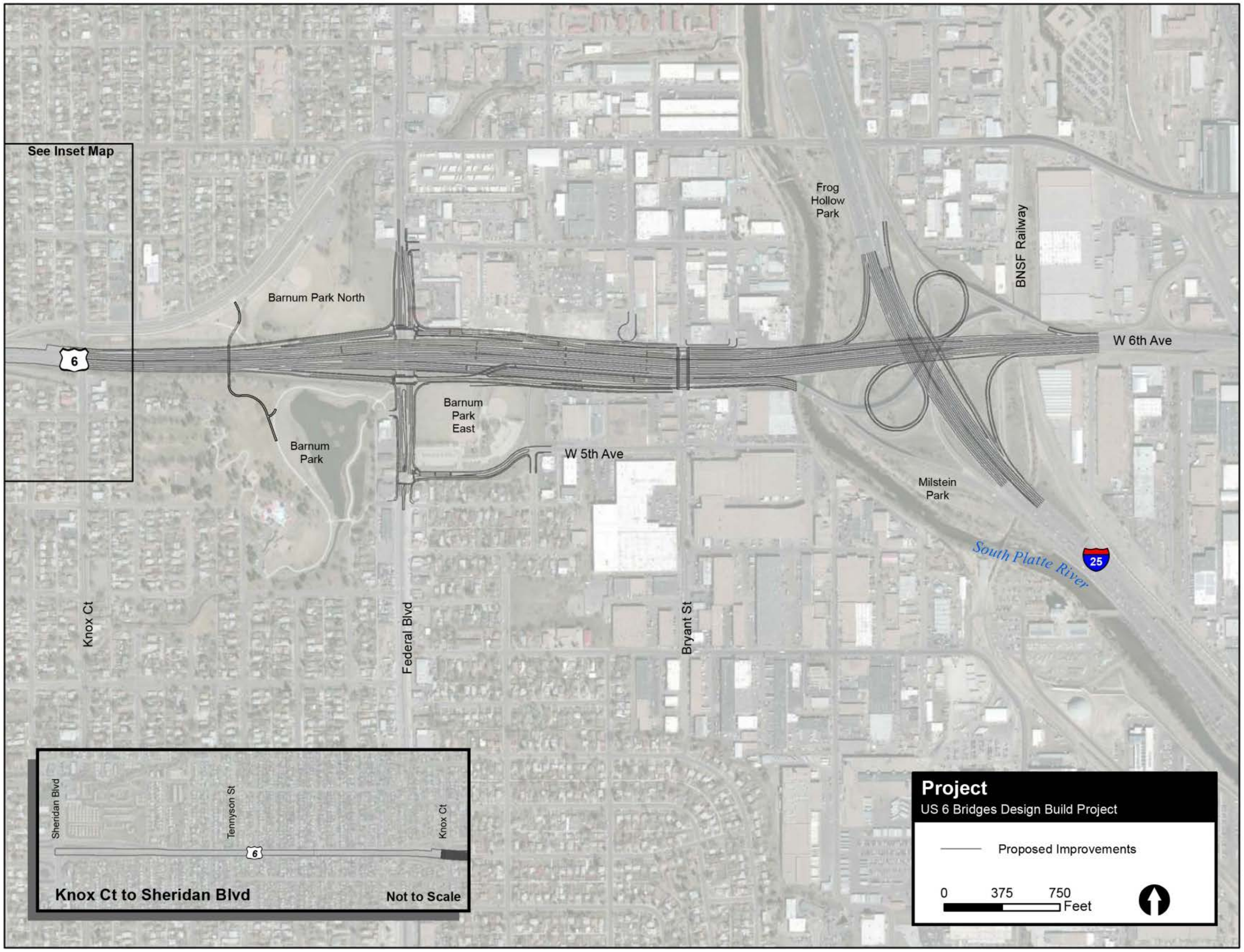

Figure 2: Project

Relationship of the Valley Highway Project and the US 6 Bridges Design Build Project

At the time of the FEIS, funding had not been identified for the entire Preferred Alternative. Although budget placeholders were included in the 2030 Regional Transportation Plan (RTP), these budgets fell short of the estimated cost of the Preferred Alternative. Therefore, FHWA and CDOT planned for a phased implementation of the Preferred Alternative. These six phases are outlined in Chapter 7 of the FEIS. The ROD2 for the Project will reevaluate part of Phase 1 (the part including the US 6/Federal Boulevard interchange) as presented in the 2007 ROD, and provide a decision for Phase 5 of the Valley Highway Project. The ROD2 for the Project will also address six new, minor project elements, which were not part of the FEIS. Due to the minor environmental significance and nature of these additional components, they are included in the ROD2 and will not affect the independent utility, logical termini, or Preferred Alternative of the Valley Highway Project.

Phasing of the FEIS Preferred Alternative

The Project includes elements of two of the six construction phases—Phase 1 and Phase 5—from the Valley Highway Project. A decision on construction Phase 1 of the Valley Highway Project, which included the US 6/Federal Boulevard bridge and ramps, excluding the braided ramp, was made in the 2007 ROD. Figure 3 shows the phases of the Valley Highway Project's Preferred Alternative and Figure 4 shows the Project Elements and how they relate to the FEIS phasing.

Additional Project Elements in the Project

At this time, the Project includes six additional elements that were not included in the FEIS or 2007 ROD:

- Reconstruction of the southbound (SB) I-25 to EB US 6 ramp;
- A bicycle/pedestrian bridge structure over US 6, connecting Barnum North and Barnum South parks;
- Replacement of the US 6 bridge over Bryant Street;
- Replacement of the US 6 bridge over I-25;
- Replacement of the US 6 bridge over the BNSF Railway; and
- Pavement resurfacing of US 6 between Sheridan Boulevard and Knox Court

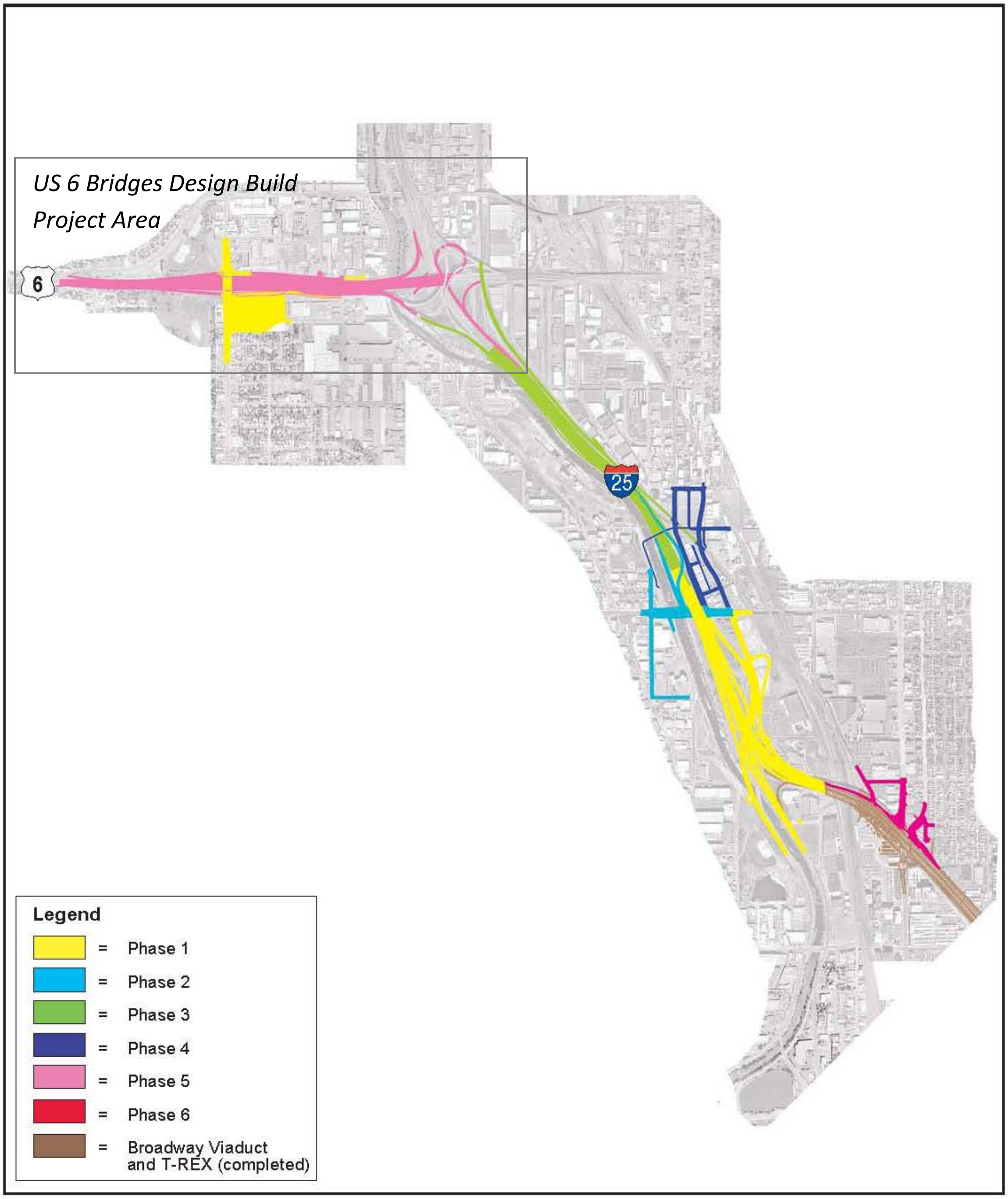

Figure 3: FEIS Phased Implementation of the Preferred Alternative

(source: I-25 Valley Highway FEIS)

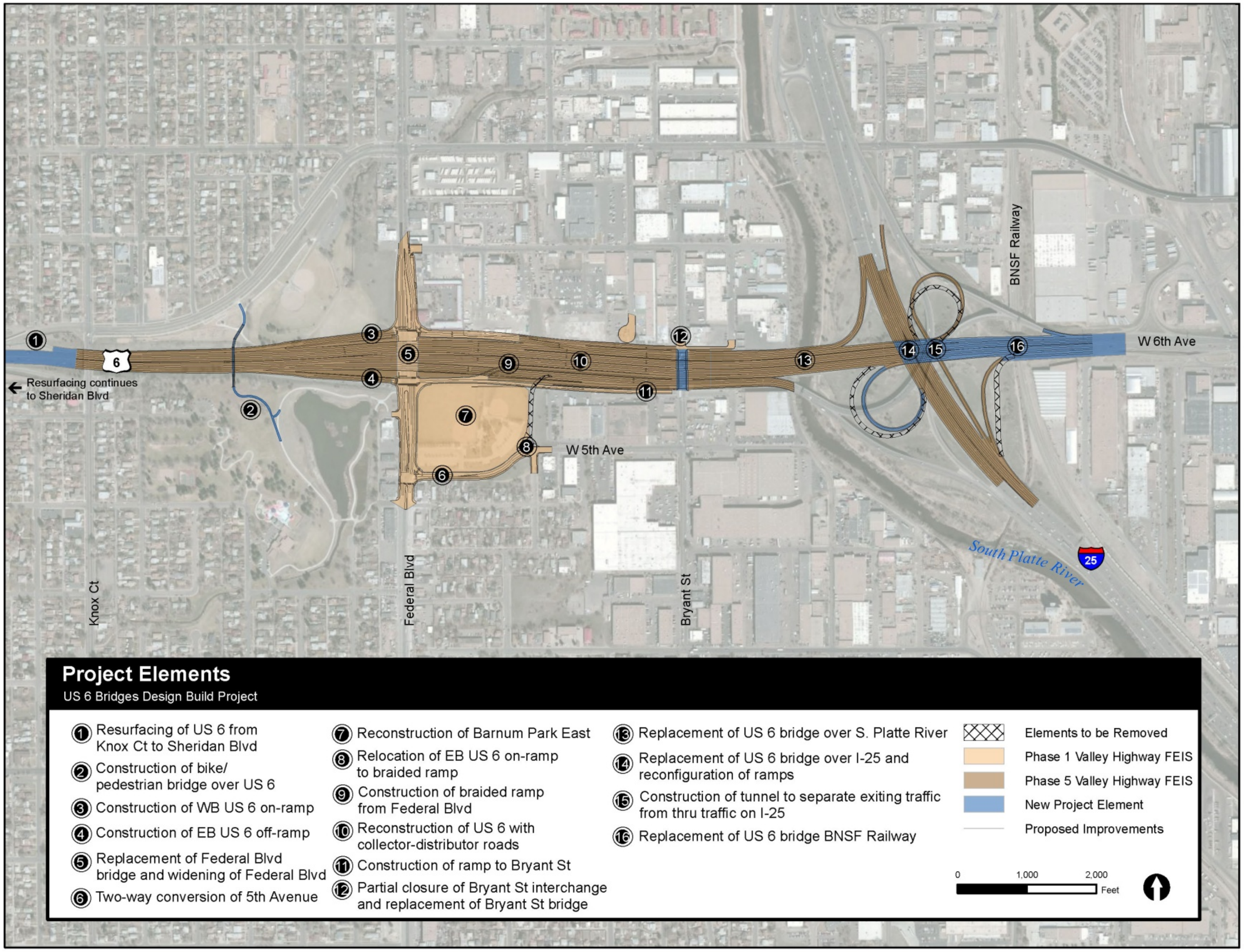

Figure 4: Project Elements

Air Quality Analyses

The air quality analysis was conducted to estimate the changes of emission levels under the 2035 No Build (without the Project) and 2035 Build (with the Project) scenarios and to assess whether impacts of these changes could cause or exacerbate a violation of the National Ambient Air Quality Standards (NAAQS) for carbon monoxide (CO). In addition, through interagency consultation with CDOT, the Colorado Department of Public Health and Environment (CPDHE), the Environmental Protection Agency (EPA), and FHWA, the following additional analyses were requested: a qualitative analysis of particulate matter smaller than 10 microns in diameter (PM_{10}), a mobile source air toxics (MSAT) analysis, and analysis of greenhouse gas (GHG) emissions.

The changes with the Project would potentially affect air quality levels in Barnum Park and near the signalized intersections of the US 6 ramps and Federal Boulevard.

Current Air Quality Standards and Guidelines

In accordance with the requirements of the Clean Air Act and its Amendments (CAA), the EPA has promulgated NAAQS for pollutants considered harmful to public health and the environment. The CAA established two types of national air quality standards. Primary standards set limits to protect public health, including the health of sensitive populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.

The EPA Office of Air Quality Planning and Standards (OAQPS) has set NAAQS for seven principal pollutants, which are called "criteria" pollutants that apply to transportation projects (Table 1). These pollutants are CO, nitrogen dioxide (NO_2), ozone (O_3), lead (Pb), PM_{10}, particulate matter smaller than 2.5 microns in diameter ($PM_{2.5}$), and sulfur dioxide (SO_2). Colorado has adopted the NAAQS as the ambient air quality standards for the state.

In addition to the criteria pollutants, changes in the emissions of a wide range of the non-criteria mobile source air toxic (MSAT) pollutants from project-related changes in automobile and truck traffic are also of concern. EPA has not defined any NAAQS for air toxics. Methods for quantifying air toxic impacts from mobile sources are subject to scientific debate, and the analysis of air toxics is an emerging field. A MSAT analysis was conducted for the FEIS using FHWA guidance applicable at that time. In order to estimate air toxic impacts of the Project under current guidance, project-related changes in MSAT emissions were quantified. This analysis considered seven MSAT pollutants that have been identified by EPA: acrolein, benzene, 1,3 butadiene, formaldehyde, diesel particulate matter (DPM), naphthalene, and polycyclic organic matter (POM). However, since the latest version of the EPA Mobile 6.2 emission model used in this analysis does not estimate naphthalene and POM emission factors, emission rates were estimated for the five remaining MSAT pollutants.

Table 1: National and State Air Quality Standards

Pollutant [final rule cite]		Primary/ Secondary	Averaging Time	Level	Form
Carbon Monoxide		Primary	8-hour	9 ppm	Not to be exceeded more than once per year
			1-hour	35 ppm	
Lead		primary and secondary	Rolling 3 month average	0.15 μg/m^3 (1)	Not to be exceded
Nitrogen Dioxide		primary	1-hour	100 ppb	98th percentile, averaged over 3 years
		primary and secondary	Annual	53 ppb(2)	Annual Mean
Ozone		primary and secondary	8-hour	0.075 ppm(3)	Annual fourth-highest daily maximum 8-hr concentration, averaged over 3 years
Particle Pollution	$PM_{2.5}$	primary and secondary	Annual	15 μg/m^3	annual mean, averaged over 3 years
			24-hour	35 μg/m^3	98th percentile, averaged over 3 years
	PM_{10}	primary and secondary	24-hour	150 μg/m^3	Not to be exceeded more than once pr year on average over 3 years
Sulfur Dioxide		primary	1-hour	75 ppb(4)	99th percentile of 1-hour daly maximum concentrations, averaged over 3 years
		secondary	3-hour	0.5 ppm	Not to be exceeded more than once per year

Notes:

(1) Final rule signed October 15, 2008. The 1978 lead standard (1.5 µg/m^3 as a quarterly average) remains in effect until one year after an area is designated for the 2008 standard, except that in areas designated nonattainment for the 1978, the 1978 standard remains in effect until implementation plans to attain or maintain the 2008 standard are approved.

(2) The official level of the annual NO_2 standard is 0.053 ppm, equal to 53 ppb, which is shown here for the purpose of clearer comparison to the 1-hour standard.

(3) Final rule signed March 12, 2008. The 1997 ozone standard (0.08 ppm, annual fourth-highest daily maximum 8-hour concentration, averaged over 3 years) and related implementation rules remain in place. In 1997, EPA revoked the 1-hour ozone standard (0.12 ppm, not to be exceeded more than once per year) in all areas, although some areas have continued obligations under that standard ("anti-backsliding"). The 1-hour ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations above 0.12 ppm is less than or equal to 1.

(4) Final rule signed June 2, 2010. The 1971 annual and 24-hour SO_2 standards were revoked in that same rulemaking. However, these standards remain in effect until one year after an area is designated for the 2010 standard, except in areas designated nonattainment for the 1971 standards, where the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standard are approved.

The greenhouse gas emission impacts of the Project resulted from the change in the vehicle miles due to traffic improvements. The principal anthropogenic (human-made) source of carbon emissions is the combustion of fossil fuels, which accounts for approximately 80 percent of anthropogenic emissions of carbon worldwide. Almost all (98 percent) of transportation-sector emissions result from the consumption of petroleum products such as gasoline, diesel fuel, and aviation fuel. The GHG analysis considered the effects of the Project on the GHG emissions.

Regulatory Setting

The CAA defines nonattainment areas as geographic regions that have been designated as not meeting one or more of the NAAQS, and maintenance areas as former non-attainment areas that subsequently demonstrated compliance with the standards. The Denver Metropolitan Area is designated as a "nonattainment" area for the 8-hour ozone standard, a "maintenance" area for CO and PM_{10}, and an attainment area for the other criteria pollutants, including NO_2. The area was designated as a NO_2 attainment area by EPA in 2010 (and was considered as a NO_2 attainment area in the I-25 Valley Highway FEIS); however, the EPA will make a new NO_2 attainment determination for the recently promulgated 1-hour standard. This re-designation will be based on three years of data collected at near road monitors, including a monitor that is being installed by Colorado Department of Public Health & Environment (CDPHE) along I-25 at Yuma Street and West Mulberry Place, approximately half mile north of the project area.

The CAA requires that a State Implementation Plan (SIP) be prepared for each nonattainment area, and a maintenance plan be prepared for each former non-attainment area. The SIP outlines how the State will meet the NAAQS under the deadlines established by the CAA. In addition, EPA's Transportation Conformity Rule requires Metropolitan Planning Organizations and the FHWA to make conformity determinations on projects before they are approved. Conformity to the purpose of a SIP means that transportation activities will not cause new air quality violations, worsen existing violations, or delay timely attainment of the NAAQS.

The US 6 and Federal Boulevard Intersection improvement is included in the fiscally constrained 2035 Regional Transportation Plan (RTP) which was adopted in February 2011 as part of the Metro Vision 2035 Plan. The Metro Vision 2035 RTP complies with the applicable Denver-area SIP.

Conformity Rule

The Clean Air Act (CAA) Amendments of 1990 and the Final Transportation Conformity Rule [40 CFR Parts 51 and 93] direct the EPA to implement environmental policies and regulations that will ensure acceptable levels of air quality. The Conformity Rule affects the funding and approval of proposed transportation projects. According to Title I, Section 176 (c) 2:

> *No federal agency may approve, accept or fund any transportation plan, program or project unless such plan, program or project has been found to conform to any applicable State Implementation Plan (SIP) in effect under this act.*

Section 176(c)1(A) of the CAA defines conformity as follows:

Conformity to an implementation plan's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of such standards; and that such activities will not:

- Cause or contribute to any new violation of any NAAQS in any area;
- Increase the frequency or severity of any existing violation of any NAAQS in any area; or
- Delay timely attainment of any NAAQS or any required interim emission reductions or other milestones in any area.

Pollutants of Concern

Of the seven criteria pollutants, CO and PM_{10} are considered as pollutants of interest for the Project. Ambient concentrations of Pb, SO_2 and NO_2 are not significantly affected by highway emissions and therefore are not likely to be significantly affected by the roadway improvements to US 6, and the associated changes in transportation-sector sources of emissions for these pollutants and are not discussed further in this report. Project-related changes in ozone levels were also not considered in this analysis because O_3 is a regional pollutant that is evaluated on an area-wide basis, and, as the US 6 Bridges improvement project is incorporated in the region's planning documents and area-wide dispersion modeling analyses, project-related changes will be accounted for in the SIP.

CO is generated in the urban environment primarily by the incomplete combustion of fossil fuels in motor vehicles, and CO concentrations can vary greatly over relatively short distances. This pollutant was selected for analysis because relatively high concentrations of CO are typically found near congested intersections and along heavily used roadways carrying slow-moving traffic. The Project may affect traffic conditions at nearby congested intersections.

PM_{10} was selected for analysis because the project area is designated as a PM_{10} maintenance area and the Project would affect diesel-fueled truck traffic on several local roadways. Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids and metals. Particulate matter also forms when industry and gases emitted from motor vehicles undergo chemical reactions in the atmosphere. Major sources of PM_{10} include motor vehicles; wood-burning stoves and fireplaces; dust from construction, landfills and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

Carcinogenic pollutants generated by diesel and gasoline-fueled vehicles are classified as mobile source air toxics (MSATs), and include, among others: formaldehyde, benzene, acrolein, 1,3 butadiene, acetaldehyde, and diesel particulate matter. Emission burdens of these six MSATs are considered in this analysis.

Existing Conditions

Representative monitored ambient air quality data for the project area are summarized in Table 2. These data are provided on the EPA AirData database and are for year 2011, the latest full year for which data are currently available. Monitored levels are the highest pollutant levels recorded during the 2011 calendar year. The maximum recorded ambient levels are not always used to measure the pollutant standard; to be consistent among the standard averaging times and durations, monitored pollutant levels are statistically adjusted for various percentiles. With the exception of recorded ozone levels being above the standards, monitored values of all of the other criteria pollutants are within (less than) the NAAQS.

Table 2: Representative Ambient Air Quality Data (2011)

Pollutant	Monitor	Averaging Time	Value
O_3	678 Jason St.	8-hour	0.095 ppm
CO	2105 Broadway – Camp	8-hour	1.9 ppm
		1-Hour	3.5 ppm
NO_2	2105 Broadway – Camp	1-Hour	94 ppb
SO_2	2105 Broadway – Camp	1-Hour	52 ppb
PM_{10}	2105 Broadway – Camp	24-Hour	109 µg/m^3
$PM_{2.5}$	2105 Broadway – Camp	Annual	7.5 µg/m^3
		24-Hour	31.6 µg/m^3

Source: EPA Airdata Database: http://www.epa.gov/airdata

Microscale CO Analysis

Analysis Site and Receptor Locations

One large analysis site was considered in this modeling analysis (i.e., all affected roadways under each set of traffic conditions were evaluated in one modeling run). This site consists of the intersection of Federal Boulevard and US 6, which would be redesigned as a result of the relocation of the EB US 6 entrance ramp, and the intersection of Federal Boulevard and 5th Avenue, which would become a signalized intersection. The 5th Avenue/Federal Boulevard intersection was also selected because it has the highest truck volumes, one of the highest overall traffic volumes, and worst levels of service (LOS) in the project area. The analysis included both intersections (see Figure 4). Receptors (i.e., locations where pollutant concentrations were estimated) were placed along the approach and departing lanes of each intersection at distances recommended in the EPA *Guidelines for Modeling Carbon Monoxide from Roadway Intersections* (EPA-454/R-92-005).

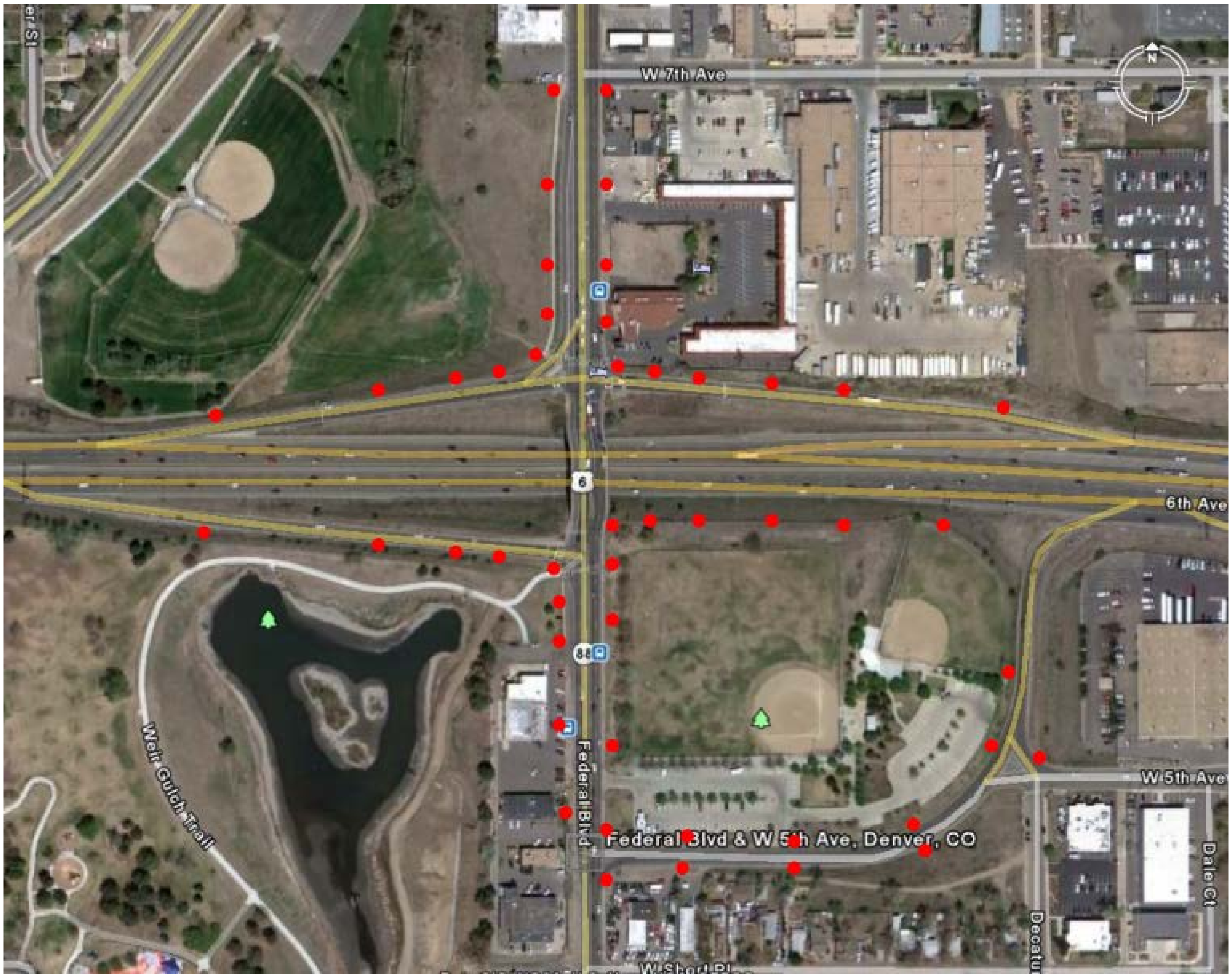

Figure 5: Modeling Site and Receptor Locations

Dispersion Modeling

Carbon monoxide levels near affected roadway intersections were estimated using the EPA CAL3QHC (Version 2.0) air quality dispersion model (EPA-404/12-92-006). This model is currently recommended in the EPA CO Modeling Guidelines for estimating CO levels near congested intersections and along heavily traveled roadways. It can be used to estimate pollutant concentrations downwind of a roadway based on the following assumptions: (1) pollutants emitted from motor vehicles traveling along a segment of roadway can be represented by a "line source" of emissions, and (2) pollutants will disperse in a Gaussian, or "normal," distribution from a defined "mixing zone" over the roadway being modeled. The rate at which pollutants disperse is assumed to be a function of wind speed and direction, and the temperature profile of the atmosphere.

The transport and concentration of pollutants from vehicular sources are influenced by three principal meteorological factors: wind speed, wind direction, and stability. Following EPA guidelines, a wind speed of one meter per second and neutral atmospheric conditions were used.

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

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

In addition, CAL3QHC estimates the average number of vehicles that would queue during the red phase of an intersection based on the characteristics of intersection and traffic conditions. This model was used to directly estimate 1-hour CO concentrations. Meteorological data used with the CAL3QHC analysis conservatively assumes the reasonable worst case scenario as recommended by the EPA in the Guidelines for the Modeling Carbon Monoxide from Roadway Intersections.

Traffic Data

Traffic analysis of the project area is described in the US 6 Bridges Design Build Project Transportation Analysis Technical Report for existing conditions, future conditions without the Project, and future conditions with the Project. The existing condition is the year 2012; the future scenarios are for the year 2035.

Using the 2025 FEIS traffic projections documented in various traffic reports[1] as the basis, Year 2035 traffic volumes on the project area roadways were forecasted. Vehicle mix assumptions and traffic analysis parameters, especially related to the percentage of trucks assumed for the EIS analyses, were based upon information obtain from the Valley Highway EIS.

An in depth analysis was performed regarding the vehicle mix and traffic circulation for the eastbound Bryant Street off-ramp from US 6 and the ingress and egress traffic movements from 5th Avenue at Federal Boulevard. In the current and No-Build conditions, vehicles with origins and destinations along 5th Avenue, 7th Avenue and Bryant Street have two options for access.

1. They can use the US 6 ramps at Bryant Street.
2. They can utilize Federal Boulevard at the intersections with 5th, 7th and 8th.

An important point in this current configuration is that vehicles on the south side of US 6 can utilize the 5th Avenue slip ramp connection to access US 6. In the Project, this slip ramp is replaced with the

[1] Traffic Report for the Valley Highway EIS Denver, Colorado, prepared for FHWA by Felsburg,Holt & Ullevig and CDOT, February 28, 2005; Traffic Report addendum for the Valley Highway EIS Denver, Colorado, prepared for FHWA by Felsburg,Holt & Ullevig and CDOT, October, 2006; Valley Highway System Level Study, Colorado, prepared for CDOT by Felsburg,Holt & Ullevig, May 2007; and Record of Decision for the I-25 Valley Highway Logan to US 6 Denver CDOT Project IM 0252-315 FHWA-CO-EIS-05-01-F, Colorado, prepared for FHWA by Felsburg,Holt & Ullevig, June, 2007.

braided ramp from Federal. The result is that vehicles destined to US 6 will be required to access it from Federal, via the 5th Avenue/Federal Boulevard intersection.

Traffic Volumes and Projections

The existing, eastbound US 6 off ramp at Bryant Street carries over 1,800 vehicles per day with volumes of about 140 vehicles in both the AM and PM peak periods.

In the 2035 No-build condition, the eastbound US 6 off ramp at Bryant Street is projected to increase to approximately 2,700 vehicles per day with volumes of about 220 vehicles in both the AM and PM peak periods.

Analysis Year

The EPA conformity rule requires that project-level analysis consider the year of expected peak emissions for the project. FHWA/EPA guidance also requires the analysis to consider the full timeframe of the area's transportation plan. The current adopted transportation plan in the Denver metropolitan area is the DRCOG *2035 Metro Vision Regional Transportation Plan (2035 MVRTP)* (DRCOG, February 2011). In accordance with the 2035 MVRTP, 2035 was selected as the future year for the air quality analysis. Microscale analyses were therefore performed for future conditions with and without the Project for the projected year 2035.

Vehicle Emission Factors, Background Concentrations and Persistence Factor

Emission factors for the analysis were obtained from the Colorado Department of Public Health and Environment (CDPHE). Emission factors at each link were estimated using the modeled traffic speeds from the regional traffic demand model and vehicle classes unique to this roadway. Existing year (2012) vehicular emission factors were conservatively used to predict future (2035) Build and No Build pollutant levels.

Microscale modeling is used to predict CO concentrations resulting from emissions from motor vehicles using roadways immediately adjacent to the locations at which predictions are being made. A CO background level must be added to this value to account for CO entering the area from other sources upwind of the receptors. The CO background level should be located away from the influence of local traffic congestion.

A persistence factor is a factor that takes into account variation of traffic and meteorological conditions over the eight hours compared with the single peak hour. Traffic volumes are usually lower during the off-peak hours while vehicular speeds are higher which creates conditions for lower emissions. Meteorological conditions (most significantly, wind speeds and directions) vary and change concentrations compared with the estimate for the single hour.

Background CO concentrations and a persistence factor for the project area used in this analysis were also obtained from the CDPHE and are presented in the Table 3. Further details of the CO analysis for this Project are provided in the Appendix to this report.

Table 3: Background Concentrations and Persistence Factor

Time period	Background Concentrations (ppm)	Persistence factor
1 Hour	6.4	n/a
8 Hour	3.6	0.56

Results

The modeling procedures described above were used to estimate air quality levels under future (2035) conditions without the Project (i.e., the No Build Alternative) and with the Project. The results of the analysis are presented in Table 4. Presented are the highest values estimated under Future No Build, and Future Build Alternative scenarios under any of the meteorological conditions considered for the AM and PM peak hours. The predicted values, which include background values, are all within the respective NAAQS for one hour and eight hour CO concentrations. Therefore, the potential mobile source air quality impacts of the Build Alternative are not considered to be significant.

Table 4: Highest One and Eight Hour CO Concentrations (ppm)

Scenario	2035 No Build	2035 Preferred Alternative	CO NAAQS
One Hour	12.3	12.3	35
Eight Hour	6.9	6.9	9

Notes:

1. Highest concentrations between the Build and the No Build condition. The results of the Build and No Build condition occurred at different receptors within the analysis area.
2. Background concentrations are included.

PM_{10} Analysis

The project was evaluated to determine if the proposed improvements and resultant changes to diesel truck traffic would rise to the level of a PM_{10} project of concern under 40 CFR 93, requiring a PM_{10} conformity analysis. Criteria were evaluated following the guidelines in the FHWA/EPA *Transportation Conformity Guidance for Qualitative Hot-Spot Analyses in $PM_{2.5}$ and PM_{10} Nonattainment and Maintenance Areas (June 12, 2009, referred to as "$PM_{2.5/10}$ Guidance"),* which is an update of the guidelines used in the FEIS.

Applying the $PM_{2.5/10}$ Guidance, a PM_{10} hot-spot analysis should be conducted according to qualitative guidance only if the project is a project of air quality concern, as defined in 40 CFR 93.123(b)(1) as follows:

i. *New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;*

ii. *Projects affecting intersections that are at level of service (LOS) D, E or F with a significant number of diesel vehicles, or those that will change to LOS D, E, or F because of increased traffic volumes from a significant number of diesel vehicles;*

iii. *New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;*

iv. *Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and*

v. *Projects in or affecting locations, areas, or categories of sites which are identified in the $PM_{2.5}$ or PM_{10} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.*

Examples of projects of air quality concern that would be covered by 40 CFR 93.123(b)(1)(i) and (ii) include the following:

- A project on a new highway or expressway that serves a significant volume of diesel truck traffic, such as facilities with greater than 125,000 annual average daily traffic (AADT) where 8% or more of such AADT is diesel truck traffic;
- New exit ramps and other highway facility improvements to connect a highway or expressway to a major freight, bus or intermodal terminal;
- Expansion of an existing highway or other facility that affects a congested intersection (operated at LOS D, E or F) that has a significant increase in the number of diesel trucks; and
- Similar highway projects that involve a significant increase in the number of diesel transit buses and/or diesel trucks.

The traffic projections performed for the Project (as described in memo: Traffic Circulation Evaluation for US6 Bridges—Air Quality (PM10 and MSAT), August 2012 demonstrated that the Project will improve traffic circulation compared with the No Build condition. The FEIS documented that the vehicle mix at the Bryant Street and 5th and 8th Avenue intersections is 30 percent trucks under Existing Conditions. The projected number of trucks at the Bryant Street Off Ramp intersection will increase under the No Build Alternative by 66 to 74 trucks per hour (57 percent increase) and decrease under the Preferred Alternative by 11 to 12 trucks per hour (74 to 75 percent decrease). Truck volumes and percentages will decrease between the No Build and the Preferred Alternative by 55 to 62 trucks and 84 percent, respectively. Truck volumes at the 5th Avenue and Federal Boulevard intersection are projected to increase from the Existing Condition to the No Build and to the Preferred Alternative: from 98 to 190 trucks per hour under the Existing Condition to 261 to 383 trucks per hour under the No Build or 147 to 171 trucks per hour under the Preferred Alternative. However, the Project will improve traffic conditions compared with the No Build scenario. The truck percentages and overall traffic volumes at the 5th Avenue intersection are projected to decrease in the Preferred Alternative. Truck percentages are estimated to decrease by between 35 to 62 percent and the total truck volumes are projected to decrease by between 90 to 236 trucks per hour. The US 6 Freeway traffic includes 3 percent trucks and buses under Existing Conditions according to the Valley Highway FEIS. The traffic volume and truck percentage on US 6 is not affected by the Project.

Based on these projections, the Project is predicted to minimally affect truck operations on the affected roadways and that the diesel truck volumes on the roadways affected by the Project are less than volumes that would be considered as significant. Following guidance set forth in 40 CFR 93.123(b)(1)(i), the Colorado Department of Public Health and Environment, Air Pollution Control Division, EPA and FHWA determined on August 22, 2012 that the Project is not considered a project of air quality concern regarding PM_{10} emissions. This has been confirmed through an interagency consultation procedure.

MSAT Analysis

In addition to the criteria pollutants for which there are NAAQS, USEPA also regulates air toxics. Toxic air pollutants are those pollutants known or suspected to cause cancer or other serious health effects. Most air toxics originate from human-made 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 Clean Air Act identified 188 air toxics. The EPA has assessed this expansive list in their latest rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007 [which is an update to the procedures used in the FEIS]) and identified a group of 93 compounds emitted from mobile sources that are listed in their Integrated Risk Information System (IRIS) (http://www.epa.gov/ncea/iris/index.html). In addition, EPA identified seven compounds with significant contributions from mobile sources that are among the national and regional-scale cancer risk drivers from their 1999 National Air Toxics Assessment (NATA) (http://www.epa.gov/ttn/atw/nata1999/). These are acrolein, benzene, 1,3-butadiene, diesel particulate matter plus diesel exhaust organic gases (diesel PM), formaldehyde, naphthalene, and polycyclic organic matter. While FHWA considers these priority mobile source air toxics, the list is subject to change and may be adjusted in consideration of future EPA rules.

Sec. 1502.22 Incomplete or Unavailable Information

When an agency is evaluating reasonably foreseeable significant adverse effects on the human environment in an environmental impact statement and there is incomplete or unavailable information, the agency shall always make clear that such information is lacking.

a. If the incomplete information relevant to reasonably foreseeable significant adverse impacts is essential to a reasoned choice among alternatives and the overall costs of obtaining it are not exorbitant, the agency shall include the information in the environmental impact statement.
b. If the information relevant to reasonably foreseeable significant adverse impacts cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known, the agency shall include within the environmental impact statement:
    1. a statement that such information is incomplete or unavailable;
    2. a statement of the relevance of the incomplete or unavailable information to evaluating reasonably foreseeable significant adverse impacts on the human environment;
    3. a summary of existing credible scientific evidence which is relevant to evaluating the reasonably foreseeable significant adverse impacts on the human environment; and
    4. the agency's evaluation of such impacts based upon theoretical approaches or research methods generally accepted in the scientific community. For the purposes of this section, "reasonably foreseeable" includes impacts that have catastrophic consequences, even if their probability of occurrence is low, provided that the analysis of the impacts is supported by credible scientific evidence, is not based on pure conjecture, and is within the rule of reason.
c. The amended regulation will be applicable to all environmental impact statements for which a Notice to Intent (40 CFR 1508.22) is published in the Federal Register on or after May 27, 1986. For environmental impact statements in progress, agencies may choose to comply with the requirements of either the original or amended regulation.

Incomplete or Unavailable Information for Project-Specific MSAT Health Impacts Analysis

In FHWA's view, information is incomplete or unavailable to credibly predict the project-specific health impacts due to changes in MSAT emissions associated with a proposed set of highway alternatives. The outcome of such an assessment, adverse or not, would be influenced more by the uncertainty introduced into the process through assumption and speculation rather than any genuine insight into the actual health impacts directly attributable to MSAT exposure associated with a proposed action. The USEPA is responsible for protecting the public health and welfare from any known or anticipated effect of an air pollutant. They are the lead authority for administering the Clean Air Act and its amendments and have specific statutory obligations with respect to hazardous air pollutants and MSAT. The EPA is in the continual process of assessing human health effects, exposures, and risks posed by air pollutants. They maintain the Integrated Risk Information System (IRIS), which is "a compilation of electronic reports on specific substances found in the environment and their potential to cause human health effects" (EPA, http://www.epa.gov/ncea/iris/index.html). Each report contains assessments of non-cancerous and cancerous effects for individual compounds and quantitative estimates of risk levels from lifetime oral and inhalation exposures with uncertainty spanning perhaps an order of magnitude.

Other organizations are also active in the research and analyses of the human health effects of MSAT, including the Health Effects Institute (HEI). Two HEI studies are summarized in Appendix D of FHWA's

Interim Guidance Update on Mobile source Air Toxic Analysis in NEPA Documents. Among the adverse health effects linked to MSAT compounds at high exposures are cancer in humans in occupational settings; cancer in animals; and irritation to the respiratory tract, including the exacerbation of asthma. Less obvious is the adverse human health effects of MSAT compounds at current environmental concentrations (HEI, http://pubs.healtheffects.org/view.php?id=282) or in the future as vehicle emissions substantially decrease (HEI, http://pubs.healtheffects.org/view.php?id=306).

The methodologies for forecasting health impacts include emissions modeling; dispersion modeling; exposure modeling; and then final determination of health impacts - each step in the process building on the model predictions obtained in the previous step. All are encumbered by technical shortcomings or uncertain science that prevents a more complete differentiation of the MSAT health impacts among a set of project alternatives. These difficulties are magnified for lifetime (i.e., 70 year) assessments, particularly because unsupportable assumptions would have to be made regarding changes in travel patterns and vehicle technology (which affects emissions rates) over that time frame, since such information is unavailable. The results produced by the EPA's MOBILE6.2 model, the California EPA's Emfac2007and Emfac2011 model, and the latest EPA's MOVES2010b model in forecasting MSAT emissions are highly inconsistent. MOVES results indicate that MOBILE6.2 significantly underestimates diesel particulate matter (PM) emissions and significantly overestimates benzene emissions.

Regarding air dispersion modeling, an extensive evaluation of EPA's guideline CAL3QHC model was conducted in an NCHRP study (http://www.epa.gov/scram001/dispersion_alt.htm#hyroad), which documents poor model performance at ten sites across the country - three where intensive monitoring was conducted plus an additional seven with less intensive monitoring. The study indicates a bias of the CAL3QHC model to overestimate concentrations near highly congested intersections and underestimate concentrations near uncongested intersections. The consequence of this is a tendency to overstate the air quality benefits of mitigating congestion at intersections. Such poor model performance is less difficult to manage for demonstrating compliance with National Ambient Air Quality Standards for relatively short time frames than it is for forecasting individual exposure over an entire lifetime, especially given that some information needed for estimating 70-year lifetime exposure is unavailable. It is particularly difficult to reliably forecast MSAT exposure near roadways, and to determine the portion of time that people are actually exposed at a specific location.

There are considerable uncertainties associated with the existing estimates of toxicity of the various MSAT, because of factors such as low-dose extrapolation and translation of occupational exposure data to the general population, a concern expressed by HEI (http://pubs.healtheffects.org/view.php?id=282). As a result, there is no national consensus on air dose-response values assumed to protect the public health and welfare for MSAT compounds, and in particular for diesel PM. The EPA (http://www.epa.gov/risk/basicinformation.htm#g) and the HEI (http://pubs.healtheffects.org/getfile.php?u=395) have not established a basis for quantitative risk assessment of diesel PM in ambient settings.

There is also the lack of a national consensus on an acceptable level of risk. The current context is the process used by the EPA as provided by the Clean Air Act to determine whether more stringent controls are required in order to provide an ample margin of safety to protect public health or to prevent an adverse environmental effect for industrial sources subject to the maximum achievable control technology standards, such as benzene emissions from refineries. The decision framework is a two-step process. The first step requires EPA to determine a "safe" or "acceptable" level of risk due to emissions from a source, which is generally no greater than approximately 100 in a million. Additional factors are considered in the second step, the goal of which is to maximize the number of people with risks less than 1 in a million due to emissions from a source. The results of this statutory two-step process do not guarantee that cancer risks from exposure to air toxics are less than 1 in a million; in some cases, the residual risk determination could result in maximum individual cancer risks that are as high as approximately 100 in a million. In a June 2008 decision, the U.S. Court of Appeals for the District of Columbia Circuit upheld EPA's approach to addressing risk in its two step decision framework. Information is incomplete or unavailable to establish that even the largest of highway projects would result in levels of risk greater than safe or acceptable.

Because of the limitations in the methodologies for forecasting health impacts described, any predicted difference in health impacts between alternatives is likely to be much smaller than the uncertainties associated with predicting the impacts. Consequently, the results of such assessments would not be useful to decision makers, who would need to weigh this information against project benefits, such as reducing traffic congestion, accident rates, and fatalities plus improved access for emergency response, that are better suited for quantitative analysis.

MSAT Assessment

Technical shortcomings of emissions and dispersion models and uncertain science with respect to health effects prevent meaningful or reliable estimates of MSAT emissions and the 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 with the project. While 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 project alternatives.

The 2007 EPA rule mentioned above requires controls that will dramatically decrease MSAT emissions through cleaner fuels and cleaner engines. According to an FHWA analysis using EPA's MOBILE6.2 model, even if vehicle activity (vehicle-miles travelled, VMT) increases by 145 percent as assumed, a combined reduction of 72 percent in the total annual emission rate for the priority MSAT is projected from 1999 to 2050, as shown in Figure 6.

Also, regardless of the alternative, emissions will likely be lower than present levels in the design year as a result of EPA's national control programs that are projected to reduce annual MSAT emissions by 72 percent between 1999 and 2050. Local conditions may differ from these national projections in terms of fleet mix and turnover, VMT growth rates, and local control measures. The magnitude of the EPA-projected reductions is so great (even after accounting for VMT growth) that MSAT emissions in the project area are likely to be lower in the future in nearly all cases.

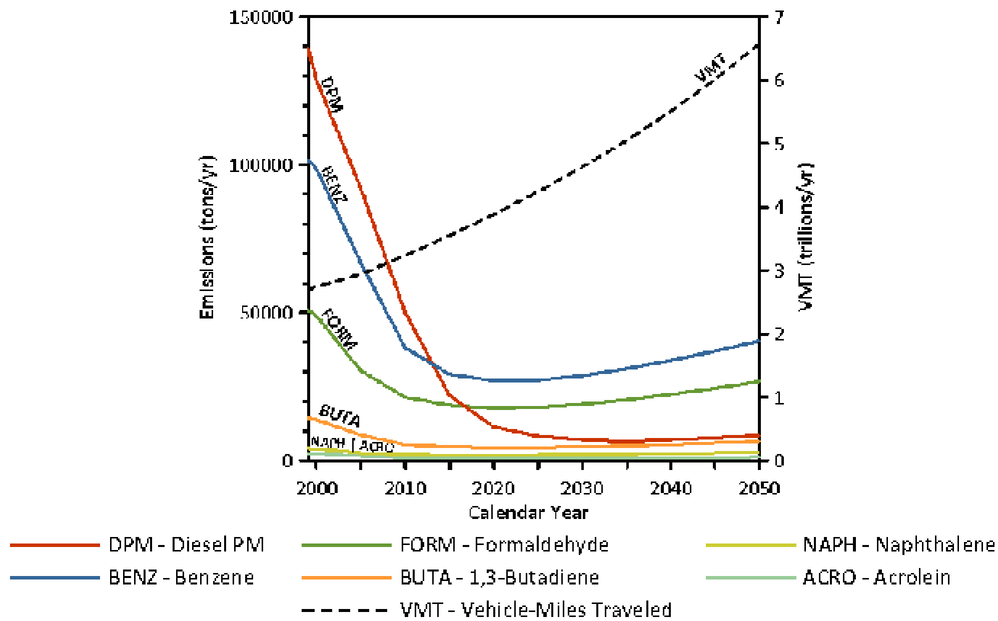

Figure 6: NATIONAL MSAT EMISSION TRENDS 1999 – 2050 FOR VEHICLES OPERATING ON ROADWAYS USING EPA's MOBILE6.2 MODEL

Notes:

(1) Annual emissions of polycyclic organic matter are projected to be 561 tons/yr for 1999, decreasing to 373 tons/yr for 2050.

(2) Trends for specific locations may be different, depending on locally derived information representing vehicle-miles travelled, vehicle speeds, vehicle mix, fuels, emission control programs, meteorology, and other factors.

Source: U.S. Environmental Protection Agency. MOBILE6.2 model run 20 August 2009.

Traffic Assessment for the Project Area

Changes in traffic circulation were evaluated under existing and future conditions at Bryant Street and off ramp from the US 6 and at the intersection of 5th Avenue and Federal Boulevard. High truck percentages were documented along the Bryant Street under the Existing Condition in the I-25 Valley Highway FEIS. As mentioned previously in this report, the actual estimated number of trucks at Bryant Street off ramp is small, 42 to 47 trucks per hour under the Existing scenario, as provided in the memorandum titled "Traffic Circulation Evaluation for US6 Bridges—Air Quality (PM10 and MSAT)." The projected number of trucks at that intersection will increase under the No Build Alternative to 66 to 74 trucks per hour (57 percent increase) and decrease under the Preferred Alternative to 11 to 12 trucks per hour (74 to 75 percent decrease). Truck volumes and percentages will decrease between the No Build and the Preferred Alternative by 55 to 62 trucks and 84 percent, respectively. Truck volumes at the 5th Avenue and Federal Boulevard intersection are projected to increase from the Existing Condition to the No Build and to the Preferred Alternative: from 98 to 190 trucks per hour under the Existing Condition to 261 to 383 trucks per hour under the No Build or 147 to 171 trucks per hour under the Preferred Alternative. However, the Project will improve traffic conditions compared with the No Build scenario. The truck percentages and overall traffic volumes at the 5th Avenue intersection are projected to decrease in the Preferred Alternative. Truck percentages are estimated to decrease by between 35 to 62 percent and the total truck volumes are projected to decrease by between 90 to 236 trucks per hour.

MSAT results

As shown in Table 5, MSAT emissions in the project area would be less in 2035 under the Preferred Alternative than under future No Build condition for all pollutants. Traffic volumes, and specifically the truck volumes and percentage of trucks at the sensitive areas affected by the Project under the Preferred Alternative, will be less than under future No Build scenario.

The slight predicted increase in some MSAT emissions in the future compared with the Existing Condition resulted from VMT increases, which more than offset the decrease in vehicle emissions. Overall, the project's MSAT impacts are not considered to be significant.

Table 5: Average Summer/Winter MSAT Emissions in the Project Area (pounds/season)

Pollutants	Existing	Future No Build	Preferred (Build) Alternative
Acrolein	237	252	242
Benzene	14,020	11,320	10,811
1,3-Butadiene	1,495	1,337	1,299
DPM	50	21	21
Formaldehyde	5,321	5,796	5,596

Source: CPDHE

Global Climate Change Cumulative Effects Discussion

The issue of global climate change is an important national and global concern that is being addressed in several ways by the Federal government. The transportation sector is the second largest source of total greenhouse gases (GHGs) in the U.S., and the greatest source of carbon dioxide (CO_2) emissions – the predominant GHG. In 2010, the transportation sector was responsible for 32 percent of all U.S. CO_2 emissions. The principal anthropogenic (human-made) source of carbon emissions is the combustion of fossil fuels, which account for approximately 80 percent of anthropogenic emissions of carbon worldwide. 98 percent of transportation-sector emissions result from the consumption of petroleum products such as gasoline, diesel fuel, and aviation fuel.

Recognizing this concern, FHWA is working nationally with other modal administrations through the DOT Center for Climate Change and Environmental Forecasting to develop strategies to reduce transportation's contribution to greenhouse gases - particularly CO_2 emissions - and to assess the risks to transportation systems and services from climate changes.

At the state level, there are also several programs underway in Colorado to address transportation GHGs. The Governor's Climate Action Plan, adopted in November 2007, includes measures to adopt vehicle CO_2 emissions standards and to reduce vehicle travel through transit, flex time, telecommuting, ridesharing, and broadband communications. CDOT issued a policy Directive on Air Quality in May 2009. This Policy Directive was developed with input from a number of agencies, including the State of Colorado's Department of Public Health and Environment (CDPHE), the U.S. Environmental Protection

Agency (EPA), the Federal Highway Administration (FHWA), the Federal Transit Administration (FTA), the Denver Regional Transportation District (RTD), the Denver Regional Air Quality Council (RAQC). This Policy Directive addresses unregulated mobile source air toxics (MSAT) and greenhouse gases (GHG) produced from Colorado's state highways, interstates, and construction activities.

As a part of CDOT's commitment to addressing MSATs and GHGs, some of CDOT's program-wide activities include:

1. Developing truck routes/restrictions with the goal of limiting truck traffic in proximity to facilities, including schools, with sensitive receptor populations.
2. Continue researching pavement durability opportunities with the goal of reducing the frequency of resurfacing and/or reconstruction projects.
3. Developing air quality educational materials, specific to transportation issues, for citizens, elected officials, and schools.
4. Offering outreach to communities to integrate land use and transportation decisions to reduce growth in vehicle miles traveled (VMT), such as smart growth techniques, buffer zones, transit-oriented development, walkable communities, access management plans, etc.
5. Committing to research additional concrete additives that would reduce the demand for cement.
6. Expanding Transportation Demand Management (TDM) efforts statewide to better utilize the existing transportation mobility network.
7. Continuing to diversify the CDOT fleet by retrofitting diesel vehicles, specifying the types of vehicles and equipment contractors may use, purchasing low-emission vehicles, such as hybrids, and purchasing cleaner burning fuels through bidding incentives where feasible. Incentivizing is the likely vehicle for this.
8. Exploring congestion and/or right-lane only restrictions for motor carriers.
9. Funding truck parking electrification (note: mostly via exploring external grant opportunities).
10. Researching additional ways to improve freight movement and efficiency statewide.
11. Developing a low-VOC emitting tree landscaping specification.

Because climate change is a global issue, and the emissions changes from the project alternatives are very small compared to global totals, the GHG emissions associated with the Project were not calculated. The relationship of current and projected Colorado highway emissions to total global CO_2 emissions is presented in the table below. Colorado highway emissions are expected to increase by 4.7% between 2009 and 2035. The benefits of the fuel economy and renewable fuels programs in the 2007 Energy Bill are offset by growth in VMT; the draft 2035 statewide transportation plan predicts that Colorado VMT will double between 2000 and 2035.

Table 6: Comparison of Global CO_2 Emissions to CO_2 Emissions from Colorado Highways

Global CO_2 emissions, 2005, million metric tons (MMT)[1]	Colorado highway CO_2 emissions, 2005, MMT[2]	Projected Colorado 2035 highway CO_2 emissions, MMT[2]	Colorado highway emissions, % of global total (2005)[2]
27,700	29.9	31.3	0.108%

Notes:

1. EIA, International Energy Outlook 2007
2. Calculated by FHWA Resource Center

Conclusions

Conformity Statement

Requirements

The Transportation Conformity Rule provides criteria and procedures for determining the conformity to a SIP of a highway project funded under Title 23 U.S.C or approved by FHWA. The Project is located in an area that is designated as nonattainment for O_3 and maintenance area for CO and PM_{10}, and hence a conformity determination is required.

The US 6 Intersection improvement is on the fiscally constrained 2035 Regional Transportation Plan (RTP) which was adopted in February 2011 as part of the Metro Vision 2035 Plan, and the Metro Vision 2035 RTP complies with the applicable Denver-area ozone SIP. The Project is fully funded in the current 2012-2017 Metropolitan Transportation Improvement Program (TIP) and the Statewide Transportation Improvement Program (STIP). In addition, it has been determined that the Project:

- Would not cause or exacerbate a violation of a CO standard;
- Is not of air quality concern for PM_{10} and is not expected to create or worsen a PM_{10} violation;
- In all cases, MSAT emissions will be lower under Preferred Alternative than under the No Build scenario as a result of traffic improvements connected with the project; and
- Is not a significant source of GHG emissions.

Therefore, the Project will comply with the conformity requirements established by the CAA.

Comparison of FEIS and 2007 ROD to the Project

Mitigation Recommendations

No mitigation was associated with the operational phase of the 2007 ROD. The following air quality-related construction phase mitigation measures were included:

- Maintain construction equipment in good working order, minimize excessive idling of inactive equipment or vehicles, and consider using higher-grade fuel (which is now obsolete as all non-road diesel vehicles are now required to use ultra-low sulfur fuel)
- Implement a dust control plan and locate stationary equipment as far from sensitive receivers as possible

These same measures will apply to the construction phase of the proposed US 6 Bridges Project. Table 7 shows this comparison in detail.

The major air quality findings are that the Project:

- Would not cause or exacerbate an exceedance of an air quality standard
- Meets air quality conformity requirements
- Minimizes temporary increases in air emissions during construction

Table 7: Summary of Previously and Currently Identified Air Quality Impacts and Mitigation

Resource	FEIS and 2007 ROD		US 6 Bridges Design Build Project: What Has Changed	US 6 Bridges Design Build Project	
	Impacts of Proposed Action	Mitigation		Impacts of Proposed Action	Mitigation
Air Quality	Improved air quality due to improved traffic flow Meets air quality conformity requirements	N/A	2007: EPA rule on the Control of Hazardous Air Pollutants from Mobile Sources (Federal Register, Vol. 72, No. 37, page 8430, February 26, 2007 2008: EPA modified NAAQS for PM10 2009: New PM2.5/10 Guidance from FHWA/EPA	Improved air quality due to improved traffic flow Meets air quality conformity requirements	N/A
Air Quality	Temporary increase in air emissions during construction	Implement a dust control plan and locate stationary equipment as far from sensitive receivers as possible	N/A	Temporary increase in air emissions during construction	In accordance with CDPHE-APCD requirements, prepare and implement a dust control plan. Locate stationary emissions equipment with consideration of public health and environment.

Air Quality	Temporary increase in air emissions during construction	Maintain construction equipment in good working order, minimize excessive idling of inactive equipment or vehicles, and consider using higher-grade fuel	2010 EPA requirement that all non-road equipment should use ultra-low sulfur diesel	Maintain construction equipment in good working order; minimize excessive idling of inactive equipment or vehicles, and consider using higher-grade fuel.	Minimize excessive idling of inactive equipment or vehicles. All non-road equipment will use ultra-low sulfur diesel. If construction equipment is creating excessive air quality emissions that have a potential to affect air quality for operators or persons working/living in the area, equipment shall be taken out of operation until fixed or replaced.
Air Quality	N/A	N/A	N/A	Increased risk of exposure of dust emissions and asbestos to workers, nearby residents and recreational users may be encountered during construction.	Comply with CDOT's Specification 250.70 - Asbestos Containing Material Management if asbestos is encountered.

References

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EPA, 2012. Mobile Source Air Toxics. Office of Transportation and Air Quality, http://www.epa.gov/otaq/toxics.htm

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Denver Regional Council of Governments (DRCOG), 2011. 2035 Metro Vision Regional Transportation Plan, Denver CO

Colorado Department of Transportation (CDOT), 2012. CDOT Air Quality Analysis and Documentation Procedures, Denver CO

EPA, 1992. Guidelines for Modeling Carbon Monoxide from Roadway Intersections (EPA-454/R-92-005)

EPA, 1995. User's Guide to CAL3QHC Version 2.0: A Modeling Methodology for Predicting Pollutant Concentrations near Roadway Intersections

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U.S. Department of Transportation, Federal Highway Administration (FHWA), 2009. Interim Guidance Update on Mobile Source Air Toxic Analysis in NEPA

EPA, 2010. Transportation Conformity Guidance for Quantitative Hot-spot Analyses in PM2.5 and PM10 Nonattainment and Maintenance Areas

Parsons Brinckerhoff, US 6 Bridges Design Build Project Transportation Analysis Technical Report, July 2012

Parsons Brinckerhoff, “Traffic Circulation Evaluation for US6 Bridges—Air Quality (PM10 and MSAT),” August 2012

Appendix

Air Quality Analysis

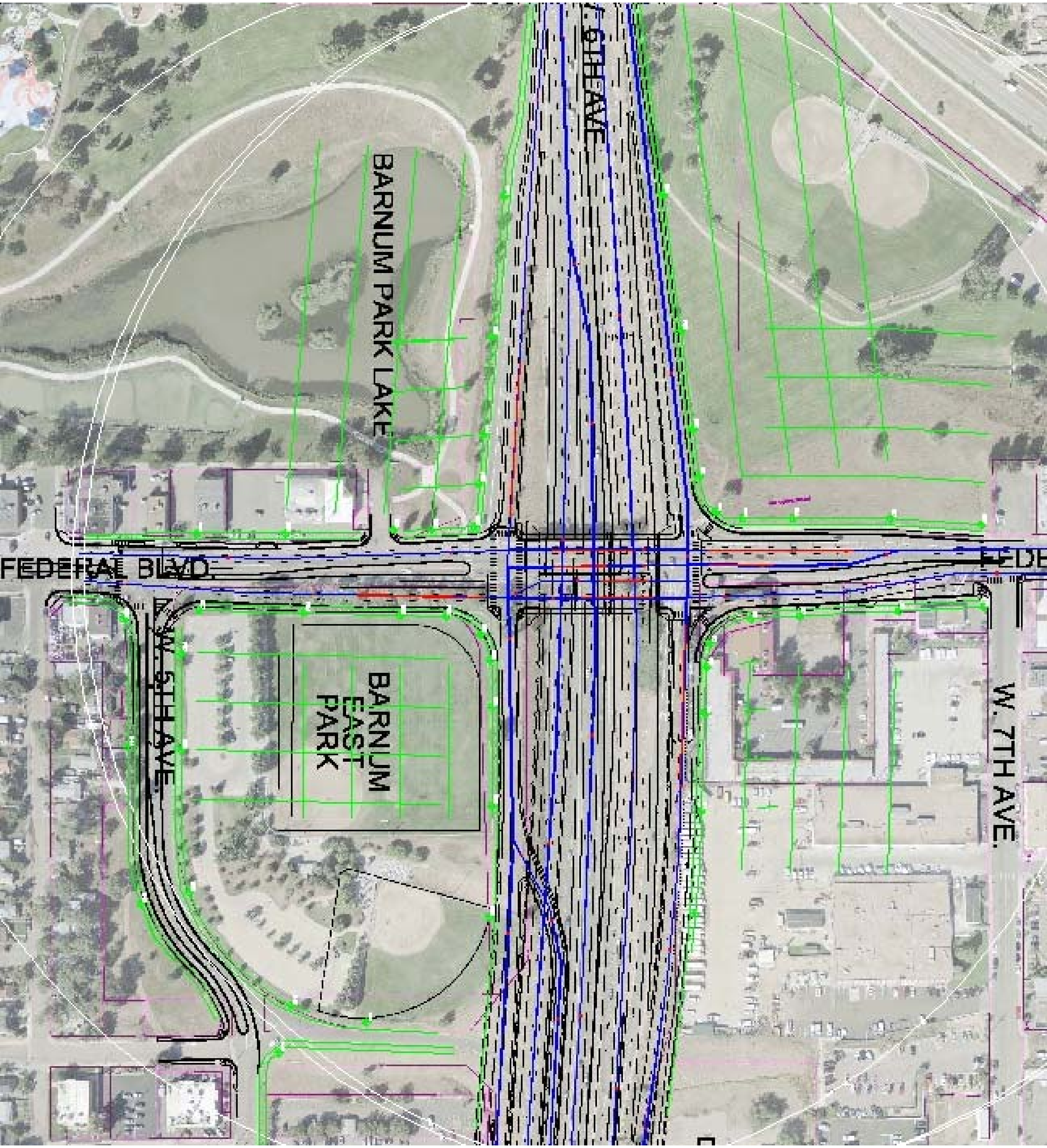
Emission Factors

DRCOGid2035	hr	street	side	MaxOfspeed	MinOfEF(g/m)	ppm background	
6411	7	Federal	n	31	13.51646712	3.608	8-hr
6410	7	Federal	nn	34	13.51646712	6.406	1-hr
6411	7	Federal	s	31	13.51646712	0.563218391	persistence factor (ratio of 8Hr to 1hr)
26351	7	Federal	ss	25	13.68023965		
27962	7	u6ebOn	e	29	13.54472306		
6375	7	US6		17	14.06821997		
6379	7	US6btween		56	14.50213322		
6379	7	US6btweenNoBuild		35	13.0061447		
6409	7	us6ebOff	w	36	13.63462213		
28154	7	us6WBoff	e	16	14.62477377		
6376	7	us6WBon	w	35	13.55509645		
6411	17	Federal	n	34	13.61965689		
6410	17	Federal	nn	31	13.59475307		
6411	17	Federal	s	34	13.61965689		
26351	17	Federal	ss	20	14.14355684		
27962	17	u6ebOn	e	15	14.85964794		
6375	17	US6		42	13.61923235		
6379	17	US6btween		62	15.22047957		
6379	17	US6btweenNoBuild		35	13.14343224		
6409	17	us6ebOff	w	26	13.70856104		
28154	17	us6WBoff	e	26	13.70856104		
6376	17	us6WBon	w	39	13.9239895		

Idle EF

hr	sp	EF(g/m)	EF (grams/hour)
ALL	2.5	29.46006148	73.6502

AutoCAD Drawings



W. 6TH AVE
BARNUM PARK LAKE
FEDERAL BLVD.
FEDE
W. 5TH AVE.
BARNUM EAST PARK
W. 7TH AVE.

CAL3HC Input and Output Files

```
US 6 & Federal Blvd NBAM                60.0321.0.0000.000450.30480000    1    1
NE COR                   2820.     2000.      6.0
NE E80                   2858.     1993.      6.0
NE E160                  2936.     1990.      6.0
NE EMID                  3094.     1984.      6.0
NE EMID                  3263.     1974.      6.0
NE N80                   2780.     2065.      6.0
NE N160                  2775.     2145.      6.0
NE NMID                  2767.     2308.      6.0
NE NMID                  2760.     2447.      6.0
NW COR                   2604.     2008.      6.0
NW W80                   2545.     1980.      6.0
NW W160                  2468.     1971.      6.0
NW WMID                  2307.     1951.      6.0
NW WMID                  2083.     1923.      6.0
NW N80                   2614.     2051.      6.0
NW N160                  2614.     2134.      6.0
NW NMID                  2615.     2294.      6.0
NW NMID                  2625.     2443.      6.0
SE COR                   2805.     1622.      6.0
SE E80                   2848.     1638.      6.0
SE E160                  2925.     1640.      6.0
SE EMID                  3086.     1640.      6.0
SE EMID                  3269.     1636.      6.0
SE S80                   2776.     1564.      6.0
SE S160                  2774.     1489.      6.0
SE SMID                  2770.     1332.      6.0
SE SMID                  2766.     1160.      6.0
SW COR                   2628.     1611.      6.0
SW W80                   2558.     1619.      6.0
SW W160                  2478.     1626.      6.0
SW WMID                  2316.     1640.      6.0
SW WMID                  2086.     1660.      6.0
SW S80                   2633.     1542.      6.0
SW S160                  2633.     1479.      6.0
SW SMID                  2640.     1301.      6.0
SW SMID                  2640.     1155.      6.0
5th Ave                  2837.     1130.      6.0
5th Ave                  2995.     1130.      6.0
5th Ave                  3229.     1143.      6.0
5th Ave                  3414.     1311.      6.0
5th Ave                  3442.     1434.      6.0
5th Ave                  3492.     1291.      6.0
5th Ave                  2779.     1035.      6.0
5th Ave                  2990.     1043.      6.0
5th Ave                  3248.     1064.      6.0
US 6 & Federal Blvd NBAM                 45  1   0
  1
EB        ERamp     AG  1713.  1724.  2134.  1678.     44013.6  0. 32.   35.
  1
EB        ERamp     AG  2134.  1678.  2681.  1633.     44013.6  0. 44.   35.
  2
EB        ERamp     AG  2618.  1638.  2338.  1661.      0. 24.   2
       100        79        2.0  440  73.65 1636 1 3
  1
NB        ERamp     AG  2709.  1104.  2709.  1648.    193013.5  0. 44.   31.
  2
NB        ERamp     AG  2709.  1603.  2709.  1448.      0. 24.   2
       100        29        2.0 1930  73.65 1753 1 3
  1
SB        ERamp     AG  2673.  1967.  2667.  1635.    185513.5 12. 44.   31.
  2
SB        ERamp     AG  2668.  1698.  2670.  1809.     12. 24.   2
       100        29        2.0 1855  73.65 1753 1 3
  1
NB        WRamp     AG  2709.  1648.  2709.  1771.    220013.5  0. 44.   31.
  1
NB        WRamp     AG  2709.  1771.  2709.  1964.    220013.5 12. 56.   31.
  2
NB        WRamp     AG  2709.  1904.  2709.  1799.     12. 36.   3
       100        29        2.0 2200  73.65 1207 1 3
  1
NBdp      WRamp     AG  2709.  1965.  2695.  2663.    194013.5  0. 44.   31.
  1
SB        WRamp     AG  2664.  2662.  2669.  2458.    182513.5  0. 56.   31.
  1
SBR       WRamp     AG  2669.  2457.  2651.  2340.     21013.5  0. 32.   31.
  1
SBR       WRamp     AG  2651.  2340.  2646.  2163.     21013.5  0. 32.   31.
  1
SBR       WRamp     AG  2646.  2163.  2646.  2013.     21013.5  0. 32.   31.
  1
SBR       WRamp     AG  2646.  2013.  2627.  1966.     21013.5  0. 32.   31.
  1
SBR       WRamp     AG  2627.  1966.  2541.  1922.     21013.5  0. 32.   31.
  1
SBT       WRamp     AG  2669.  2452.  2673.  1967.    161513.5  0. 44.   31.
  2
SBT       WRamp     AG  2673.  2008.  2671.  2161.     12. 24.   2
       100        40        2.0 1615  73.65 1753 1 3
  1
WB        WRamp     AG  3507.  1865.  3329.  1895.     42513.6  0. 56.   35.
  1
WB        WRamp     AG  3329.  1895.  3054.  1916.     42513.6  0. 56.   35.
  1
WB        WRamp     AG  3054.  1916.  2685.  1942.     42513.6  0. 56.   35.
  2
WB        WRamp     AG  2791.  1935.  2947.  1924.     12. 36.   3
       100        79        2.0  425  73.65 1650 1 3
  1
WBdp      WRamp     AG  2688.  1942.  2544.  1921.     65013.6  0. 44.   36.
  1
WBdp      WRamp     AG  2544.  1921.  1721.  1825.     65013.6  0. 32.   36.
  1
EB        US6       AG  1714.  1752.  2325.  1770.    635013.0  0. 68.   35.
  1
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EB        US6       AG  2328.  1769.  3688.  1750.    635013.0  0. 68.   35.
  1
WB        US6       AG  3689.  1788.  1717.  1821.    685013.0  0. 68.   35.
  1
WB        5Ave      AG  2713.  1102.  3186.  1102.    126513.7  0. 32.   25.
  1
WB        5Ave      AG  3186.  1102.  3378.  1205.    126513.7  0. 32.   25.
  1
WB        5Ave      AG  3378.  1205.  3456.  1339.    126513.7  0. 32.   25.
  1
WB        5Ave      AG  3456.  1339.  3469.  1472.    126513.7  0. 32.   25.
  1
WB        5Ave      AG  3469.  1472.  3475.  1593.    126513.7  0. 32.   25.
  1
WB        5Ave      AG  3475.  1593.  3508.  1662.    126513.7  0. 32.   25.
  1
WB        5Ave      AG  3508.  1662.  3564.  1695.    126513.7  0. 32.   25.
  1
WB        5Ave      AG  3564.  1695.  3720.  1709.    126513.7  0. 32.   25.
  1
NB        5Ave      AG  2699.   665.  2713.  1102.    298513.0  0. 44.   35.
  2
NB        5Ave      AG  2711.  1040.  2706.   896.     12. 24.   2
       100        29       2.0 2985  73.65 1660 1 3
  1
SB        5Ave      AG  2665.  1635.  2682.  1303.    149013.0  0. 56.   35.
  1
SBL       5Ave      AG  2684.  1305.  2697.  1235.     21013.0  0. 32.   35.
  1
SBL       5Ave      AG  2697.  1235.  2702.  1103.     21013.0  0. 32.   35.
  2
SBL       5Ave      AG  2701.  1123.  2698.  1196.     12. 12.   1
       100        29       2.0  210  73.65  107 1 3
  1
SBT       5Ave      AG  2682.  1304.  2682.  1102.    128013.0  0. 44.   35.
  2
SBT       5Ave      AG  2682.  1137.  2682.  1248.     12. 24.   2
       100        29       2.0 1280  73.65 1753 1 3
  1
SBDP      5Ave      AG  2682.  1101.  2669.   665.    128013.0  0. 44.   35.
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: US 6 & Federal Blvd NBAM RUN: US 6 & Federal Blvd NBAM
DATE: 07/23/2012 TIME: 14:42:18.72

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		X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. EB	ERamp	1713.0	1724.0	2134.0	1678.0	424.	96.	AG	440.	13.6	.0	32.0		
2. EB	ERamp	2134.0	1678.0	2681.0	1633.0	549.	95.	AG	440.	13.6	.0	44.0		
3. EB	ERamp	2618.0	1638.0	2511.1	1646.8	107.	275.	AG	312.	100.0	.0	24.0	.79	5.4
4. NB	ERamp	2709.0	1104.0	2709.0	1648.0	544.	360.	AG	1930.	13.5	.0	44.0		
5. NB	ERamp	2709.0	1603.0	2709.0	1450.0	153.	180.	AG	115.	100.0	.0	24.0	.82	7.8
6. SB	ERamp	2673.0	1967.0	2667.0	1635.0	332.	181.	AG	1855.	13.5	12.0	44.0		
7. SB	ERamp	2668.0	1698.0	2670.6	1845.0	147.	1.	AG	115.	100.0	12.0	24.0	.79	7.5
8. NB	WRamp	2709.0	1648.0	2709.0	1771.0	123.	360.	AG	2200.	13.5	.0	44.0		
9. NB	WRamp	2709.0	1771.0	2709.0	1964.0	193.	360.	AG	2200.	13.5	12.0	56.0		
10. NB	WRamp	2709.0	1904.0	2709.0	1747.0	157.	180.	AG	172.	100.0	12.0	36.0	.91	8.0
11. NBdp	WRamp	2709.0	1965.0	2695.0	2663.0	698.	359.	AG	1940.	13.5	.0	44.0		
12. SB	WRamp	2664.0	2662.0	2669.0	2458.0	204.	179.	AG	1825.	13.5	.0	56.0		
13. SBR	WRamp	2669.0	2457.0	2651.0	2340.0	118.	189.	AG	210.	13.5	.0	32.0		
14. SBR	WRamp	2651.0	2340.0	2646.0	2163.0	177.	182.	AG	210.	13.5	.0	32.0		
15. SBR	WRamp	2646.0	2163.0	2646.0	2013.0	150.	180.	AG	210.	13.5	.0	32.0		
16. SBR	WRamp	2646.0	2013.0	2627.0	1966.0	51.	202.	AG	210.	13.5	.0	32.0		
17. SBR	WRamp	2627.0	1966.0	2541.0	1922.0	97.	243.	AG	210.	13.5	.0	32.0		
18. SBT	WRamp	2669.0	2452.0	2673.0	1967.0	485.	180.	AG	1615.	13.5	.0	44.0		
19. SBT	WRamp	2673.0	2008.0	2670.6	2188.3	180.	359.	AG	158.	100.0	12.0	24.0	.82	9.2
20. WB	WRamp	3507.0	1865.0	3329.0	1895.0	181.	280.	AG	425.	13.6	.0	56.0		
21. WB	WRamp	3329.0	1895.0	3054.0	1916.0	276.	274.	AG	425.	13.6	.0	56.0		
22. WB	WRamp	3054.0	1916.0	2685.0	1942.0	370.	274.	AG	425.	13.6	.0	56.0		
23. WB	WRamp	2791.0	1935.0	2851.8	1930.7	61.	94.	AG	468.	100.0	12.0	36.0	.50	3.1
24. WBdp	WRamp	2688.0	1942.0	2544.0	1921.0	146.	262.	AG	650.	13.6	.0	44.0		
25. WBdp	WRamp	2544.0	1921.0	1721.0	1825.0	829.	263.	AG	650.	13.6	.0	32.0		
26. EB	US6	1714.0	1752.0	2325.0	1770.0	611.	88.	AG	6350.	13.0	.0	68.0		
27. EB	US6	2328.0	1769.0	3688.0	1750.0	1360.	91.	AG	6350.	13.0	.0	68.0		
28. WB	US6	3689.0	1788.0	1717.0	1821.0	1972.	271.	AG	6850.	13.0	.0	68.0		
29. WB	5Ave	2713.0	1102.0	3186.0	1102.0	473.	90.	AG	1530.	13.7	.0	32.0		
30. WB	5Ave	3186.0	1102.0	3378.0	1205.0	218.	62.	AG	1530.	13.7	.0	32.0		
31. WB	5Ave	3378.0	1205.0	3456.0	1339.0	155.	30.	AG	1530.	13.7	.0	32.0		
32. WB	5Ave	3456.0	1339.0	3469.0	1472.0	134.	6.	AG	1530.	13.7	.0	32.0		
33. WB	5Ave	3469.0	1472.0	3475.0	1593.0	121.	3.	AG	1530.	13.7	.0	32.0		
34. WB	5Ave	3475.0	1593.0	3508.0	1662.0	76.	26.	AG	1530.	13.7	.0	32.0		
35. WB	5Ave	3508.0	1662.0	3564.0	1695.0	65.	59.	AG	1530.	13.7	.0	32.0		
36. WB	5Ave	3564.0	1695.0	3720.0	1709.0	157.	85.	AG	1530.	13.7	.0	32.0		
37. NB	5Ave	2699.0	665.0	2713.0	1102.0	437.	2.	AG	2985.	13.0	.0	44.0		
38. NB	5Ave	2711.0	1040.0	2565.4	-3152.9	4195.	182.	AG	115.	100.0	12.0	24.0	1.34	213.1
39. SB	5Ave	2665.0	1635.0	2682.0	1303.0	332.	177.	AG	1490.	13.0	.0	56.0		
40. SBL	5Ave	2684.0	1305.0	2697.0	1235.0	71.	169.	AG	210.	13.0	.0	32.0		
41. SBL	5Ave	2697.0	1235.0	2702.0	1103.0	132.	178.	AG	210.	13.0	.0	32.0		
42. SBL	5Ave	2701.0	1123.0	2638.4	2645.5	1524.	358.	AG	57.	100.0	12.0	12.0	2.96	77.4
43. SBT	5Ave	2682.0	1304.0	2682.0	1102.0	202.	180.	AG	1280.	13.0	.0	44.0		
44. SBT	5Ave	2682.0	1137.0	2682.0	1238.5	101.	360.	AG	115.	100.0	12.0	24.0	.55	5.2

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JOB: US 6 & Federal Blvd NBAM RUN: US 6 & Federal Blvd NBAM
DATE: 07/23/2012 TIME: 14:42:18.72

LINK VARIABLES

LINK DESCRIPTION		X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
45. SBDP	5Ave	2682.0	1101.0	2669.0	665.0	436.	182.	AG	1280.	13.0	.0	44.0		

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JOB: US 6 & Federal Blvd NBAM RUN: US 6 & Federal Blvd NBAM
DATE: 07/23/2012 TIME: 14:42:18.72

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION		CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
3. EB	ERamp	100	79	2.0	440	1636	73.65	1	3
5. NB	ERamp	100	29	2.0	1930	1753	73.65	1	3
7. SB	ERamp	100	29	2.0	1855	1753	73.65	1	3
10. NB	WRamp	100	29	2.0	2200	1207	73.65	1	3
19. SBT	WRamp	100	40	2.0	1615	1753	73.65	1	3
23. WB	WRamp	100	79	2.0	425	1650	73.65	1	3
38. NB	5Ave	100	29	2.0	2985	1660	73.65	1	3
42. SBL	5Ave	100	29	2.0	210	107	73.65	1	3
44. SBT	5Ave	100	29	2.0	1280	1753	73.65	1	3

RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. NE COR	2820.0	2000.0	6.0
2. NE E80	2858.0	1993.0	6.0
3. NE E160	2936.0	1990.0	6.0
4. NE EMID	3094.0	1984.0	6.0
5. NE EMID	3263.0	1974.0	6.0
6. NE N80	2780.0	2065.0	6.0
7. NE N160	2775.0	2145.0	6.0
8. NE NMID	2767.0	2308.0	6.0
9. NE NMID	2760.0	2447.0	6.0

		X	Y	Z	
10. NW COR	*	2604.0	2008.0	6.0	*
11. NW W80	*	2545.0	1980.0	6.0	*
12. NW W160	*	2468.0	1971.0	6.0	*
13. NW WMID	*	2307.0	1951.0	6.0	*
14. NW WMID	*	2083.0	1923.0	6.0	*
15. NW N80	*	2614.0	2051.0	6.0	*
16. NW N160	*	2614.0	2134.0	6.0	*
17. NW NMID	*	2615.0	2294.0	6.0	*
18. NW NMID	*	2625.0	2443.0	6.0	*
19. SE COR	*	2805.0	1622.0	6.0	*
20. SE E80	*	2848.0	1638.0	6.0	*
21. SE E160	*	2925.0	1640.0	6.0	*
22. SE EMID	*	3086.0	1640.0	6.0	*
23. SE EMID	*	3269.0	1636.0	6.0	*
24. SE S80	*	2776.0	1564.0	6.0	*
25. SE S160	*	2774.0	1489.0	6.0	*
26. SE SMID	*	2770.0	1332.0	6.0	*
27. SE SMID	*	2766.0	1160.0	6.0	*
28. SW COR	*	2628.0	1611.0	6.0	*
29. SW W80	*	2558.0	1619.0	6.0	*
30. SW W160	*	2478.0	1626.0	6.0	*
31. SW WMID	*	2316.0	1640.0	6.0	*
32. SW WMID	*	2086.0	1660.0	6.0	*
33. SW S80	*	2633.0	1542.0	6.0	*
34. SW S160	*	2633.0	1479.0	6.0	*
35. SW SMID	*	2640.0	1301.0	6.0	*
36. SW SMID	*	2640.0	1155.0	6.0	*

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JOB: US 6 & Federal Blvd NBAM RUN: US 6 & Federal Blvd NBAM
DATE: 07/23/2012 TIME: 14:42:18.72

RECEPTOR LOCATIONS

RECEPTOR	*	COORDINATES (FT) X	Y	Z	*
37. 5th Ave	*	2837.0	1130.0	6.0	*
38. 5th Ave	*	2995.0	1130.0	6.0	*
39. 5th Ave	*	3229.0	1143.0	6.0	*
40. 5th Ave	*	3414.0	1311.0	6.0	*
41. 5th Ave	*	3442.0	1434.0	6.0	*
42. 5th Ave	*	3492.0	1291.0	6.0	*
43. 5th Ave	*	2779.0	1035.0	6.0	*
44. 5th Ave	*	2990.0	1043.0	6.0	*
45. 5th Ave	*	3248.0	1064.0	6.0	*

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JOB: US 6 & Federal Blvd NBAM RUN: US 6 & Federal Blvd NBAM

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 ANGLE (DEGR)	*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
0.	*	.1	.1	.0	.0	.0	.4	.3	.3	.1	.6	.2	.0	.0	.0	.6	.6	.5	.5	2.4	2.3
5.	*	.1	.0	.0	.0	.0	.1	.1	.1	.1	.7	.3	.0	.0	.0	.8	.7	.6	.6	2.1	2.3
10.	*	.0	.0	.0	.0	.0	.1	.1	.1	.0	.9	.4	.1	.0	.0	1.0	1.0	.8	.8	2.1	2.2
15.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	.5	.3	.0	.0	1.3	1.1	.9	1.0	2.0	2.1
20.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	.7	.3	.0	.0	1.2	1.2	1.0	1.1	1.9	2.1
25.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.8	.4	.1	.0	1.3	1.1	1.2	1.2	1.9	2.1
30.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.8	.4	.1	.0	1.3	1.1	1.0	1.2	1.9	2.1
35.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.8	.4	.2	.0	1.3	1.2	1.1	1.2	2.0	2.1
40.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.8	.5	.2	.1	1.3	1.2	1.0	1.2	2.1	2.2
45.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.7	.5	.2	.1	1.3	1.1	1.1	1.2	2.1	2.3
50.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.7	.5	.2	.2	1.3	1.1	1.1	1.1	2.1	2.4
55.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.7	.5	.2	.2	1.2	1.3	1.1	1.1	2.2	2.4
60.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.7	.5	.2	.2	1.2	1.2	1.1	1.0	2.3	2.4
65.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.7	.5	.2	.2	1.2	1.2	1.1	1.0	2.2	2.4
70.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.5	.5	.2	.2	1.2	1.2	1.1	1.0	2.1	2.3
75.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.5	.5	.3	.4	1.2	1.2	1.1	1.0	1.8	2.1
80.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.6	.5	.5	.7	1.2	1.2	1.0	1.0	1.6	1.7
85.	*	.1	.1	.1	.0	.0	.0	.0	.0	.0	1.1	1.1	.9	1.0	1.0	1.3	1.2	1.0	.9	1.1	1.3
90.	*	.3	.3	.2	.1	.0	.1	.0	.0	.0	1.3	1.3	1.3	1.4	1.7	1.4	1.2	1.0	1.1	.7	.8
95.	*	.5	.5	.5	.3	.1	.3	.1	.0	.0	1.8	1.5	1.7	1.6	2.3	1.7	1.4	1.0	1.1	.3	.5
100.	*	.8	.8	.8	.5	.3	.5	.2	.0	.0	2.2	2.2	2.2	2.1	2.9	2.0	1.5	1.1	1.0	.2	.3
105.	*	1.3	1.4	1.1	.9	.5	.7	.4	.1	.0	2.4	2.5	2.4	2.6	3.0	2.4	1.7	1.3	1.1	.0	.1
110.	*	1.5	1.5	1.5	1.2	.9	1.0	.5	.2	.0	2.8	2.7	2.7	2.8	3.2	2.6	2.0	1.4	1.2	.0	.0
115.	*	1.7	1.7	1.8	1.5	1.2	1.2	.9	.3	.2	2.9	3.0	2.8	2.8	3.3	2.8	2.2	1.6	1.3	.0	.0
120.	*	1.9	1.9	1.9	1.7	1.4	1.4	.9	.5	.2	3.1	3.0	2.8	2.8	3.0	2.9	2.4	1.8	1.6	.0	.0
125.	*	1.9	1.9	2.0	1.8	1.7	1.5	1.1	.7	.4	3.2	3.0	2.9	2.8	3.1	2.9	2.5	1.9	1.7	.0	.0
130.	*	2.0	1.9	1.9	1.9	1.9	1.5	1.1	.7	.5	3.2	3.1	2.7	2.9	3.0	2.9	2.8	2.0	1.9	.0	.0
135.	*	2.0	1.9	1.9	1.9	2.0	1.6	1.1	.8	.6	2.9	2.9	2.8	2.7	2.8	2.9	2.9	2.0	2.0	.0	.0
140.	*	2.0	1.9	1.9	1.9	2.0	1.6	1.1	.9	.7	2.9	3.0	2.5	2.6	2.8	2.9	2.6	2.1	2.0	.0	.0
145.	*	1.9	1.7	1.7	1.8	1.9	1.6	1.1	.9	.7	2.8	3.0	2.4	2.5	2.7	2.7	2.6	2.2	2.0	.0	.0
150.	*	2.0	1.7	1.7	1.8	1.8	1.6	1.3	.9	.7	2.8	3.1	2.5	2.4	2.5	2.7	2.7	2.3	2.1	.1	.1
155.	*	2.1	1.7	1.7	1.7	1.8	1.6	1.3	.8	.7	3.0	2.9	2.5	2.4	2.5	2.8	2.6	2.4	2.2	.1	.1
160.	*	2.1	1.7	1.7	1.7	1.8	1.7	1.3	.8	.7	2.9	2.8	2.5	2.3	2.4	2.8	2.5	2.3	2.3	.1	.1
165.	*	2.1	1.8	1.7	1.7	1.7	1.7	1.2	.9	.8	3.0	2.4	2.4	2.3	2.4	2.8	2.6	2.3	2.3	.1	.1
170.	*	2.3	1.8	1.7	1.7	1.7	1.8	1.4	1.0	.8	2.8	2.5	2.5	2.2	2.4	2.8	2.7	1.9	2.3	.2	.1
175.	*	2.5	1.9	1.7	1.7	1.7	1.9	1.7	1.3	1.3	3.1	2.6	2.4	2.1	2.4	2.6	2.3	2.0	2.1	.4	.2
180.	*	2.6	2.3	1.7	1.7	1.8	2.4	2.1	1.7	1.4	2.5	2.5	2.1	2.2	2.4	2.4	2.1	1.9	1.8	.4	.4
185.	*	2.9	2.3	2.0	1.7	1.8	2.5	2.2	1.7	1.8	2.4	2.1	2.0	2.2	2.4	2.0	1.5	1.5	1.3	.7	.4
190.	*	3.0	2.7	2.0	1.9	1.7	2.6	2.4	1.9	1.9	1.9	2.1	2.0	2.1	2.4	1.6	1.3	1.0	1.1	.9	.6
195.	*	3.0	2.7	2.0	1.9	1.8	2.5	2.3	2.0	2.0	1.8	1.7	2.0	2.2	2.5	1.5	1.1	.8	.9	.8	.6
200.	*	2.7	2.9	2.0	1.9	1.8	2.6	2.3	2.0	1.9	1.7	1.7	2.0	2.1	2.4	1.4	1.1	.9	.7	.7	.7

205.	*	2.8	2.9	2.0	1.9	1.9	2.6	2.2	1.9	1.9	1.8	1.9	2.0	2.2	2.4	1.5	1.1	1.0	.8	.9	.6

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JOB: US 6 & Federal Blvd NBAM RUN: US 6 & Federal Blvd NBAM

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
210.	*	3.1	3.1	2.1	2.0	2.0	2.4	2.2	2.0	1.8	1.9	2.0	2.0	2.2	2.4	1.7	1.2	.9	.7	.8	.4
215.	*	2.9	3.1	2.3	2.0	2.1	2.6	2.4	2.0	1.8	1.8	2.0	2.0	2.2	2.5	1.5	1.2	.9	.8	.8	.6
220.	*	2.9	2.9	2.4	2.1	2.0	2.4	2.3	1.9	1.8	1.9	2.1	2.0	2.3	2.6	1.5	1.2	.9	.7	.7	.6
225.	*	2.6	3.1	2.5	2.1	2.0	2.5	2.3	1.9	1.8	1.8	2.0	2.1	2.3	2.6	1.5	1.3	.9	.6	.7	.6
230.	*	2.7	2.9	2.7	2.2	2.1	2.4	2.2	1.7	1.4	1.8	2.1	2.1	2.3	2.5	1.6	1.2	.7	.5	.7	.6
235.	*	2.5	2.8	2.8	2.2	2.1	2.5	2.2	1.5	1.3	1.9	2.1	2.2	2.3	2.5	1.6	1.3	.7	.4	.7	.6
240.	*	2.7	2.7	2.8	2.4	2.2	2.5	2.2	1.5	1.1	2.0	2.1	2.1	2.3	2.4	1.5	1.1	.5	.3	.7	.6
245.	*	2.6	2.7	2.7	2.3	2.2	2.3	2.2	1.3	1.0	1.8	2.1	2.1	2.2	2.1	1.4	1.0	.4	.2	.7	.6
250.	*	2.5	2.7	2.7	2.3	2.2	2.1	1.9	1.1	.9	1.5	1.9	1.9	1.9	1.7	1.2	.8	.2	.0	.7	.6
255.	*	2.3	2.5	2.4	2.2	2.3	1.9	1.5	1.0	.8	1.2	1.5	1.6	1.6	1.3	.9	.5	.1	.0	.8	.8
260.	*	1.8	1.9	2.1	1.8	2.0	1.5	1.3	.9	.9	.9	1.2	1.2	1.1	1.0	.7	.3	.0	.0	1.1	1.0
265.	*	1.6	1.6	1.6	1.5	1.6	1.3	1.2	.8	.8	.7	.8	.8	.8	.7	.3	.1	.0	.0	1.2	1.2
270.	*	1.2	1.1	1.3	1.3	1.0	1.1	1.1	.8	.8	.3	.5	.5	.5	.3	.2	.0	.0	.0	1.5	1.7
275.	*	.9	.8	.7	.6	.7	1.1	.9	.8	.8	.1	.2	.1	.2	.1	.1	.0	.0	.0	2.0	2.1
280.	*	.7	.6	.5	.3	.3	1.0	.9	.8	.8	.0	.1	.1	.1	.1	.0	.0	.0	.0	2.5	2.5
285.	*	.6	.6	.4	.2	.3	1.0	.9	.8	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.8	2.9
290.	*	.6	.6	.5	.2	.2	1.0	.9	.8	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.9	3.0
295.	*	.6	.6	.5	.2	.2	1.0	.9	.8	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.2	3.3
300.	*	.6	.6	.5	.2	.2	1.0	.9	.8	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.3	3.2
305.	*	.7	.6	.5	.2	.2	.9	.8	.8	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0	3.1
310.	*	.7	.6	.4	.2	.1	1.0	.9	1.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0	3.0
315.	*	.8	.6	.4	.2	.1	1.0	.9	1.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.2	3.1
320.	*	.8	.6	.3	.2	.1	1.0	.9	1.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.1	2.9
325.	*	.7	.5	.3	.1	.0	1.0	.9	1.0	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.2	2.9
330.	*	.6	.5	.4	.1	.0	.9	1.1	1.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.0	2.9
335.	*	.7	.5	.4	.1	.0	1.0	.9	.8	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.9	2.7
340.	*	.7	.5	.2	.0	.0	.8	.8	.8	.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.9	2.9
345.	*	.5	.4	.1	.0	.0	.8	.8	.6	.5	.0	.0	.0	.0	.0	.0	.0	.0	.1	2.8	2.6
350.	*	.5	.3	.1	.0	.0	.6	.6	.6	.4	.1	.0	.0	.0	.0	.2	.2	.1	.1	2.7	2.6
355.	*	.3	.1	.0	.0	.0	.5	.5	.4	.3	.2	.0	.0	.0	.0	.3	.3	.2	.3	2.5	2.5
360.	*	.1	.1	.0	.0	.0	.4	.3	.3	.1	.6	.2	.0	.0	.0	.6	.6	.5	.5	2.4	2.3
MAX	*	3.1	3.1	2.8	2.4	2.3	2.6	2.4	2.0	2.0	3.2	3.1	2.9	2.9	3.3	2.9	2.9	2.4	2.3	3.3	3.3
DEGR.	*	210	225	235	240	255	190	215	195	195	125	130	125	130	115	120	135	155	160	300	295

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JOB: US 6 & Federal Blvd NBAM RUN: US 6 & Federal Blvd NBAM

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 ANGLE (DEGR)	*	CONCENTRATION (PPM) REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
0.	*	2.1	2.2	2.1	2.4	1.9	1.7	1.7	3.2	3.1	2.1	2.4	2.6	3.0	2.5	2.1	1.8	.9	.7	.8	1.1
5.	*	2.1	2.2	2.2	2.1	1.8	1.5	1.3	3.6	3.2	2.3	2.3	2.6	3.2	2.9	2.3	2.1	.7	.7	.8	1.1
10.	*	2.2	2.2	2.2	1.8	1.4	1.2	.9	3.6	3.5	2.3	2.4	2.6	3.3	2.9	2.4	2.1	.7	.7	.9	1.1
15.	*	2.2	2.2	2.2	1.6	1.2	1.0	.9	3.8	3.6	2.4	2.5	2.6	3.3	2.9	2.5	2.2	.7	.7	.8	1.2
20.	*	2.1	2.2	2.1	1.5	1.2	1.0	.8	3.6	3.8	2.5	2.5	2.6	3.5	2.8	2.4	2.1	.8	.8	.7	1.4
25.	*	2.1	2.2	2.2	1.6	1.2	1.0	.8	3.8	3.9	2.6	2.6	2.6	3.3	2.8	2.1	2.0	.8	.7	.7	1.3
30.	*	2.2	2.2	2.2	1.6	1.3	1.0	.8	3.7	4.1	2.6	2.5	2.7	3.0	2.7	2.2	2.0	.8	.6	.7	1.3
35.	*	2.2	2.2	2.2	1.6	1.3	1.0	.8	3.6	4.1	2.8	2.5	2.8	3.0	2.6	2.2	2.1	.7	.6	.8	1.3
40.	*	2.3	2.3	2.3	1.6	1.3	1.0	.8	3.6	4.1	3.1	2.5	3.0	2.8	2.5	2.2	2.1	.6	.6	.8	.9
45.	*	2.3	2.4	2.3	1.7	1.4	1.0	.6	3.5	4.2	3.2	2.8	3.0	2.9	2.6	2.1	2.0	.6	.4	.8	1.0
50.	*	2.4	2.4	2.3	1.7	1.4	1.0	.6	3.5	4.0	3.2	2.9	3.2	2.9	2.6	2.1	1.8	.4	.4	.8	.8
55.	*	2.4	2.4	2.2	1.7	1.4	.8	.4	3.4	4.0	3.5	2.8	3.3	2.8	2.6	1.9	1.8	.4	.2	.8	.8
60.	*	2.4	2.4	2.2	1.7	1.3	.7	.4	3.5	3.8	3.6	2.9	3.1	2.7	2.5	1.9	1.6	.2	.1	1.0	.8
65.	*	2.4	2.3	1.9	1.7	1.2	.6	.2	3.3	3.7	3.6	2.9	3.4	2.7	2.4	1.7	1.4	.2	.2	1.0	.7
70.	*	2.3	2.1	1.8	1.5	1.0	.4	.1	3.3	3.7	3.5	3.1	3.3	2.6	2.2	1.5	1.4	.1	.3	1.1	.7
75.	*	2.1	1.9	1.4	1.3	.7	.2	.0	2.9	3.4	3.6	3.1	3.3	2.2	1.9	1.3	1.3	.2	.3	1.2	.7
80.	*	1.7	1.5	1.2	.9	.5	.1	.1	2.8	2.8	3.2	2.7	2.9	2.0	1.6	1.3	1.3	.3	.3	1.2	.7
85.	*	1.2	1.0	.9	.7	.3	.0	.2	2.3	2.4	2.7	2.3	2.5	1.8	1.4	1.1	1.4	.5	.5	1.0	.6
90.	*	.8	.6	.5	.3	.1	.0	.3	1.9	1.9	2.1	2.0	1.9	1.5	1.3	1.0	1.5	.6	.6	1.0	.6
95.	*	.5	.3	.3	.2	.0	.0	.4	1.6	1.4	1.6	1.3	1.2	1.4	1.1	1.1	1.5	.7	.6	1.0	.6
100.	*	.2	.1	.2	.0	.0	.0	.4	1.3	.9	1.1	.8	.8	1.2	1.1	1.0	1.4	.8	.7	.9	.6
105.	*	.1	.1	.2	.0	.0	.1	.4	1.1	1.0	.9	.6	.5	1.2	1.1	1.1	1.4	.8	.8	.9	.6
110.	*	.0	.0	.1	.0	.0	.1	.4	1.1	.8	.7	.4	.3	1.1	1.1	1.3	1.4	.8	.8	.8	.6
115.	*	.0	.0	.1	.0	.0	.2	.4	1.1	.7	.7	.3	.2	1.1	1.1	1.2	1.4	.8	.7	.8	.6
120.	*	.0	.0	.1	.0	.0	.1	.4	1.2	.7	.5	.2	.1	1.2	1.0	1.3	1.3	.8	.7	.7	.6
125.	*	.0	.0	.2	.0	.0	.1	.4	1.2	.7	.4	.3	.1	1.2	1.2	1.3	1.4	.7	.7	.7	.6
130.	*	.0	.0	.2	.0	.0	.1	.4	1.2	.8	.5	.3	.2	1.4	1.3	1.2	1.2	.7	.7	.7	.6
135.	*	.0	.0	.2	.0	.1	.1	.4	1.4	.9	.5	.3	.1	1.4	1.3	1.4	1.2	.7	.7	.7	.6
140.	*	.0	.0	.1	.1	.1	.2	.4	1.4	.9	.5	.2	.1	1.5	1.3	1.5	1.4	.6	.6	.7	.6
145.	*	.0	.0	.1	.1	.1	.2	.4	1.5	.8	.5	.2	.1	1.5	1.3	1.4	1.3	.6	.6	.7	.6
150.	*	.0	.0	.2	.1	.1	.2	.4	1.5	.9	.6	.2	.1	1.5	1.5	1.4	1.4	.6	.6	.7	.7
155.	*	.0	.1	.2	.1	.1	.2	.4	1.6	.8	.4	.2	.0	1.6	1.5	1.6	1.3	.6	.6	.7	.7
160.	*	.1	.1	.1	.1	.1	.2	.4	1.7	.6	.5	.2	.0	1.6	1.4	1.5	1.4	.6	.6	.7	.7
165.	*	.1	.0	.1	.1	.1	.2	.5	1.6	.7	.4	.2	.0	1.7	1.6	1.6	1.4	.6	.6	.7	.7
170.	*	.1	.0	.1	.3	.3	.3	.7	1.5	.7	.3	.1	.0	1.4	1.3	1.3	1.3	.6	.6	.7	.8
175.	*	.1	.1	.1	.4	.4	.6	.9	1.4	.4	.2	.1	.0	1.3	1.0	1.2	1.1	.7	.6	.7	.8
180.	*	.3	.1	.1	.7	.8	.7	1.2	.9	.2	.1	.0	.0	1.0	.8	1.0	.8	.8	.6	.7	.8
185.	*	.3	.1	.1	1.0	.9	1.1	1.3	.6	.2	.0	.0	.0	.7	.6	.5	.5	.8	.7	.7	.9
190.	*	.3	.2	.0	1.0	1.0	1.1	1.6	.3	.0	.0	.0	.0	.4	.5	.4	.3	1.1	.7	.8	.9
195.	*	.5	.3	.2	1.1	1.1	1.2	1.7	.1	.0	.0	.0	.0	.1	.0	.2	.2	1.2	.7	.9	.8
200.	*	.4	.3	.2	1.2	1.0	1.2	1.8	.1	.0	.0	.0	.0	.1	.0	.0	.0	1.3	.8	.9	.8
205.	*	.5	.3	.3	1.2	1.0	1.2	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.8	1.0	.7

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WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
		CONCENTRATION (PPM)																			
210.	*	.5	.3	.2	1.2	1.0	1.1	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.8	1.0	.6
215.	*	.3	.2	.2	1.0	1.0	1.0	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	1.0	1.0	.6
220.	*	.3	.2	.2	1.0	.9	1.1	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	1.0	1.1	.5
225.	*	.3	.1	.3	1.1	.9	.9	1.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	1.1	1.1	.5
230.	*	.3	.2	.2	1.1	1.0	.8	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	1.2	1.1	.5
235.	*	.4	.2	.1	1.1	1.0	.9	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	1.2	1.3	.4
240.	*	.4	.2	.1	1.1	1.0	.9	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	1.2	1.3	.3
245.	*	.4	.2	.2	1.1	1.0	.9	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	1.1	1.3	.3
250.	*	.4	.2	.2	1.1	1.0	.8	.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	1.1	1.2	.2
255.	*	.3	.2	.3	1.1	1.0	.9	.8	.1	.1	.1	.1	.0	.0	.0	.0	.0	1.0	1.0	1.0	.3
260.	*	.7	.5	.5	1.1	1.1	.9	.9	.3	.2	.2	.2	.2	.0	.0	.0	.0	1.1	1.1	.8	.2
265.	*	1.2	.9	.9	1.3	1.1	.9	1.0	.6	.4	.4	.4	.3	.1	.0	.0	.0	.9	1.0	.8	.1
270.	*	1.6	1.5	1.3	1.5	1.3	.9	1.0	.9	.8	.8	.8	.5	.2	.1	.0	.0	.7	.7	.6	.1
275.	*	2.0	2.0	1.9	2.0	1.4	.9	1.0	1.5	1.1	1.0	1.2	.8	.5	.2	.0	.0	.8	.6	.4	.3
280.	*	2.6	2.3	2.3	2.1	1.6	1.1	1.0	2.0	1.8	1.5	1.5	1.1	.7	.4	.0	.0	.7	.5	.5	.5
285.	*	2.7	2.7	2.7	2.4	2.0	1.2	1.0	2.5	2.2	1.9	2.0	1.6	1.0	.6	.2	.0	.7	.5	.5	.7
290.	*	3.0	2.9	2.8	2.8	2.3	1.3	1.2	2.9	2.6	2.2	2.3	2.0	1.4	.9	.3	.1	.8	.6	.7	.9
295.	*	3.1	2.9	2.9	2.9	2.5	1.5	1.2	3.1	3.0	2.5	2.5	2.3	1.7	1.1	.4	.2	.8	.7	.8	.9
300.	*	3.1	2.7	2.8	3.0	2.6	1.7	1.4	3.3	3.1	2.5	2.6	2.7	1.7	1.3	.6	.3	1.0	.8	.8	1.0
305.	*	3.0	2.7	2.7	3.1	2.7	1.7	1.6	3.2	3.3	2.6	2.6	2.7	1.9	1.4	.8	.4	1.0	.9	.9	1.2
310.	*	3.0	2.9	2.6	2.9	2.8	1.9	1.6	3.2	3.2	2.4	2.6	2.7	1.9	1.5	.8	.6	1.2	1.0	.9	1.0
315.	*	2.8	2.8	2.6	2.7	2.7	2.1	1.9	3.2	3.2	2.4	2.5	2.8	2.0	1.6	.9	.6	1.2	1.1	1.0	1.1
320.	*	2.9	2.6	2.5	2.6	2.6	2.0	1.8	3.0	3.2	2.3	2.4	2.7	2.0	1.5	.9	.8	1.3	1.1	.8	1.1
325.	*	2.7	2.6	2.4	2.7	2.5	2.2	1.8	2.7	3.2	2.3	2.4	2.7	1.9	1.4	.9	.8	1.4	1.1	.8	1.1
330.	*	2.7	2.4	2.3	2.8	2.3	2.3	1.9	2.7	3.1	2.2	2.4	2.6	1.8	1.6	1.0	.7	1.4	1.0	.9	1.1
335.	*	2.6	2.4	2.2	2.9	2.4	2.2	1.8	2.6	3.1	2.3	2.4	2.6	1.8	1.5	.9	.8	1.4	1.0	.9	1.0
340.	*	2.5	2.3	2.2	3.0	2.7	2.2	1.8	2.5	3.0	2.2	2.4	2.6	1.9	1.5	1.1	.8	1.3	1.0	.9	1.0
345.	*	2.6	2.3	2.2	2.7	2.3	2.3	1.9	2.5	2.9	2.2	2.3	2.6	1.9	1.7	1.1	.9	1.3	.8	.8	.9
350.	*	2.5	2.2	2.2	2.6	2.3	2.2	2.0	2.8	2.9	2.2	2.4	2.6	2.2	1.9	1.4	1.0	1.4	.8	.8	.9
355.	*	2.3	2.2	2.2	2.5	2.0	2.1	2.0	3.1	3.1	2.1	2.4	2.6	2.5	2.2	1.8	1.4	1.1	.8	.8	1.1
360.	*	2.1	2.2	2.1	2.4	1.9	1.7	1.7	3.2	3.1	2.1	2.4	2.6	3.0	2.5	2.1	1.8	.9	.7	.8	1.1
MAX	*	3.1	2.9	2.9	3.1	2.8	2.3	2.0	3.8	4.2	3.6	3.1	3.4	3.5	2.9	2.5	2.2	1.5	1.2	1.3	1.4
DEGR.	*	295	290	295	305	310	330	350	15	45	75	70	65	20	5	15	15	225	230	235	20

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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 ANGLE (DEGR)	*	REC41	REC42	REC43	REC44	REC45
		CONCENTRATION (PPM)				
0.	*	1.7	1.1	1.5	1.0	1.0
5.	*	1.7	1.1	1.2	1.0	1.0
10.	*	1.8	1.0	1.0	1.0	1.0
15.	*	1.8	.8	.9	1.0	1.0
20.	*	2.0	.6	.9	1.0	1.1
25.	*	2.1	.5	.9	1.0	1.0
30.	*	1.8	.2	.9	1.0	.9
35.	*	1.6	.2	1.0	1.0	.7
40.	*	1.4	.0	1.0	.8	.6
45.	*	1.2	.0	.9	.8	.4
50.	*	1.1	.0	.8	.7	.3
55.	*	.8	.0	.6	.7	.2
60.	*	.7	.0	.6	.6	.1
65.	*	.6	.0	.4	.4	.0
70.	*	.6	.0	.5	.4	.0
75.	*	.6	.0	.4	.3	.0
80.	*	.6	.0	.4	.3	.0
85.	*	.6	.0	.3	.2	.0
90.	*	.6	.0	.1	.2	.0
95.	*	.6	.0	.1	.0	.0
100.	*	.6	.0	.0	.0	.0
105.	*	.6	.0	.0	.0	.0
110.	*	.6	.0	.0	.0	.0
115.	*	.6	.0	.0	.0	.0
120.	*	.6	.0	.0	.0	.0
125.	*	.6	.0	.0	.0	.0
130.	*	.7	.0	.0	.0	.0
135.	*	.7	.0	.0	.0	.0
140.	*	.7	.0	.0	.0	.0
145.	*	.7	.0	.0	.0	.0
150.	*	.7	.0	.0	.0	.0
155.	*	.8	.0	.0	.0	.0
160.	*	.8	.0	.0	.0	.0
165.	*	.8	.0	.0	.0	.0
170.	*	.8	.0	.2	.0	.0
175.	*	.7	.0	.2	.0	.0
180.	*	.6	.0	.4	.0	.0
185.	*	.6	.0	.7	.1	.0
190.	*	.6	.0	.8	.1	.0
195.	*	.5	.0	1.0	.1	.0
200.	*	.4	.0	1.1	.1	.1
205.	*	.3	.0	1.2	.2	.1

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WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC41	REC42	REC43	REC44	REC45
210.	.2	.0	1.2	.2	.1
215.	.2	.2	1.3	.2	.1
220.	.3	.2	1.3	.4	.0
225.	.3	.4	1.3	.4	.0
230.	.2	.6	1.3	.4	.1
235.	.2	.7	1.1	.5	.1
240.	.2	.7	1.1	.5	.1
245.	.2	.8	1.1	.5	.2
250.	.2	.7	1.0	.5	.3
255.	.1	.7	1.0	.5	.4
260.	.1	.7	1.0	.3	.4
265.	.1	.6	1.0	.4	.5
270.	.4	.5	1.0	.4	.5
275.	.5	.7	1.0	.6	.6
280.	.8	.9	1.0	.6	.7
285.	1.0	1.0	.9	.6	.9
290.	1.2	1.3	.9	.9	.8
295.	1.4	1.2	1.2	.8	1.1
300.	1.3	1.5	1.2	1.1	1.3
305.	1.2	1.3	1.3	1.1	1.3
310.	1.3	1.4	1.5	1.4	1.3
315.	1.3	1.6	1.8	1.3	1.3
320.	1.3	1.5	1.7	1.3	1.2
325.	1.3	1.6	2.0	1.4	1.0
330.	1.2	1.3	2.0	1.3	1.0
335.	1.2	1.4	2.0	1.3	1.1
340.	1.2	1.4	2.0	1.3	1.1
345.	1.3	1.4	1.8	1.1	1.0
350.	1.3	1.2	1.8	1.1	1.0
355.	1.4	1.2	1.8	1.1	1.0
360.	1.7	1.1	1.5	1.0	1.0
MAX	2.1	1.6	2.0	1.4	1.3
DEGR.	25	315	335	310	300

THE HIGHEST CONCENTRATION IS 4.20 PPM AT 45 DEGREES FROM REC29.
THE 2ND HIGHEST CONCENTRATION IS 3.80 PPM AT 15 DEGREES FROM REC28.
THE 3RD HIGHEST CONCENTRATION IS 3.60 PPM AT 75 DEGREES FROM REC30.

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US 6 & Federal Blvd NBPM                60.0321.0.0000.000450.30480000    1    1
NE COR                   2820.     2000.      6.0
NE E80                   2858.     1993.      6.0
NE E160                  2936.     1990.      6.0
NE EMID                  3094.     1984.      6.0
NE EMID                  3263.     1974.      6.0
NE N80                   2780.     2065.      6.0
NE N160                  2775.     2145.      6.0
NE NMID                  2767.     2308.      6.0
NE NMID                  2760.     2447.      6.0
NW COR                   2604.     2008.      6.0
NW W80                   2545.     1980.      6.0
NW W160                  2468.     1971.      6.0
NW WMID                  2307.     1951.      6.0
NW WMID                  2083.     1923.      6.0
NW N80                   2614.     2051.      6.0
NW N160                  2614.     2134.      6.0
NW NMID                  2615.     2294.      6.0
NW NMID                  2625.     2443.      6.0
SE COR                   2805.     1622.      6.0
SE E80                   2848.     1638.      6.0
SE E160                  2925.     1640.      6.0
SE EMID                  3086.     1640.      6.0
SE EMID                  3269.     1636.      6.0
SE S80                   2776.     1564.      6.0
SE S160                  2774.     1489.      6.0
SE SMID                  2770.     1332.      6.0
SE SMID                  2766.     1160.      6.0
SW COR                   2628.     1611.      6.0
SW W80                   2558.     1619.      6.0
SW W160                  2478.     1626.      6.0
SW WMID                  2316.     1640.      6.0
SW WMID                  2086.     1660.      6.0
SW S80                   2633.     1542.      6.0
SW S160                  2633.     1479.      6.0
SW SMID                  2640.     1301.      6.0
SW SMID                  2640.     1155.      6.0
5th Ave                  2837.     1130.      6.0
5th Ave                  2995.     1130.      6.0
5th Ave                  3229.     1143.      6.0
5th Ave                  3414.     1311.      6.0
5th Ave                  3442.     1434.      6.0
5th Ave                  3492.     1291.      6.0
5th Ave                  2779.     1035.      6.0
5th Ave                  2990.     1043.      6.0
5th Ave                  3248.     1064.      6.0
US 6 & Federal Blvd NBPM                 45  1   0
  1
EB        ERamp     AG  1713.  1724.  2134.  1678.     45013.1  0. 32.   35.
  1
EB        ERamp     AG  2134.  1678.  2681.  1633.     45013.1  0. 44.   35.
  2
EB        ERamp     AG  2618.  1638.  2338.  1661.      0. 24.   2
       100        79       2.0  450  73.65 1605 1 3
  1
NB        ERamp     AG  2709.  1104.  2709.  1648.    220013.6  0. 44.   34.
  2
NB        ERamp     AG  2709.  1603.  2709.  1448.      0. 24.   2
       100        29       2.0 2200  73.65 1753 1 3
  1
SB        ERamp     AG  2673.  1967.  2667.  1635.    322013.6 12. 44.   34.
  2
SB        ERamp     AG  2668.  1698.  2670.  1809.     12. 24.   2
       100        29       2.0 3220  73.65 1753 1 3
  1
NB        WRamp     AG  2709.  1648.  2709.  1771.    240013.6  0. 44.   34.
  1
NB        WRamp     AG  2709.  1771.  2709.  1964.    240013.6 12. 56.   34.
  2
NB        WRamp     AG  2709.  1904.  2709.  1799.     12. 36.   3
       100        29       2.0 2400  73.65 1207 1 3
  1
NBdp      WRamp     AG  2709.  1965.  2695.  2663.    221013.6  0. 44.   34.
  1
SB        WRamp     AG  2664.  2662.  2669.  2458.    327513.6  0. 56.   34.
  1
SBR       WRamp     AG  2669.  2457.  2651.  2340.     52513.6  0. 32.   34.
  1
SBR       WRamp     AG  2651.  2340.  2646.  2163.     52513.6  0. 32.   34.
  1
SBR       WRamp     AG  2646.  2163.  2646.  2013.     52513.6  0. 32.   34.
  1
SBR       WRamp     AG  2646.  2013.  2627.  1966.     52513.6  0. 32.   34.
  1
SBR       WRamp     AG  2627.  1966.  2541.  1922.     52513.6  0. 32.   34.
  1
SBT       WRamp     AG  2669.  2452.  2673.  1967.    275013.6  0. 44.   34.
  2
SBT       WRamp     AG  2673.  2008.  2671.  2161.     12. 24.   2
       100        40       2.0 2750  73.65 1753 1 3
  1
WB        WRamp     AG  3507.  1865.  3329.  1895.     98513.1  0. 56.   35.
  1
WB        WRamp     AG  3329.  1895.  3054.  1916.     98513.1  0. 56.   35.
  1
WB        WRamp     AG  3054.  1916.  2685.  1942.     98513.1  0. 56.   35.
  2
WB        WRamp     AG  2791.  1935.  2947.  1924.     12. 36.   3
       100        79       2.0  985  73.65 1650 1 3
  1
WBdp      WRamp     AG  2688.  1942.  2544.  1921.    120013.7  0. 44.   26.
  1
WBdp      WRamp     AG  2544.  1921.  1721.  1825.    120013.7  0. 32.   26.
  1
EB        US6       AG  1714.  1752.  2325.  1770.    820013.0  0. 68.   35.
  1
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EB        US6       AG  2328.  1769.  3688.  1750.    820013.0  0. 68.   35.
  1
WB        US6       AG  3689.  1788.  1717.  1821.    855013.0  0. 68.   35.
  1
WB        5Ave      AG  2713.  1102.  3186.  1102.     85014.1  0. 32.   20.
  1
WB        5Ave      AG  3186.  1102.  3378.  1205.     85014.1  0. 32.   20.
  1
WB        5Ave      AG  3378.  1205.  3456.  1339.     85014.1  0. 32.   20.
  1
WB        5Ave      AG  3456.  1339.  3469.  1472.     85014.1  0. 32.   20.
  1
WB        5Ave      AG  3469.  1472.  3475.  1593.     85014.1  0. 32.   20.
  1
WB        5Ave      AG  3475.  1593.  3508.  1662.     85014.1  0. 32.   20.
  1
WB        5Ave      AG  3508.  1662.  3564.  1695.     85014.1  0. 32.   20.
  1
WB        5Ave      AG  3564.  1695.  3720.  1709.     85014.1  0. 32.   20.
  1
NB        5Ave      AG  2699.   665.  2713.  1102.    282513.1  0. 44.   35.
  2
NB        5Ave      AG  2711.  1040.  2706.   896.     12. 24.   2
       100        29       2.0 2825  73.65 1695 1 3
  1
SB        5Ave      AG  2665.  1635.  2682.  1303.    347513.1  0. 56.   35.
  1
SBL       5Ave      AG  2684.  1305.  2697.  1235.     22513.1  0. 32.   35.
  1
SBL       5Ave      AG  2697.  1235.  2702.  1103.     22513.1  0. 32.   35.
  2
SBL       5Ave      AG  2701.  1123.  2698.  1196.     12. 12.   1
       100        29       2.0  225  73.65  107 1 3
  1
SBT       5Ave      AG  2682.  1304.  2682.  1102.    325013.1  0. 44.   35.
  2
SBT       5Ave      AG  2682.  1137.  2682.  1248.     12. 24.   2
       100        29       2.0 3250  73.65 1753 1 3
  1
SBDP      5Ave      AG  2682.  1101.  2669.   665.    325013.1  0. 44.   35.
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: US 6 & Federal Blvd NBPM RUN: US 6 & Federal Blvd NBPM
DATE: 07/23/2012 TIME: 14:55:44.37

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		X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. EB	ERamp	1713.0	1724.0	2134.0	1678.0	424.	96.	AG	450.	13.1	.0	32.0		
2. EB	ERamp	2134.0	1678.0	2681.0	1633.0	549.	95.	AG	450.	13.1	.0	44.0		
3. EB	ERamp	2618.0	1638.0	2503.5	1647.4	115.	275.	AG	312.	100.0	.0	24.0	.83	5.8
4. NB	ERamp	2709.0	1104.0	2709.0	1648.0	544.	360.	AG	2200.	13.6	.0	44.0		
5. NB	ERamp	2709.0	1603.0	2709.0	1362.3	241.	180.	AG	115.	100.0	.0	24.0	.94	12.2
6. SB	ERamp	2673.0	1967.0	2667.0	1635.0	332.	181.	AG	3220.	13.6	12.0	44.0		
7. SB	ERamp	2668.0	1698.0	2754.0	6473.5	4776.	1.	AG	115.	100.0	12.0	24.0	1.37	242.6
8. NB	WRamp	2709.0	1648.0	2709.0	1771.0	123.	360.	AG	2400.	13.6	.0	44.0		
9. NB	WRamp	2709.0	1771.0	2709.0	1964.0	193.	360.	AG	2400.	13.6	12.0	56.0		
10. NB	WRamp	2709.0	1904.0	2709.0	1653.6	250.	180.	AG	172.	100.0	12.0	36.0	.99	12.7
11. NBdp	WRamp	2709.0	1965.0	2695.0	2663.0	698.	359.	AG	2210.	13.6	.0	44.0		
12. SB	WRamp	2664.0	2662.0	2669.0	2458.0	204.	179.	AG	3275.	13.6	.0	56.0		
13. SBR	WRamp	2669.0	2457.0	2651.0	2340.0	118.	189.	AG	525.	13.6	.0	32.0		
14. SBR	WRamp	2651.0	2340.0	2646.0	2163.0	177.	182.	AG	525.	13.6	.0	32.0		
15. SBR	WRamp	2646.0	2163.0	2646.0	2013.0	150.	180.	AG	525.	13.6	.0	32.0		
16. SBR	WRamp	2646.0	2013.0	2627.0	1966.0	51.	202.	AG	525.	13.6	.0	32.0		
17. SBR	WRamp	2627.0	1966.0	2541.0	1922.0	97.	243.	AG	525.	13.6	.0	32.0		
18. SBT	WRamp	2669.0	2452.0	2673.0	1967.0	485.	180.	AG	2750.	13.6	.0	44.0		
19. SBT	WRamp	2673.0	2008.0	2615.6	6400.5	4393.	359.	AG	158.	100.0	12.0	24.0	1.40	223.2
20. WB	WRamp	3507.0	1865.0	3329.0	1895.0	181.	280.	AG	985.	13.1	.0	56.0		
21. WB	WRamp	3329.0	1895.0	3054.0	1916.0	276.	274.	AG	985.	13.1	.0	56.0		
22. WB	WRamp	3054.0	1916.0	2685.0	1942.0	370.	274.	AG	985.	13.1	.0	56.0		
23. WB	WRamp	2791.0	1935.0	3498.9	1885.1	710.	94.	AG	468.	100.0	12.0	36.0	1.17	36.1
24. WBdp	WRamp	2688.0	1942.0	2544.0	1921.0	146.	262.	AG	1200.	13.7	.0	44.0		
25. WBdp	WRamp	2544.0	1921.0	1721.0	1825.0	829.	263.	AG	1200.	13.7	.0	32.0		
26. EB	US6	1714.0	1752.0	2325.0	1770.0	611.	88.	AG	8200.	13.0	.0	68.0		
27. EB	US6	2328.0	1769.0	3688.0	1750.0	1360.	91.	AG	8200.	13.0	.0	68.0		
28. WB	US6	3689.0	1788.0	1717.0	1821.0	1972.	271.	AG	8550.	13.0	.0	68.0		
29. WB	5Ave	2713.0	1102.0	3186.0	1102.0	473.	90.	AG	850.	14.1	.0	32.0		
30. WB	5Ave	3186.0	1102.0	3378.0	1205.0	218.	62.	AG	850.	14.1	.0	32.0		
31. WB	5Ave	3378.0	1205.0	3456.0	1339.0	155.	30.	AG	850.	14.1	.0	32.0		
32. WB	5Ave	3456.0	1339.0	3469.0	1472.0	134.	6.	AG	850.	14.1	.0	32.0		
33. WB	5Ave	3469.0	1472.0	3475.0	1593.0	121.	3.	AG	850.	14.1	.0	32.0		
34. WB	5Ave	3475.0	1593.0	3508.0	1662.0	76.	26.	AG	850.	14.1	.0	32.0		
35. WB	5Ave	3508.0	1662.0	3564.0	1695.0	65.	59.	AG	850.	14.1	.0	32.0		
36. WB	5Ave	3564.0	1695.0	3720.0	1709.0	157.	85.	AG	850.	14.1	.0	32.0		
37. NB	5Ave	2699.0	665.0	2713.0	1102.0	437.	2.	AG	2825.	13.1	.0	44.0		
38. NB	5Ave	2711.0	1040.0	2601.5	-2113.2	3155.	182.	AG	115.	100.0	12.0	24.0	1.24	160.3
39. SB	5Ave	2665.0	1635.0	2682.0	1303.0	332.	177.	AG	3475.	13.1	.0	56.0		
40. SBL	5Ave	2684.0	1305.0	2697.0	1235.0	71.	169.	AG	225.	13.1	.0	32.0		
41. SBL	5Ave	2697.0	1235.0	2702.0	1103.0	132.	178.	AG	225.	13.1	.0	32.0		
42. SBL	5Ave	2701.0	1123.0	2631.9	2804.1	1683.	358.	AG	57.	100.0	12.0	12.0	3.17	85.5
43. SBT	5Ave	2682.0	1304.0	2682.0	1102.0	202.	180.	AG	3250.	13.1	.0	44.0		
44. SBT	5Ave	2682.0	1137.0	2682.0	6065.4	4928.	360.	AG	115.	100.0	12.0	24.0	1.38	250.4

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JOB: US 6 & Federal Blvd NBPM RUN: US 6 & Federal Blvd NBPM
DATE: 07/23/2012 TIME: 14:55:44.37

LINK VARIABLES

LINK DESCRIPTION		X1 (FT)	Y1 (FT)	X2 (FT)	Y2 (FT)	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
45. SBDP	5Ave	2682.0	1101.0	2669.0	665.0	436.	182.	AG	3250.	13.1	.0	44.0		

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JOB: US 6 & Federal Blvd NBPM RUN: US 6 & Federal Blvd NBPM
DATE: 07/23/2012 TIME: 14:55:44.37

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION		CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
3. EB	ERamp	100	79	2.0	450	1605	73.65	1	3
5. NB	ERamp	100	29	2.0	2200	1753	73.65	1	3
7. SB	ERamp	100	29	2.0	3220	1753	73.65	1	3
10. NB	WRamp	100	29	2.0	2400	1207	73.65	1	3
19. SBT	WRamp	100	40	2.0	2750	1753	73.65	1	3
23. WB	WRamp	100	79	2.0	985	1650	73.65	1	3
38. NB	5Ave	100	29	2.0	2825	1695	73.65	1	3
42. SBL	5Ave	100	29	2.0	225	107	73.65	1	3
44. SBT	5Ave	100	29	2.0	3250	1753	73.65	1	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. NE COR	2820.0	2000.0	6.0
2. NE E80	2858.0	1993.0	6.0
3. NE E160	2936.0	1990.0	6.0
4. NE EMID	3094.0	1984.0	6.0
5. NE EMID	3263.0	1974.0	6.0
6. NE N80	2780.0	2065.0	6.0
7. NE N160	2775.0	2145.0	6.0
8. NE NMID	2767.0	2308.0	6.0
9. NE NMID	2760.0	2447.0	6.0

10. NW COR	*	2604.0	2008.0	6.0 *
11. NW W80	*	2545.0	1980.0	6.0 *
12. NW W160	*	2468.0	1971.0	6.0 *
13. NW WMID	*	2307.0	1951.0	6.0 *
14. NW WMID	*	2083.0	1923.0	6.0 *
15. NW N80	*	2614.0	2051.0	6.0 *
16. NW N160	*	2614.0	2134.0	6.0 *
17. NW NMID	*	2615.0	2294.0	6.0 *
18. NW NMID	*	2625.0	2443.0	6.0 *
19. SE COR	*	2805.0	1622.0	6.0 *
20. SE E80	*	2848.0	1638.0	6.0 *
21. SE E160	*	2925.0	1640.0	6.0 *
22. SE EMID	*	3086.0	1640.0	6.0 *
23. SE EMID	*	3269.0	1636.0	6.0 *
24. SE S80	*	2776.0	1564.0	6.0 *
25. SE S160	*	2774.0	1489.0	6.0 *
26. SE SMID	*	2770.0	1332.0	6.0 *
27. SE SMID	*	2766.0	1160.0	6.0 *
28. SW COR	*	2628.0	1611.0	6.0 *
29. SW W80	*	2558.0	1619.0	6.0 *
30. SW W160	*	2478.0	1626.0	6.0 *
31. SW WMID	*	2316.0	1640.0	6.0 *
32. SW WMID	*	2086.0	1660.0	6.0 *
33. SW S80	*	2633.0	1542.0	6.0 *
34. SW S160	*	2633.0	1479.0	6.0 *
35. SW SMID	*	2640.0	1301.0	6.0 *
36. SW SMID	*	2640.0	1155.0	6.0 *

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JOB: US 6 & Federal Blvd NBPM RUN: US 6 & Federal Blvd NBPM
DATE: 07/23/2012 TIME: 14:55:44.37

RECEPTOR LOCATIONS

RECEPTOR	*	X	Y	Z	*
37. 5th Ave	*	2837.0	1130.0	6.0	*
38. 5th Ave	*	2995.0	1130.0	6.0	*
39. 5th Ave	*	3229.0	1143.0	6.0	*
40. 5th Ave	*	3414.0	1311.0	6.0	*
41. 5th Ave	*	3442.0	1434.0	6.0	*
42. 5th Ave	*	3492.0	1291.0	6.0	*
43. 5th Ave	*	2779.0	1035.0	6.0	*
44. 5th Ave	*	2990.0	1043.0	6.0	*
45. 5th Ave	*	3248.0	1064.0	6.0	*

(COORDINATES (FT) spans X, Y, Z)

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JOB: US 6 & Federal Blvd NBPM RUN: US 6 & Federal Blvd NBPM

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 ANGLE (DEGR)	*	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
	*	CONCENTRATION (PPM)																			
0.	*	.5	.4	.3	.0	.0	.9	.8	.8	.8	1.4	.7	.3	.1	.0	1.7	1.6	1.4	1.6	3.5	3.4
5.	*	.4	.2	.0	.0	.0	.6	.6	.5	.4	1.9	.8	.4	.1	.0	2.0	1.9	1.8	1.9	3.3	3.5
10.	*	.0	.0	.0	.0	.0	.4	.4	.4	.3	2.1	1.0	.7	.3	.1	2.4	2.4	2.0	2.4	2.9	3.1
15.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	1.2	.7	.3	.1	2.6	2.5	2.3	2.6	2.8	3.1
20.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	1.4	.9	.4	.2	2.5	2.4	2.4	2.7	2.8	3.0
25.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.3	1.3	.8	.5	.3	2.6	2.4	2.5	2.7	2.9	3.1
30.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.3	1.4	.9	.6	.1	2.4	2.5	2.4	2.6	2.9	3.2
35.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.3	1.4	.8	.6	.2	2.4	2.4	2.4	2.5	3.0	3.2
40.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	1.4	.8	.7	.3	2.3	2.3	2.4	2.4	2.9	3.2
45.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	1.3	.8	.7	.4	2.3	2.3	2.3	2.4	3.1	3.3
50.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	1.3	.8	.7	.4	2.2	2.3	2.3	2.3	3.2	3.4
55.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	1.2	.8	.7	.3	2.1	2.2	2.3	2.3	3.2	3.5
60.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.8	1.1	.8	.7	.3	2.1	2.1	2.2	2.3	3.2	3.5
65.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.8	1.1	.8	.7	.3	2.1	2.0	2.2	2.3	3.0	3.3
70.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	1.0	.8	.6	.3	2.0	2.0	2.1	2.3	2.9	3.1
75.	*	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	1.2	.9	.7	.6	2.0	2.0	2.1	2.3	2.4	2.7
80.	*	.1	.1	.1	.1	.0	.0	.0	.0	.0	1.9	1.5	1.5	1.3	1.1	1.9	2.0	2.2	2.3	2.0	2.3
85.	*	.3	.3	.3	.1	.0	.1	.0	.0	.0	2.2	1.8	1.8	1.7	1.9	2.2	2.0	2.2	2.3	1.4	1.6
90.	*	.8	.8	.7	.4	.2	.3	.0	.0	.0	2.6	2.6	2.3	2.3	2.6	2.5	2.2	2.2	2.2	.9	1.1
95.	*	1.3	1.4	1.1	.7	.3	.5	.2	.0	.0	2.9	3.0	2.9	3.0	3.2	2.9	2.3	2.2	2.2	.5	.6
100.	*	1.9	1.9	1.7	1.3	.7	.9	.4	.0	.0	3.6	3.6	3.6	3.6	3.7	3.3	2.7	2.3	2.3	.2	.3
105.	*	2.4	2.5	2.4	1.8	1.1	1.4	.7	.1	.0	3.9	3.9	4.0	4.0	4.3	3.7	3.0	2.4	2.3	.1	.1
110.	*	3.0	3.1	2.9	2.4	1.5	1.9	1.0	.3	.0	4.3	4.3	4.0	4.0	4.2	4.2	3.5	2.6	2.5	.0	.0
115.	*	3.2	3.4	3.2	2.8	2.1	2.3	1.5	.5	.2	4.6	4.2	4.1	3.9	4.3	4.6	3.9	3.1	2.8	.0	.0
120.	*	3.5	3.6	3.4	3.1	2.6	2.5	1.8	.9	.4	4.5	4.2	4.2	4.0	4.2	4.7	4.1	3.3	2.9	.0	.0
125.	*	3.4	3.4	3.4	3.3	2.9	2.5	1.9	1.0	.6	4.6	4.2	4.0	3.8	3.8	4.5	4.1	3.6	3.1	.0	.0
130.	*	3.4	3.4	3.4	3.3	3.2	2.5	2.1	1.1	.7	4.5	4.0	3.7	3.7	3.8	4.4	4.0	3.7	3.6	.0	.0
135.	*	3.3	3.4	3.3	3.3	3.3	2.6	2.0	1.4	1.0	4.5	4.1	3.8	3.6	3.7	4.6	4.1	3.9	3.7	.0	.0
140.	*	3.3	3.3	3.3	3.3	3.2	2.4	2.0	1.4	1.0	4.3	4.1	3.8	3.6	3.7	4.5	4.1	3.8	3.7	.0	.0
145.	*	3.1	3.3	3.3	3.2	3.2	2.4	2.0	1.4	1.1	4.5	4.0	3.6	3.3	3.6	4.2	4.0	3.8	3.8	.0	.0
150.	*	3.0	3.2	3.1	3.2	3.2	2.4	1.9	1.4	1.1	4.7	3.9	3.5	3.6	3.4	4.4	4.1	4.0	4.0	.0	.0
155.	*	3.0	3.0	3.1	3.1	3.1	2.4	1.8	1.4	1.1	4.6	4.0	3.5	3.3	3.4	4.3	4.3	3.8	4.0	.0	.0
160.	*	3.0	3.0	3.0	3.0	3.1	2.3	1.8	1.4	1.1	4.6	3.8	3.5	3.3	3.3	4.2	4.3	4.0	4.2	.0	.0
165.	*	3.0	3.0	3.0	2.9	2.9	2.1	1.7	1.4	1.3	4.5	4.0	3.4	3.1	3.2	4.2	3.8	3.7	4.1	.0	.0
170.	*	3.0	3.0	3.0	2.9	3.1	2.3	1.9	1.7	1.4	4.4	3.8	3.2	2.9	3.2	4.3	4.0	3.5	3.9	.1	.0
175.	*	3.2	3.1	3.0	2.9	3.1	2.9	2.3	2.0	2.0	4.4	3.6	3.1	2.8	3.2	4.2	3.6	3.4	3.7	.4	.1
180.	*	3.4	3.5	3.0	2.9	3.1	3.4	2.8	2.6	2.4	3.8	3.3	2.6	2.8	3.2	3.9	3.5	2.9	3.0	.6	.4
185.	*	4.1	3.6	3.4	2.9	3.1	3.5	3.2	2.8	2.8	3.3	2.9	2.5	2.7	3.2	3.0	2.6	2.3	2.2	.8	.5
190.	*	4.0	4.0	3.6	3.1	3.1	3.8	3.3	2.9	2.9	2.8	2.7	2.5	2.7	3.2	2.5	1.8	1.5	2.0	1.2	.8
195.	*	4.0	4.1	3.5	3.2	2.9	3.8	3.3	3.1	3.1	2.3	2.5	2.5	2.8	3.2	2.3	1.6	1.4	1.0	1.4	.9
200.	*	3.7	4.1	3.8	3.3	3.1	3.4	3.5	3.2	3.1	2.2	2.3	2.6	2.8	3.2	2.0	1.6	1.2	1.2	1.3	1.0

205. *	4.0	3.9	3.9	3.6	3.3	3.9	3.3	3.1	3.1	2.4	2.5	2.6	2.8	3.2	2.0	1.6	1.2	1.0	1.4	1.1

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WIND ANGLE (DEGR)*	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
210. *	4.1	4.2	3.8	3.5	3.4	3.7	3.1	3.1	3.2	2.5	2.5	2.7	2.8	3.2	2.1	1.6	1.2	1.0	1.4	1.1
215. *	4.0	4.3	4.1	3.3	3.5	3.6	3.3	3.1	3.1	2.4	2.5	2.6	2.9	3.2	2.1	1.6	1.3	1.0	1.4	1.1
220. *	3.9	4.4	4.0	3.6	3.3	3.4	3.3	3.2	3.1	2.4	2.7	2.7	2.9	3.3	2.2	1.6	1.2	1.0	1.3	1.1
225. *	3.8	4.2	4.0	3.8	3.7	3.4	3.3	3.2	3.0	2.6	2.7	2.8	3.0	3.4	2.1	1.6	1.2	.8	1.3	1.0
230. *	3.8	4.0	4.3	3.8	3.7	3.4	3.2	2.9	2.7	2.5	2.8	3.0	3.1	3.4	2.0	1.6	1.0	.8	1.3	1.0
235. *	3.7	4.0	4.3	4.2	3.7	3.6	3.1	2.6	2.6	2.4	2.8	2.9	3.1	3.3	2.0	1.6	1.0	.5	1.1	1.0
240. *	3.8	4.0	4.2	4.2	3.9	3.4	3.1	2.4	2.2	2.4	2.9	2.9	3.0	3.1	2.0	1.4	.8	.3	1.1	.9
245. *	3.8	4.0	4.1	4.1	3.8	3.1	2.9	2.3	1.9	2.4	2.7	2.8	2.9	2.7	1.9	1.2	.5	.2	1.1	.9
250. *	3.4	3.6	4.1	3.8	3.8	3.1	2.6	2.0	1.8	2.2	2.4	2.6	2.4	2.3	1.6	.9	.3	.1	1.1	.9
255. *	3.3	3.2	3.7	3.6	3.7	2.6	2.3	1.8	1.7	1.7	2.1	2.1	2.0	1.7	1.3	.7	.1	.0	1.3	1.2
260. *	2.7	2.8	3.2	3.1	3.3	2.3	2.1	1.7	1.6	1.3	1.6	1.6	1.5	1.2	.9	.3	.0	.0	1.6	1.5
265. *	2.3	2.3	2.3	2.6	2.8	2.1	1.7	1.6	1.7	.8	1.1	1.1	1.0	.8	.5	.2	.0	.0	1.8	1.8
270. *	1.9	1.7	2.0	1.8	2.2	1.8	1.6	1.6	1.6	.5	.6	.6	.6	.4	.3	.0	.0	.0	2.3	2.3
275. *	1.5	1.4	1.4	1.4	1.3	1.6	1.4	1.6	1.7	.1	.4	.4	.3	.2	.1	.0	.0	.0	2.8	3.1
280. *	1.2	1.0	.8	.7	.8	1.5	1.4	1.6	1.6	.0	.1	.1	.1	.1	.0	.0	.0	.0	3.6	3.6
285. *	1.1	.9	.7	.6	.4	1.5	1.4	1.5	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.8	4.1
290. *	1.1	.9	.8	.5	.3	1.5	1.5	1.5	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.3	4.0
295. *	1.2	.9	.8	.7	.3	1.5	1.5	1.6	1.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.1	4.3
300. *	1.2	.9	.8	.7	.3	1.5	1.5	1.6	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.4	4.5
305. *	1.1	.9	.8	.7	.4	1.4	1.5	1.7	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.3	4.4
310. *	1.1	1.0	.9	.7	.4	1.6	1.7	1.8	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.2	4.3
315. *	1.2	1.0	.9	.7	.3	1.7	1.7	2.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.3	4.3
320. *	1.2	1.1	.9	.6	.3	1.7	1.8	2.0	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.2	4.2
325. *	1.2	1.1	.9	.6	.2	1.8	2.0	1.9	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.3	4.1
330. *	1.4	1.1	.8	.5	.1	2.0	1.9	2.0	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.2	4.2
335. *	1.3	1.1	.7	.5	.3	1.9	1.9	1.8	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.4	4.0
340. *	1.2	1.0	.7	.3	.3	1.8	1.9	1.7	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.1	4.3	4.0
345. *	1.1	.8	.5	.3	.1	1.7	1.7	1.6	1.4	.2	.0	.0	.0	.0	.2	.2	.2	.2	4.0	3.9
350. *	.9	.8	.5	.3	.1	1.5	1.5	1.4	1.2	.6	.1	.0	.0	.0	.6	.6	.4	.8	4.0	4.0
355. *	.8	.5	.3	.1	.0	1.3	1.3	1.1	.9	.8	.3	.1	.0	.0	1.0	1.0	.9	1.0	3.9	3.7
360. *	.5	.4	.3	.0	.0	.9	.8	.8	.8	1.4	.7	.3	.1	.0	1.7	1.6	1.4	1.6	3.5	3.4
MAX *	4.1	4.4	4.3	4.2	3.9	3.9	3.5	3.2	3.2	4.7	4.3	4.2	4.0	4.3	4.7	4.3	4.0	4.2	4.4	4.5
DEGR. *	185	220	230	235	240	205	200	200	210	150	110	120	105	105	120	155	150	160	300	300

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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 ANGLE (DEGR)*	CONCENTRATION (PPM) REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
0. *	3.6	3.2	3.2	3.3	3.0	2.8	2.8	4.8	4.2	3.3	2.9	3.2	4.9	4.3	3.8	3.2	1.8	1.2	1.1	1.4
5. *	3.2	3.2	3.2	3.0	2.7	2.2	2.0	5.5	4.6	3.3	3.2	3.3	5.1	4.6	4.1	3.8	1.3	1.0	1.1	1.5
10. *	3.2	3.2	3.2	2.8	2.5	1.8	1.6	5.2	5.0	3.4	3.2	3.4	5.3	4.9	4.4	4.0	.9	.9	1.1	1.4
15. *	3.1	3.2	3.2	2.2	1.9	1.4	1.2	5.9	4.9	3.6	3.3	3.4	5.5	4.8	4.6	3.9	1.0	1.0	.9	1.4
20. *	3.1	3.1	3.1	2.2	1.9	1.4	1.1	5.6	5.2	3.6	3.4	3.6	5.3	4.8	4.2	3.7	1.1	1.1	.9	1.3
25. *	3.1	3.2	3.2	2.3	1.9	1.4	1.1	5.4	5.1	3.9	3.4	3.6	5.2	4.7	4.1	3.6	1.1	.9	1.0	1.2
30. *	3.2	3.2	3.2	2.4	1.8	1.4	1.1	5.5	5.2	3.9	3.5	3.7	5.0	4.7	4.1	3.4	1.1	.9	.7	.9
35. *	3.2	3.2	3.1	2.4	1.8	1.4	1.1	5.5	5.3	4.1	3.5	3.6	4.8	4.5	3.8	3.2	.9	.9	.7	.8
40. *	3.2	3.2	3.1	2.4	1.9	1.4	1.0	5.4	5.3	4.3	3.7	3.8	4.8	4.3	3.7	3.3	.9	.8	.5	.7
45. *	3.4	3.3	3.1	2.4	1.9	1.3	.9	5.6	5.4	4.5	3.6	3.8	4.6	4.1	3.7	3.0	.9	.6	.5	.6
50. *	3.4	3.4	3.0	2.4	1.9	1.3	.9	5.5	5.4	4.8	3.9	3.7	4.6	4.2	3.5	2.9	.6	.4	.6	.5
55. *	3.5	3.4	3.0	2.4	1.9	1.2	.6	5.2	5.6	4.7	4.0	4.1	4.6	4.2	3.3	2.7	.4	.2	.5	.4
60. *	3.3	3.3	2.8	2.4	1.8	1.0	.4	5.4	5.3	5.0	4.2	4.3	4.4	4.1	3.0	2.5	.3	.2	.6	.4
65. *	3.3	3.1	2.5	2.3	1.6	.7	.2	5.2	5.3	5.2	4.4	4.5	4.3	3.8	2.6	2.3	.2	.0	.6	.4
70. *	3.1	2.9	2.1	2.0	1.4	.5	.2	5.0	5.0	5.1	4.3	4.1	4.0	3.5	2.4	2.1	.0	.0	.7	.5
75. *	2.7	2.3	1.6	1.7	.9	.3	.0	4.5	4.5	4.9	4.2	4.2	3.7	3.2	2.2	2.0	.1	.2	.6	.4
80. *	2.3	1.8	1.2	1.2	.7	.2	.0	4.1	4.1	4.3	3.9	3.8	3.3	2.9	2.1	2.0	.1	.2	.6	.4
85. *	1.5	1.3	.7	.8	.3	.0	.1	3.7	3.3	3.5	3.3	3.2	3.0	2.6	1.9	2.0	.2	.2	.6	.4
90. *	1.0	.8	.4	.5	.2	.0	.1	3.1	2.6	2.9	2.6	2.7	2.8	2.4	1.9	2.0	.3	.3	.6	.4
95. *	.6	.4	.2	.2	.0	.0	.2	2.7	2.0	2.2	1.7	1.8	2.5	2.2	1.9	2.1	.3	.4	.6	.4
100. *	.3	.2	.1	.1	.0	.0	.2	2.3	1.7	1.5	1.3	.9	2.2	2.2	1.9	2.0	.4	.4	.5	.4
105. *	.1	.1	.0	.0	.0	.0	.2	2.2	1.4	1.2	.8	.7	2.2	2.1	2.0	1.9	.4	.4	.5	.4
110. *	.0	.0	.1	.0	.0	.0	.2	2.1	1.2	1.0	.8	.4	2.1	2.1	2.1	2.0	.4	.4	.5	.4
115. *	.0	.0	.1	.0	.0	.0	.3	2.2	1.1	1.0	.7	.2	2.3	2.2	2.1	2.0	.4	.4	.4	.4
120. *	.0	.0	.1	.0	.0	.1	.3	2.2	1.2	.8	.5	.3	2.3	2.3	2.1	1.9	.4	.4	.4	.4
125. *	.0	.0	.1	.0	.0	.1	.3	2.2	1.2	.8	.6	.3	2.4	2.3	2.2	1.9	.4	.4	.4	.4
130. *	.0	.0	.0	.0	.0	.1	.2	2.4	1.2	.8	.6	.4	2.4	2.2	2.2	2.0	.4	.4	.4	.4
135. *	.0	.0	.0	.0	.0	.1	.2	2.4	1.3	.9	.3	.4	2.6	2.4	2.2	2.0	.4	.4	.4	.4
140. *	.0	.0	.0	.0	.0	.1	.2	2.5	1.3	.8	.5	.2	2.6	2.6	2.3	2.0	.4	.4	.4	.4
145. *	.0	.0	.0	.0	.1	.1	.2	2.7	1.4	.8	.5	.2	2.7	2.6	2.3	2.0	.4	.3	.4	.4
150. *	.0	.0	.0	.0	.1	.1	.2	2.7	1.4	.8	.4	.2	2.8	2.7	2.4	2.2	.3	.3	.4	.4
155. *	.0	.0	.0	.0	.1	.1	.2	2.8	1.2	.9	.3	.1	2.9	2.8	2.5	2.1	.3	.3	.4	.4
160. *	.0	.0	.0	.1	.1	.1	.2	2.8	1.2	.6	.3	.0	2.9	2.6	2.5	2.2	.3	.3	.4	.4
165. *	.0	.0	.0	.1	.1	.2	.3	2.9	1.2	.7	.3	.0	2.9	2.6	2.4	2.2	.3	.3	.4	.4
170. *	.0	.0	.0	.3	.4	.4	.6	2.7	1.0	.4	.2	.0	2.8	2.5	2.1	1.9	.3	.3	.4	.4
175. *	.0	.0	.0	.6	.6	.7	.7	2.4	.7	.3	.0	.0	2.4	1.9	1.8	1.7	.4	.3	.4	.4
180. *	.2	.0	.0	1.0	.8	1.0	1.0	1.7	.5	.2	.0	.0	1.8	1.6	1.4	1.3	.5	.3	.4	.4
185. *	.3	.0	.0	1.3	1.2	1.1	1.4	1.1	.3	.0	.0	.0	1.3	1.1	.9	.9	.6	.4	.4	.4
190. *	.4	.1	.0	1.6	1.5	1.5	1.6	.7	.0	.0	.0	.0	.7	.7	.6	.6	.7	.4	.4	.5
195. *	.5	.3	.0	1.8	1.7	1.5	1.8	.3	.0	.0	.0	.0	.4	.3	.3	.3	1.0	.4	.5	.5
200. *	.5	.3	.1	1.7	1.8	1.8	2.0	.1	.0	.0	.0	.0	.1	.1	.1	.1	1.2	.5	.6	.5
205. *	.6	.3	.3	1.8	1.8	1.8	1.9	.1	.0	.0	.0	.0	.1	.0	.0	.1	1.2	.6	.6	.4

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WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
210.	.7	.4	.2	1.7	1.7	1.7	1.9	.0	.0	.0	.0	.0	.1	.0	.0	.0	1.3	.6	.7	.3
215.	.7	.4	.2	1.8	1.7	1.6	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.9	.7	.3
220.	.8	.5	.2	1.7	1.7	1.5	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.9	.7	.2
225.	.9	.4	.4	1.7	1.8	1.4	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.9	.7	.4
230.	.8	.4	.4	1.7	1.7	1.5	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	1.1	.8	.4
235.	.8	.5	.3	1.6	1.7	1.4	1.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	1.1	.8	.4
240.	.7	.5	.3	1.6	1.7	1.5	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	1.0	.8	.4
245.	.7	.5	.3	1.5	1.7	1.5	1.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.9	.9	.3
250.	.7	.4	.2	1.5	1.7	1.4	1.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	.8	.8	.3
255.	.8	.6	.4	1.7	1.7	1.5	1.4	.1	.1	.1	.1	.0	.0	.0	.0	.0	1.1	.9	.7	.5
260.	1.2	.8	.7	1.7	1.7	1.5	1.4	.3	.2	.2	.2	.2	.0	.0	.0	.0	1.1	1.0	.7	.2
265.	1.7	1.4	1.2	1.7	1.8	1.5	1.4	.6	.5	.5	.5	.3	.1	.0	.0	.0	1.0	.7	.7	.3
270.	2.3	2.0	1.8	2.1	1.9	1.5	1.5	1.1	.9	.9	1.0	.6	.3	.1	.0	.0	.9	.7	.7	.4
275.	2.9	2.8	2.5	2.5	2.1	1.6	1.5	1.7	1.5	1.3	1.3	1.1	.5	.3	.0	.0	1.1	.8	.4	.4
280.	3.6	3.4	3.1	2.8	2.4	1.7	1.5	2.5	2.2	1.9	1.8	1.5	.8	.5	.1	.0	.9	.5	.6	.7
285.	3.8	3.9	3.5	3.5	2.7	1.8	1.6	3.1	2.9	2.4	2.4	1.9	1.4	.7	.2	.0	.9	.8	.5	.9
290.	4.2	4.0	3.6	3.8	3.3	2.1	1.7	3.5	3.3	2.8	2.8	2.6	1.7	1.1	.3	.1	1.0	.9	.8	1.3
295.	4.3	4.0	3.9	4.1	3.5	2.4	1.8	3.8	3.6	3.0	3.0	3.0	2.0	1.5	.5	.2	1.2	1.0	.8	1.5
300.	4.2	3.8	4.0	4.0	3.5	2.6	2.0	3.8	3.9	3.1	3.3	3.2	2.3	1.7	.8	.4	1.5	1.3	1.1	1.3
305.	4.2	4.0	3.8	4.1	3.7	2.9	2.1	3.7	4.0	3.2	3.3	3.3	2.4	1.8	.9	.6	1.6	1.4	1.3	1.4
310.	4.0	3.9	3.7	4.2	3.8	3.0	2.4	3.7	3.8	3.0	3.1	3.4	2.5	2.0	1.2	.7	1.8	1.5	1.3	1.5
315.	3.9	3.9	3.7	3.8	3.7	3.3	2.6	3.6	3.9	3.0	3.1	3.4	2.6	2.0	1.3	.8	1.8	1.5	1.3	1.6
320.	3.8	3.9	3.7	3.9	3.7	3.4	2.8	3.6	3.7	2.9	3.1	3.4	2.5	2.0	1.3	.9	1.9	1.5	1.1	1.5
325.	4.1	3.9	3.5	4.0	3.6	3.5	2.8	3.3	3.7	2.9	2.9	3.3	2.4	2.1	1.3	1.0	2.2	1.6	1.3	1.6
330.	3.9	3.8	3.5	4.0	3.7	3.3	2.7	3.2	3.7	2.9	2.9	3.3	2.5	2.1	1.3	1.1	2.2	1.4	1.5	1.7
335.	3.9	3.8	3.6	4.0	3.6	3.4	2.9	3.1	3.6	2.9	2.9	3.3	2.5	2.1	1.4	1.0	2.3	1.6	1.6	1.6
340.	4.0	3.7	3.5	4.1	3.6	3.6	2.9	3.1	3.6	2.8	2.9	3.3	2.6	2.2	1.5	1.0	2.0	1.9	1.6	1.5
345.	3.7	3.6	3.3	4.1	3.8	3.5	3.1	3.4	3.5	2.7	2.9	3.3	2.7	2.5	1.7	1.5	2.4	1.7	1.5	1.5
350.	3.8	3.5	3.3	3.9	3.6	3.3	3.4	3.7	3.7	2.7	2.8	3.3	3.2	2.9	2.3	1.9	1.9	1.6	1.2	1.4
355.	3.7	3.4	3.2	3.9	3.5	3.0	3.1	4.3	4.0	2.8	2.9	3.3	4.1	3.7	3.1	2.5	1.8	1.5	1.1	1.4
360.	3.6	3.2	3.2	3.3	3.0	2.8	2.8	4.8	4.2	3.3	2.9	3.2	4.9	4.3	3.8	3.2	1.8	1.2	1.1	1.4
MAX	4.3	4.0	4.0	4.2	3.8	3.6	3.4	5.9	5.6	5.2	4.4	4.5	5.5	4.9	4.6	4.0	2.4	1.9	1.6	1.7
DEGR.	295	290	300	310	345	340	350	15	55	65	65	65	15	10	15	10	345	340	335	330

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 ANGLE (DEGR)	CONCENTRATION (PPM) REC41	REC42	REC43	REC44	REC45
0.	1.8	1.3	2.3	1.2	1.1
5.	1.8	1.3	2.0	1.1	1.1
10.	1.9	1.1	1.4	1.1	1.1
15.	2.0	.8	1.2	1.1	1.1
20.	1.9	.6	1.1	1.1	1.1
25.	1.6	.5	1.1	1.1	.8
30.	1.5	.3	1.1	1.1	.8
35.	1.4	.2	1.1	1.0	.7
40.	1.2	.1	1.1	.8	.5
45.	.8	.0	.8	.6	.4
50.	.6	.0	.7	.4	.2
55.	.5	.0	.6	.5	.1
60.	.3	.0	.4	.3	.0
65.	.3	.0	.3	.3	.0
70.	.3	.0	.2	.3	.0
75.	.3	.0	.2	.2	.0
80.	.3	.0	.2	.2	.0
85.	.4	.0	.1	.1	.0
90.	.4	.0	.1	.0	.0
95.	.4	.0	.1	.0	.0
100.	.4	.0	.0	.0	.0
105.	.4	.0	.0	.0	.0
110.	.4	.0	.0	.0	.0
115.	.4	.0	.0	.0	.0
120.	.4	.0	.0	.0	.0
125.	.4	.0	.0	.0	.0
130.	.4	.0	.0	.0	.0
135.	.4	.0	.0	.0	.0
140.	.4	.0	.0	.0	.0
145.	.4	.0	.0	.0	.0
150.	.4	.0	.0	.0	.0
155.	.4	.0	.0	.0	.0
160.	.5	.0	.0	.0	.0
165.	.5	.0	.0	.0	.0
170.	.5	.0	.2	.0	.0
175.	.4	.0	.3	.0	.0
180.	.4	.0	.5	.0	.0
185.	.3	.0	.7	.1	.0
190.	.2	.0	1.0	.1	.0
195.	.3	.0	1.2	.1	.0
200.	.3	.0	1.4	.1	.1
205.	.2	.0	1.5	.2	.1

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC41	REC42	REC43	REC44	REC45
210.	.2	.0	1.6	.3	.1
215.	.1	.0	1.6	.3	.1
220.	.3	.2	1.7	.5	.0
225.	.2	.2	1.6	.5	.0
230.	.3	.4	1.5	.5	.2
235.	.3	.5	1.5	.6	.2
240.	.3	.6	1.5	.7	.2
245.	.4	.6	1.5	.7	.2
250.	.3	.6	1.4	.7	.3
255.	.3	.6	1.4	.6	.4
260.	.3	.5	1.4	.5	.4
265.	.4	.4	1.4	.4	.4
270.	.5	.5	1.4	.6	.5
275.	.9	.6	1.4	.7	.6
280.	1.1	.9	1.4	.5	.7
285.	1.5	1.1	1.2	.7	.8
290.	1.7	1.5	1.2	.9	.9
295.	1.7	1.6	1.5	.9	1.1
300.	1.9	1.5	1.6	1.2	1.1
305.	1.9	1.7	1.8	1.5	1.2
310.	1.9	1.8	2.0	1.6	1.3
315.	2.0	1.8	2.4	1.6	1.4
320.	2.0	1.7	2.4	1.7	1.5
325.	2.0	1.9	2.4	1.6	1.2
330.	1.9	1.9	2.6	1.7	1.5
335.	1.7	1.8	2.6	1.5	1.5
340.	1.7	1.7	2.8	1.8	1.6
345.	1.7	1.7	2.9	1.9	1.5
350.	1.7	1.6	2.8	1.7	1.2
355.	1.7	1.5	2.6	1.5	1.1
360.	1.8	1.3	2.3	1.2	1.1
MAX	2.0	1.9	2.9	1.9	1.6
DEGR.	15	325	345	345	340

THE HIGHEST CONCENTRATION IS 5.90 PPM AT 15 DEGREES FROM REC28.
THE 2ND HIGHEST CONCENTRATION IS 5.60 PPM AT 55 DEGREES FROM REC29.
THE 3RD HIGHEST CONCENTRATION IS 5.50 PPM AT 15 DEGREES FROM REC33.

```
US 6 & Federal Blvd BDAM                60.0321.0.0000.000450.30480000    1    1
NE COR                   2820.     2000.       6.0
NE E80                   2858.     1993.       6.0
NE E160                  2936.     1990.       6.0
NE EMID                  3094.     1984.       6.0
NE EMID                  3263.     1974.       6.0
NE N80                   2780.     2065.       6.0
NE N160                  2775.     2145.       6.0
NE NMID                  2767.     2308.       6.0
NE NMID                  2760.     2447.       6.0
NW COR                   2604.     2008.       6.0
NW W80                   2545.     1980.       6.0
NW W160                  2468.     1971.       6.0
NW WMID                  2307.     1951.       6.0
NW WMID                  2083.     1923.       6.0
NW N80                   2614.     2051.       6.0
NW N160                  2614.     2134.       6.0
NW NMID                  2615.     2294.       6.0
NW NMID                  2625.     2443.       6.0
SE COR                   2805.     1622.       6.0
SE E80                   2848.     1638.       6.0
SE E160                  2925.     1640.       6.0
SE EMID                  3086.     1640.       6.0
SE EMID                  3269.     1636.       6.0
SE S80                   2776.     1564.       6.0
SE S160                  2774.     1489.       6.0
SE SMID                  2770.     1332.       6.0
SE SMID                  2766.     1160.       6.0
SW COR                   2628.     1611.       6.0
SW W80                   2558.     1619.       6.0
SW W160                  2478.     1626.       6.0
SW WMID                  2316.     1640.       6.0
SW WMID                  2086.     1660.       6.0
SW S80                   2633.     1542.       6.0
SW S160                  2633.     1479.       6.0
SW SMID                  2640.     1301.       6.0
SW SMID                  2640.     1155.       6.0
5th Ave                  2837.     1130.       6.0
5th Ave                  2995.     1130.       6.0
5th Ave                  3229.     1143.       6.0
5th Ave                  3414.     1311.       6.0
5th Ave                  3442.     1434.       6.0
5th Ave                  3492.     1291.       6.0
5th Ave                  2779.     1035.       6.0
5th Ave                  2990.     1043.       6.0
5th Ave                  3248.     1064.       6.0
US 6 & Federal Blvd BDAM                  75  1   0
  1
EB        EBRAMP    AG  1548.  1747.  1860.  1721.     51013.6  0. 32.   35.
  1
EB        EBRAMP    AG  1861.  1721.  2127.  1699.     51013.6  0. 32.   35.
  1
EB        EBRAMP    AG  2129.  1700.  2697.  1665.     51013.6  0. 44.   35.
  2
EB        EBRamp    AG  2612.  1670.  2358.  1686.      0. 24.   2
        92        69       2.0  510  73.65 1596 1 3
  1
EBDP      EBRAMP    AG  2701.  1666.  3149.  1674.    124514.6  0. 44.   16.
  1
EBDP      EBRAMP    AG  3158.  1674.  3711.  1644.    100014.6  0. 44.   16.
  1
toUS6     EBRAMP    AG  3139.  1674.  3251.  1734.     42514.6  0. 44.   16.
  1
toUS6     EBRAMP    AG  3251.  1734.  3346.  1754.     42514.6  0. 44.   16.
  1
toUS6     EBRAMP    AG  3346.  1754.  3709.  1732.     42514.6  0. 44.   16.
  1
NB        EBRAMP    AG  2725.  1077.  2742.  1358.    300013.5  0. 56.   31.
  1
NB        EBRAMP    AG  2743.  1358.  2746.  1670.    300013.5  0. 56.   31.
  2
NB        EBRamp    AG  2745.  1609.  2744.  1480.      0. 36.   3
        92        29       2.0 3000  73.65 1590 1 3
  1
SBL       EBRAMP    AG  2691.  1963.  2695.  1665.     17513.5 12. 44.   31.
  2
SBL       EBRamp    AG  2694.  1744.  2693.  1827.     12. 24.   2
        92        29       2.0  175  73.65  117 1 3
  1
SBT       EBRAMP    AG  2666.  1963.  2666.  1667.    198513.5 12. 56.   31.
  2
SBT       EBRamp    AG  2666.  1739.  2666.  1874.     12. 36.   3
        92        29       2.0 1985  73.65 1679 1 3
  1
NBT       WBRAMP    AG  2746.  1670.  2746.  1957.    191513.5 12. 56.   31.
  2
NBT       WBRAMP    AG  2746.  1904.  2746.  1786.     12. 36.   3
       100        33       2.0 1915  73.65 1679 1 3
  1
NBL       WBRAMP    AG  2745.  1667.  2717.  1721.     34013.5 12. 56.   31.
  1
NBL       WBRAMP    AG  2717.  1721.  2717.  1964.     34013.5 12. 56.   31.
  2
NBL       WBRamp    AG  2717.  1896.  2717.  1820.     12. 24.   2
       100        33       2.0  340  73.65  135 1 3
  1
NBdp      WBRAMP    AG  2745.  1958.  2737.  2215.    212513.5  0. 56.   31.
  1
NBdp      WBRAMP    AG  2737.  2215.  2705.  2405.    212513.5  0. 56.   31.
  1
NBdp      WBRAMP    AG  2705.  2405.  2705.  2664.    212513.5  0. 56.   31.
  1
SB        WBRAMP    AG  2664.  2662.  2668.  2311.    181013.5  0. 56.   31.
  1
SBT       WBRAMP    AG  2668.  2309.  2668.  1962.    160013.5  0. 56.   31.
  2
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SBT       WBRamp    AG  2668.  1995.  2668.  2232.     12. 36.   3
       100        50       2.0 1600  73.65 1679 1 3
  1
SBL       WBRAMP    AG  2668.  2309.  2690.  2228.     21013.5  0. 32.   31.
  1
SBL       WBRAMP    AG  2690.  2228.  2693.  2123.     21013.5  0. 32.   31.
  1
SBL       WBRAMP    AG  2693.  2123.  2691.  1963.     21013.5 12. 44.   31.
  2
SBL       WBRamp    AG  2691.  1998.  2692.  2101.     12. 24.   2
       100        50       2.0  210  73.65 1568 1 3
  1
WB        WBRAMP    AG  3700.  1882.  3373.  1927.    181013.6  0. 56.   35.
  1
WB        WBRAMP    AG  3373.  1927.  3171.  1946.    181013.6  0. 56.   35.
  1
WB        WBRAMP    AG  3171.  1946.  2705.  1961.    181013.6  0. 56.   35.
  2
WB        WBRamp    AG  2791.  1958.  3041.  1950.     12. 36.   3
       100        73       2.0 1810  73.65 1645 1 3
  1
WBDP      WBRAMP    AG  2705.  1961.  2593.  1961.     65013.6  0. 44.   36.
  1
WBDP      WBRAMP    AG  2593.  1961.  1725.  1858.     65013.6  0. 44.   36.
  1
EB        US6       AG  1715.  1751.  2153.  1767.    635014.5  0. 68.   56.
  1
EB        US6       AG  2152.  1767.  2330.  1802.    635014.5  0. 56.   56.
  1
EB        US6       AG  2330.  1802.  2845.  1810.    635014.5  0. 56.   56.
  1
EB        US6       AG  2845.  1810.  3347.  1791.    635014.5  0. 56.   56.
  1
EB        US6       AG  3347.  1791.  3683.  1768.    635014.5  0. 56.   56.
  1
EB        I-25      AG  2155.  1768.  2541.  1761.    100014.5  0. 56.   56.
  1
EB        I-25      AG  2541.  1761.  2976.  1746.    100014.5  0. 56.   56.
  1
EB        I-25      AG  2976.  1746.  3665.  1697.    100014.5  0. 56.   56.
  1
WB        US6       AG  3696.  1836.  3115.  1870.    685014.5  0. 68.   56.
  1
WB        US6       AG  3115.  1870.  2798.  1878.    685014.5  0. 68.   56.
  1
WB        US6       AG  2798.  1878.  2469.  1863.    685014.5  0. 68.   56.
  1
WB        US6       AG  2469.  1863.  1718.  1812.    685014.5  0. 68.   56.
  1
NB        5Ave      AG  2708.   665.  2725.  1075.    298513.0  0. 56.   35.
  2
NB        5Ave      AG  2723.  1025.  2717.   887.     12. 36.   3
       100        37       2.0 2985  73.65 1664 1 3
  1
SB        5Ave      AG  2667.  1668.  2681.  1291.    190513.0  0. 56.   35.
  1
SBL       5Ave      AG  2681.  1291.  2702.  1236.      9013.0  0. 32.   35.
  1
SBL       5Ave      AG  2702.  1236.  2702.  1086.      9013.0  0. 32.   35.
  2
SBL       5Ave      AG  2702.  1109.  2702.  1185.      0. 12.   1
       100        28       2.0   90  73.65  112 1 3
  1
SBT       5Ave      AG  2680.  1291.  2676.  1082.    181513.0  0. 56.   35.
  2
SBT       5Ave      AG  2677.  1127.  2679.  1250.      0. 36.   3
       100        28       2.0 1815  73.65 1679 1 3
  1
SBdp      5Ave      AG  2676.  1081.  2667.   855.    186513.0  0. 56.   35.
  1
WB        5Ave      AG  3398.  1229.  3338.  1182.     22513.7  0. 32.   25.
  1
WB        5Ave      AG  3338.  1182.  3301.  1150.     22513.7  0. 32.   25.
  1
WB        5Ave      AG  3301.  1150.  3253.  1120.     22513.7  0. 32.   25.
  1
WB        5Ave      AG  3253.  1120.  3190.  1100.     22513.7  0. 32.   25.
  1
WB        5Ave      AG  3192.  1101.  3130.  1093.     22513.7  0. 32.   25.
  1
WBR       5Ave      AG  3129.  1093.  2788.  1093.     17513.7  0. 32.   25.
  2
WBR       5Ave      AG  2803.  1093.  2884.  1093.      0. 12.   1
       100        76       2.0  175  73.65 1568 1 3
  1
WBR       5Ave      AG  2788.  1093.  2730.  1151.     17513.7  0. 32.   25.
  1
WBL       5Ave      AG  3131.  1093.  2993.  1081.      5013.7  0. 32.   25.
  1
WBL       5Ave      AG  2993.  1081.  2727.  1081.      5013.7  0. 32.   25.
  2
WBL       5Ave      AG  2805.  1081.  2903.  1081.      0. 12.   1
       100        80       2.0   50  73.65 1752 1 3
  1
WBdp      5Ave      AG  2724.  1067.  3152.  1069.     26513.7  0. 32.   25.
  1
WBdp      5Ave      AG  3152.  1069.  3210.  1076.     26513.7  0. 32.   25.
  1
WBdp      5Ave      AG  3210.  1076.  3278.  1103.     26513.7  0. 32.   25.
  1
WBdp      5Ave      AG  3278.  1103.  3334.  1142.     26513.7  0. 32.   25.
  1
WBdp      5Ave      AG  3334.  1142.  3364.  1174.     26513.7  0. 32.   25.
  1
WBdp      5Ave      AG  3364.  1174.  3426.  1210.     26513.7  0. 32.   25.
1.0   04  1000   0Y  5   0 72
```

JOB: US 6 & Federal Blvd BDAM RUN: US 6 & Federal Blvd BDAM
DATE: 07/23/2012 TIME: 09:47:06.30

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		X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. EB	EBRAMP	1548.0	1747.0	1860.0	1721.0	313.	95.	AG	510.	13.6	.0	32.0		
2. EB	EBRAMP	1861.0	1721.0	2127.0	1699.0	267.	95.	AG	510.	13.6	.0	32.0		
3. EB	EBRAMP	2129.0	1700.0	2697.0	1665.0	569.	94.	AG	510.	13.6	.0	44.0		
4. EB	EBRamp	2612.0	1670.0	2506.3	1676.7	106.	274.	AG	296.	100.0	.0	24.0	.78	5.4
5. EBDP	EBRAMP	2701.0	1666.0	3149.0	1674.0	448.	89.	AG	1245.	14.6	.0	44.0		
6. EBDP	EBRAMP	3158.0	1674.0	3711.0	1644.0	554.	93.	AG	1000.	14.6	.0	44.0		
7. toUS6	EBRAMP	3139.0	1674.0	3251.0	1734.0	127.	62.	AG	425.	14.6	.0	44.0		
8. toUS6	EBRAMP	3251.0	1734.0	3346.0	1754.0	97.	78.	AG	425.	14.6	.0	44.0		
9. toUS6	EBRAMP	3346.0	1754.0	3709.0	1732.0	364.	93.	AG	425.	14.6	.0	44.0		
10. NB	EBRAMP	2725.0	1077.0	2742.0	1358.0	282.	3.	AG	3000.	13.5	.0	56.0		
11. NB	EBRAMP	2743.0	1358.0	2746.0	1670.0	312.	1.	AG	3000.	13.5	.0	56.0		
12. NB	EBRamp	2745.0	1609.0	2742.8	1327.9	281.	180.	AG	187.	100.0	.0	36.0	.98	14.3
13. SBL	EBRAMP	2691.0	1963.0	2695.0	1665.0	298.	179.	AG	175.	13.5	12.0	44.0		
14. SBL	EBRamp	2694.0	1744.0	2691.8	1925.2	181.	359.	AG	125.	100.0	12.0	24.0	1.16	9.2
15. SBT	EBRAMP	2666.0	1963.0	2666.0	1667.0	296.	180.	AG	1985.	13.5	12.0	56.0		
16. SBT	EBRamp	2666.0	1739.0	2666.0	1843.8	105.	360.	AG	187.	100.0	12.0	36.0	.61	5.3
17. NBT	WBRAMP	2746.0	1670.0	2746.0	1957.0	287.	360.	AG	1915.	13.5	12.0	56.0		
18. NBT	WBRAMP	2746.0	1904.0	2746.0	1788.9	115.	180.	AG	196.	100.0	12.0	36.0	.60	5.8
19. NBL	WBRAMP	2745.0	1667.0	2717.0	1721.0	61.	333.	AG	340.	13.5	12.0	56.0		
20. NBL	WBRAMP	2717.0	1721.0	2717.0	1964.0	243.	360.	AG	340.	13.5	12.0	56.0		
21. NBL	WBRamp	2717.0	1896.0	2717.0	938.2	958.	180.	AG	130.	100.0	12.0	24.0	2.00	48.7
22. NBdp	WBRAMP	2745.0	1958.0	2737.0	2215.0	257.	358.	AG	2125.	13.5	.0	56.0		
23. NBdp	WBRAMP	2737.0	2215.0	2705.0	2405.0	193.	350.	AG	2125.	13.5	.0	56.0		
24. NBdp	WBRAMP	2705.0	2405.0	2705.0	2664.0	259.	360.	AG	2125.	13.5	.0	56.0		
25. SB	WBRAMP	2664.0	2662.0	2668.0	2311.0	351.	179.	AG	1810.	13.5	.0	56.0		
26. SBT	WBRAMP	2668.0	2309.0	2668.0	1962.0	347.	180.	AG	1600.	13.5	.0	56.0		
27. SBT	WBRamp	2668.0	1995.0	2668.0	2140.7	146.	360.	AG	296.	100.0	12.0	36.0	.69	7.4
28. SBL	WBRAMP	2668.0	2309.0	2690.0	2228.0	84.	165.	AG	210.	13.5	.0	32.0		
29. SBL	WBRAMP	2690.0	2228.0	2693.0	2123.0	105.	178.	AG	210.	13.5	.0	32.0		
30. SBL	WBRAMP	2693.0	2123.0	2691.0	1963.0	160.	181.	AG	210.	13.5	12.0	44.0		
31. SBL	WBRamp	2691.0	1998.0	2691.3	2026.7	29.	1.	AG	198.	100.0	12.0	24.0	.15	1.5
32. WB	WBRAMP	3700.0	1882.0	3373.0	1927.0	330.	278.	AG	1810.	13.6	.0	56.0		
33. WB	WBRAMP	3373.0	1927.0	3171.0	1946.0	203.	275.	AG	1810.	13.6	.0	56.0		
34. WB	WBRAMP	3171.0	1946.0	2705.0	1961.0	466.	272.	AG	1810.	13.6	.0	56.0		
35. WB	WBRamp	2791.0	1958.0	5396.1	1874.6	2606.	92.	AG	433.	100.0	12.0	36.0	1.60	132.4
36. WBDP	WBRAMP	2705.0	1961.0	2593.0	1961.0	112.	270.	AG	650.	13.6	.0	44.0		
37. WBDP	WBRAMP	2593.0	1961.0	1725.0	1858.0	874.	263.	AG	650.	13.6	.0	44.0		
38. EB	US6	1715.0	1751.0	2153.0	1767.0	438.	88.	AG	6350.	14.5	.0	68.0		
39. EB	US6	2152.0	1767.0	2330.0	1802.0	181.	79.	AG	6350.	14.5	.0	56.0		
40. EB	US6	2330.0	1802.0	2845.0	1810.0	515.	89.	AG	6350.	14.5	.0	56.0		
41. EB	US6	2845.0	1810.0	3347.0	1791.0	502.	92.	AG	6350.	14.5	.0	56.0		
42. EB	US6	3347.0	1791.0	3683.0	1768.0	337.	94.	AG	6350.	14.5	.0	56.0		
43. EB	I-25	2155.0	1768.0	2541.0	1761.0	386.	91.	AG	1000.	14.5	.0	56.0		
44. EB	I-25	2541.0	1761.0	2976.0	1746.0	435.	92.	AG	1000.	14.5	.0	56.0		

JOB: US 6 & Federal Blvd BDAM RUN: US 6 & Federal Blvd BDAM
DATE: 07/23/2012 TIME: 09:47:06.30

LINK VARIABLES

LINK DESCRIPTION		X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
45. EB	I-25	2976.0	1746.0	3665.0	1697.0	691.	94.	AG	1000.	14.5	.0	56.0		
46. WB	US6	3696.0	1836.0	3115.0	1870.0	582.	273.	AG	6850.	14.5	.0	68.0		
47. WB	US6	3115.0	1870.0	2798.0	1878.0	317.	271.	AG	6850.	14.5	.0	68.0		
48. WB	US6	2798.0	1878.0	2469.0	1863.0	329.	267.	AG	6850.	14.5	.0	68.0		
49. WB	US6	2469.0	1863.0	1718.0	1812.0	753.	266.	AG	6850.	14.5	.0	68.0		
50. NB	5Ave	2708.0	665.0	2725.0	1075.0	410.	2.	AG	2985.	13.0	.0	56.0		
51. NB	5Ave	2723.0	1025.0	2701.5	531.3	494.	182.	AG	219.	100.0	12.0	36.0	1.01	25.1
52. SB	5Ave	2667.0	1668.0	2681.0	1291.0	377.	178.	AG	1905.	13.0	.0	56.0		
53. SBL	5Ave	2681.0	1291.0	2702.0	1236.0	59.	159.	AG	90.	13.0	.0	32.0		
54. SBL	5Ave	2702.0	1236.0	2702.0	1086.0	150.	180.	AG	90.	13.0	.0	32.0		
55. SBL	5Ave	2702.0	1109.0	2702.0	1311.3	202.	360.	AG	55.	100.0	.0	12.0	1.18	10.3
56. SBT	5Ave	2680.0	1291.0	2676.0	1082.0	209.	181.	AG	1815.	13.0	.0	56.0		
57. SBT	5Ave	2677.0	1127.0	2678.5	1219.6	93.	1.	AG	166.	100.0	.0	36.0	.53	4.7
58. SBdp	5Ave	2676.0	1081.0	2667.0	855.0	226.	182.	AG	1865.	13.0	.0	56.0		
59. WB	5Ave	3398.0	1229.0	3338.0	1182.0	76.	232.	AG	225.	13.7	.0	32.0		
60. WB	5Ave	3338.0	1182.0	3301.0	1150.0	49.	229.	AG	225.	13.7	.0	32.0		
61. WB	5Ave	3301.0	1150.0	3253.0	1120.0	57.	238.	AG	225.	13.7	.0	32.0		
62. WB	5Ave	3253.0	1120.0	3190.0	1100.0	66.	252.	AG	225.	13.7	.0	32.0		
63. WB	5Ave	3192.0	1101.0	3130.0	1093.0	63.	263.	AG	225.	13.7	.0	32.0		
64. WBR	5Ave	3129.0	1093.0	2788.0	1093.0	341.	270.	AG	175.	13.7	.0	32.0		
65. WBR	5Ave	2803.0	1093.0	2875.7	1093.0	73.	90.	AG	150.	100.0	.0	12.0	.56	3.7
66. WBR	5Ave	2788.0	1093.0	2730.0	1151.0	82.	315.	AG	175.	13.7	.0	32.0		
67. WBL	5Ave	3131.0	1093.0	2993.0	1081.0	139.	265.	AG	50.	13.7	.0	32.0		
68. WBL	5Ave	2993.0	1081.0	2727.0	1081.0	266.	270.	AG	50.	13.7	.0	32.0		
69. WBL	5Ave	2805.0	1081.0	2826.9	1081.0	22.	90.	AG	158.	100.0	.0	12.0	.18	1.1
70. WBdp	5Ave	2724.0	1067.0	3152.0	1069.0	428.	90.	AG	265.	13.7	.0	32.0		
71. WBdp	5Ave	3152.0	1069.0	3210.0	1076.0	58.	83.	AG	265.	13.7	.0	32.0		
72. WBdp	5Ave	3210.0	1076.0	3278.0	1103.0	73.	68.	AG	265.	13.7	.0	32.0		
73. WBdp	5Ave	3278.0	1103.0	3334.0	1142.0	68.	55.	AG	265.	13.7	.0	32.0		
74. WBdp	5Ave	3334.0	1142.0	3364.0	1174.0	44.	43.	AG	265.	13.7	.0	32.0		
75. WBdp	5Ave	3364.0	1174.0	3426.0	1210.0	72.	60.	AG	265.	13.7	.0	32.0		

JOB: US 6 & Federal Blvd BDAM RUN: US 6 & Federal Blvd BDAM
DATE: 07/23/2012 TIME: 09:47:06.30

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION		CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
4. EB	EBRamp	92	69	2.0	510	1596	73.65	1	3
12. NB	EBRamp	92	29	2.0	3000	1590	73.65	1	3
14. SBL	EBRamp	92	29	2.0	175	117	73.65	1	3
16. SBT	EBRamp	92	29	2.0	1985	1679	73.65	1	3
18. NBT	WBRAMP	100	33	2.0	1915	1679	73.65	1	3
21. NBL	WBRamp	100	33	2.0	340	135	73.65	1	3
27. SBT	WBRamp	100	50	2.0	1600	1679	73.65	1	3
31. SBL	WBRamp	100	50	2.0	210	1568	73.65	1	3
35. WB	WBRamp	100	73	2.0	1810	1645	73.65	1	3
51. NB	5Ave	100	37	2.0	2985	1664	73.65	1	3
55. SBL	5Ave	100	28	2.0	90	112	73.65	1	3
57. SBT	5Ave	100	28	2.0	1815	1679	73.65	1	3
65. WBR	5Ave	100	76	2.0	175	1568	73.65	1	3
69. WBL	5Ave	100	80	2.0	50	1752	73.65	1	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. NE COR	2820.0	2000.0	6.0
2. NE E80	2858.0	1993.0	6.0
3. NE E160	2936.0	1990.0	6.0
4. NE EMID	3094.0	1984.0	6.0
5. NE EMID	3263.0	1974.0	6.0
6. NE N80	2780.0	2065.0	6.0
7. NE N160	2775.0	2145.0	6.0
8. NE NMID	2767.0	2308.0	6.0
9. NE NMID	2760.0	2447.0	6.0
10. NW COR	2604.0	2008.0	6.0
11. NW W80	2545.0	1980.0	6.0
12. NW W160	2468.0	1971.0	6.0
13. NW WMID	2307.0	1951.0	6.0
14. NW WMID	2083.0	1923.0	6.0
15. NW N80	2614.0	2051.0	6.0
16. NW N160	2614.0	2134.0	6.0
17. NW NMID	2615.0	2294.0	6.0
18. NW NMID	2625.0	2443.0	6.0
19. SE COR	2805.0	1622.0	6.0
20. SE E80	2848.0	1638.0	6.0
21. SE E160	2925.0	1640.0	6.0
22. SE EMID	3086.0	1640.0	6.0
23. SE EMID	3269.0	1636.0	6.0
24. SE S80	2776.0	1564.0	6.0
25. SE S160	2774.0	1489.0	6.0
26. SE SMID	2770.0	1332.0	6.0
27. SE SMID	2766.0	1160.0	6.0
28. SW COR	2628.0	1611.0	6.0
29. SW W80	2558.0	1619.0	6.0
30. SW W160	2478.0	1626.0	6.0
31. SW WMID	2316.0	1640.0	6.0

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JOB: US 6 & Federal Blvd BDAM RUN: US 6 & Federal Blvd BDAM
DATE: 07/23/2012 TIME: 09:47:06.30

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
32. SW WMID	2086.0	1660.0	6.0
33. SW S80	2633.0	1542.0	6.0
34. SW S160	2633.0	1479.0	6.0
35. SW SMID	2640.0	1301.0	6.0
36. SW SMID	2640.0	1155.0	6.0
37. 5th Ave	2837.0	1130.0	6.0
38. 5th Ave	2995.0	1130.0	6.0
39. 5th Ave	3229.0	1143.0	6.0
40. 5th Ave	3414.0	1311.0	6.0
41. 5th Ave	3442.0	1434.0	6.0
42. 5th Ave	3492.0	1291.0	6.0
43. 5th Ave	2779.0	1035.0	6.0
44. 5th Ave	2990.0	1043.0	6.0
45. 5th Ave	3248.0	1064.0	6.0

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JOB: US 6 & Federal Blvd BDAM RUN: US 6 & Federal Blvd BDAM

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 ANGLE (DEGR)	REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
	CONCENTRATION (PPM)																			
0.	.4	.0	.0	.0	.0	.7	.7	.4	.2	.5	.1	.0	.0	.0	.6	.4	.4	.5	3.0	3.1
5.	.0	.0	.0	.0	.0	.5	.5	.2	.1	.7	.3	.1	.0	.0	.7	.7	.6	.6	2.9	3.0
10.	.0	.0	.0	.0	.0	.2	.3	.1	.1	.8	.4	.2	.0	.0	.9	.9	.8	.8	2.9	2.8
15.	.0	.0	.0	.0	.0	.1	.2	.0	.0	1.0	.4	.2	.0	.0	1.0	1.0	.9	1.0	2.7	2.8
20.	.0	.0	.0	.0	.0	.1	.0	.0	.0	1.1	.5	.4	.1	.0	1.2	1.0	1.0	1.2	2.6	2.9
25.	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.6	.4	.2	.0	1.3	1.1	1.0	1.2	2.7	2.9

30. *	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.8	.4	.2	.0	1.3	1.0	1.0	1.3	2.6	3.0
35. *	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.7	.4	.2	.0	1.4	1.0	1.1	1.3	2.9	3.1
40. *	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.8	.6	.3	.1	1.3	.9	1.0	1.2	2.9	3.2
45. *	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.8	.5	.4	.2	1.4	.9	1.0	1.2	3.0	3.2
50. *	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.9	.5	.2	.1	1.4	.8	1.0	1.2	3.0	3.3
55. *	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.3	.8	.7	.3	.2	1.3	.9	1.0	1.2	3.1	3.3
60. *	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.9	.6	.5	.2	1.3	.8	.9	1.1	3.1	3.4
65. *	.0	.1	.1	.0	.1	.0	.0	.0	.0	1.2	.9	.7	.4	.3	1.4	1.0	1.0	1.1	3.1	3.3
70. *	.1	.2	.2	.1	.2	.0	.0	.0	.0	1.3	1.0	.9	.5	.6	1.4	1.0	.9	1.1	2.8	3.2
75. *	.3	.3	.4	.5	.5	.1	.0	.0	.0	1.5	1.4	1.2	1.1	1.2	1.5	1.0	1.0	1.1	2.5	2.9
80. *	.7	.8	.9	.9	.8	.1	.1	.0	.0	1.9	1.6	1.7	1.6	1.7	1.7	1.1	.9	1.1	2.0	2.3
85. *	1.3	1.8	1.5	1.4	1.3	.4	.1	.0	.0	2.3	2.3	2.4	2.5	2.9	1.9	1.3	.9	1.1	1.4	1.8
90. *	2.2	2.5	2.4	2.1	1.8	.8	.3	.1	.0	2.9	3.0	3.1	3.3	3.5	2.5	1.5	1.0	1.1	.9	1.2
95. *	3.0	3.4	3.2	2.9	2.5	1.3	.4	.1	.1	3.6	4.0	3.7	3.7	4.2	3.2	2.1	1.1	1.2	.7	.9
100. *	3.7	4.1	3.9	3.6	3.1	2.0	.9	.2	.1	4.4	4.3	4.2	4.2	4.9	3.8	2.5	1.1	1.2	.2	.4
105. *	4.5	4.7	4.4	4.3	3.6	2.3	1.5	.4	.2	4.6	4.7	4.4	4.4	4.6	4.3	3.1	1.5	1.4	.0	.1
110. *	4.7	5.1	4.9	4.4	4.2	2.9	1.7	.6	.3	4.7	4.8	4.5	4.3	4.6	4.5	3.5	1.7	1.5	.0	.1
115. *	4.9	5.2	5.1	4.9	4.4	3.2	1.9	.8	.4	4.5	4.5	4.6	4.1	4.2	4.6	3.6	2.1	1.6	.0	.0
120. *	4.7	5.0	5.1	4.9	4.6	3.2	2.2	1.2	.5	4.6	4.5	4.2	4.1	4.1	4.1	3.6	2.3	1.9	.0	.0
125. *	4.7	4.9	5.0	5.0	4.7	3.2	2.4	1.3	.8	4.1	4.2	4.2	4.1	3.8	4.3	3.5	2.5	2.1	.0	.0
130. *	4.6	4.8	4.7	4.8	4.8	3.2	2.3	1.5	.9	4.2	4.2	4.0	3.9	3.9	4.4	3.6	2.5	2.2	.0	.0
135. *	4.3	4.6	4.6	4.5	4.8	3.0	2.3	1.6	1.1	4.0	4.1	3.8	3.9	3.8	3.9	3.6	2.7	2.4	.0	.0
140. *	4.1	4.6	4.4	4.6	4.5	3.0	2.2	1.6	1.0	3.9	3.9	3.8	3.9	3.5	4.0	3.4	2.6	2.6	.0	.0
145. *	4.2	4.1	4.2	4.3	4.3	2.8	2.2	1.5	1.3	4.0	4.0	3.9	3.6	3.5	4.0	3.5	2.5	2.4	.0	.0
150. *	4.2	4.1	4.2	4.1	4.2	2.8	2.3	1.3	1.2	4.1	3.9	3.7	3.6	3.4	3.7	3.6	2.5	2.5	.0	.0
155. *	3.8	4.2	4.1	4.1	4.3	2.9	2.1	1.4	1.0	4.0	3.9	3.7	3.3	3.3	3.9	3.5	2.7	2.4	.0	.0
160. *	3.8	4.0	4.0	4.0	4.3	2.9	2.3	1.7	1.2	4.0	3.7	3.6	3.1	3.3	3.8	3.5	2.8	2.6	.0	.0
165. *	3.9	4.0	4.0	4.1	4.1	2.9	2.4	1.7	1.3	4.1	3.9	3.4	3.2	3.2	3.8	3.6	2.6	2.7	.0	.0
170. *	3.9	3.9	4.1	4.0	4.1	3.2	2.6	2.1	1.5	3.9	3.4	3.3	3.1	3.1	3.4	3.4	2.6	2.4	.3	.0
175. *	4.3	4.1	4.0	4.0	4.1	3.8	3.3	2.5	1.9	3.5	3.4	3.2	3.0	3.0	3.3	3.0	2.3	2.2	.5	.2
180. *	4.7	4.5	4.0	4.1	4.0	4.0	3.6	2.8	2.3	3.3	3.1	2.9	3.0	3.0	2.9	2.6	1.9	1.9	.9	.4
185. *	4.8	4.8	4.3	4.0	4.0	4.2	3.8	3.0	2.3	2.7	2.9	2.9	3.0	3.0	2.5	2.1	1.6	1.2	1.5	.7
190. *	5.1	4.8	4.4	4.1	4.0	4.5	3.8	2.9	2.3	2.6	2.8	2.8	3.0	3.1	2.3	1.6	1.2	1.1	1.7	1.0
195. *	5.0	4.9	4.7	4.3	4.0	4.2	3.6	2.9	2.3	2.5	2.8	2.9	3.0	3.1	2.3	1.7	1.0	.9	2.0	1.3
200. *	5.2	4.9	4.8	4.3	4.2	4.1	3.6	2.7	2.1	2.5	2.8	2.9	3.0	3.1	1.9	1.6	1.2	.8	1.9	1.4
205. *	5.0	4.9	4.8	4.5	4.2	4.2	3.2	2.4	2.1	2.4	2.8	2.9	3.1	3.2	2.0	1.6	1.2	.9	2.0	1.3

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JOB: US 6 & Federal Blvd BDAM RUN: US 6 & Federal Blvd BDAM

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. *	4.9	4.8	5.0	4.6	4.4	3.6	3.2	2.6	1.9	2.5	2.9	2.9	3.2	3.2	2.1	1.6	1.3	.8	2.1	1.2
215. *	5.0	5.0	5.0	4.8	4.6	3.6	3.2	2.5	1.9	2.5	3.0	2.9	3.1	3.2	2.1	1.7	1.2	.8	2.0	1.3
220. *	4.8	5.3	5.0	4.7	4.7	3.6	3.0	2.5	1.9	2.7	3.0	3.1	3.2	3.3	2.2	1.7	1.2	.7	1.9	1.3
225. *	4.9	5.3	5.2	5.0	5.1	3.5	3.4	2.6	1.9	2.6	3.2	3.3	3.4	3.4	2.4	1.8	1.3	.7	1.9	1.1
230. *	4.9	5.4	5.3	5.3	5.0	3.6	3.3	2.1	1.7	2.7	3.3	3.4	3.3	3.3	2.3	1.8	1.0	.6	1.7	1.2
235. *	4.7	5.5	5.5	5.3	5.4	3.8	3.2	2.0	1.6	2.7	3.4	3.4	3.2	3.3	2.3	1.5	1.0	.5	1.7	1.2
240. *	4.4	5.1	5.7	5.1	5.5	3.6	3.1	1.9	1.4	2.8	3.4	3.3	3.2	3.1	2.3	1.4	.6	.3	1.7	1.1
245. *	4.6	5.0	5.4	5.6	5.9	3.7	2.8	1.6	1.4	2.7	3.3	3.1	3.1	2.8	2.0	1.2	.5	.2	1.7	1.1
250. *	4.4	4.8	5.4	5.6	5.8	3.2	2.5	1.3	1.1	2.4	3.0	2.9	2.8	2.5	1.8	1.0	.3	.1	1.5	1.1
255. *	3.8	4.4	4.8	5.3	5.9	2.8	2.3	1.3	1.1	2.0	2.5	2.5	2.3	1.9	1.3	.7	.1	.0	1.5	1.1
260. *	3.3	3.8	4.2	4.8	5.4	2.5	1.7	1.1	1.0	1.4	1.9	2.0	1.7	1.5	.8	.3	.0	.0	1.6	1.5
265. *	2.6	3.1	3.5	4.2	4.6	2.0	1.6	1.0	1.0	1.0	1.5	1.3	1.3	1.0	.5	.1	.0	.0	1.8	1.8
270. *	2.2	2.4	2.7	3.4	3.6	1.7	1.4	1.1	1.0	.5	.9	.9	.8	.6	.3	.0	.0	.0	2.2	2.1
275. *	1.6	1.7	1.8	2.0	2.6	1.5	1.2	1.0	1.0	.3	.5	.5	.4	.4	.1	.0	.0	.0	2.7	2.8
280. *	1.2	1.1	1.1	1.3	1.7	1.4	1.2	1.1	1.0	.1	.2	.2	.2	.2	.0	.0	.0	.0	2.9	3.3
285. *	.9	.9	.9	.9	1.0	1.3	1.1	1.1	1.0	.0	.1	.1	.1	.1	.0	.0	.0	.0	3.5	3.6
290. *	.9	.9	.7	.6	.6	1.3	1.1	1.0	1.0	.0	.1	.1	.1	.1	.0	.0	.0	.0	3.7	4.0
295. *	.9	.9	.7	.4	.5	1.3	1.1	1.0	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	3.8
300. *	.9	.8	.6	.4	.1	1.3	1.2	1.2	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.1	3.9
305. *	.9	.7	.4	.4	.2	1.3	1.2	1.3	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.1	3.8
310. *	.9	.7	.4	.4	.3	1.3	1.2	1.2	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.7	3.7
315. *	.9	.8	.5	.3	.2	1.3	1.4	1.3	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.8	3.7
320. *	.9	.9	.4	.3	.2	1.5	1.4	1.3	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.8	3.7
325. *	1.0	.7	.5	.3	.0	1.4	1.5	1.3	1.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.8	3.6
330. *	.9	.8	.4	.2	.0	1.4	1.6	1.2	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.0	3.8
335. *	.9	.7	.3	.1	.0	1.6	1.5	1.2	1.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.9	3.6
340. *	.8	.6	.3	.0	.0	1.6	1.6	1.0	.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	3.8	3.5
345. *	.8	.4	.3	.0	.0	1.4	1.4	.8	.6	.0	.0	.0	.0	.0	.0	.1	.1	.1	3.6	3.6
350. *	.6	.4	.1	.0	.0	1.3	1.3	.8	.5	.2	.0	.0	.0	.0	.2	.1	.1	.2	3.6	3.6
355. *	.4	.3	.0	.0	.0	.9	1.1	.5	.4	.3	.0	.0	.0	.0	.3	.4	.3	.3	3.4	3.5
360. *	.4	.0	.0	.0	.0	.7	.7	.4	.2	.5	.1	.0	.0	.0	.6	.4	.4	.5	3.0	3.1
MAX *	5.2	5.5	5.7	5.6	5.9	4.5	3.8	3.0	2.3	4.7	4.8	4.6	4.4	4.9	4.6	3.6	2.8	2.7	4.1	4.0
DEGR. *	200	235	240	250	245	190	185	185	180	110	110	115	105	100	115	115	160	165	300	290

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JOB: US 6 & Federal Blvd BDAM RUN: US 6 & Federal Blvd BDAM

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	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
0. *	2.8	3.0	3.0	3.6	3.7	3.9	3.2	3.2	2.9	2.2	2.4	2.8	2.9	2.8	2.1	1.9	1.6	1.1	1.0	1.4
5. *	3.1	3.0	3.0	3.2	3.2	3.3	2.7	3.6	2.9	2.3	2.4	2.7	3.2	2.7	2.4	2.5	1.0	.9	.9	1.5
10. *	3.0	3.1	3.0	2.7	2.7	2.5	2.0	3.7	3.1	2.3	2.4	2.6	3.5	3.1	3.0	3.0	1.2	1.0	1.1	1.3
15. *	3.0	3.1	3.1	2.3	2.5	2.1	1.8	3.9	3.3	2.4	2.5	2.6	3.5	3.3	3.1	3.2	.9	.9	1.1	1.3
20. *	3.0	3.1	3.1	2.3	2.2	1.8	1.3	3.9	3.5	2.7	2.5	2.6	3.9	3.1	3.4	3.4	.9	1.0	1.1	1.3
25. *	2.9	3.0	3.2	2.1	2.0	1.4	1.0	3.9	3.7	2.6	2.6	2.9	3.5	3.2	3.3	3.3	.9	.8	1.0	1.1
30. *	3.0	2.9	3.0	2.2	2.0	1.4	.9	4.0	3.8	3.0	2.6	3.0	3.6	3.4	3.1	3.3	1.0	1.0	.6	.7
35. *	3.2	3.0	2.9	2.3	1.9	1.3	1.1	4.0	3.8	3.2	2.7	2.9	3.3	3.3	3.1	3.2	.8	.9	.6	.6
40. *	3.2	3.3	3.1	2.2	2.1	1.3	.9	3.9	3.8	3.4	2.8	3.1	3.5	3.4	3.2	3.2	.9	.9	.3	.5

45.	*	3.2	3.3	3.3	2.5	2.0	1.4	.9	3.8	3.7	3.7	3.1	3.5	3.4	3.5	3.2	3.1	.9	.6	.3	.3
50.	*	3.2	3.3	3.3	2.5	2.0	1.3	1.0	3.9	3.6	3.8	3.2	3.6	3.6	3.5	3.0	2.9	.7	.3	.1	.2
55.	*	3.4	3.2	3.1	2.4	1.8	1.2	.7	3.9	3.5	3.9	3.1	3.5	3.8	3.4	3.0	2.8	.3	.3	.1	.2
60.	*	3.4	3.4	3.0	2.5	1.7	1.0	.4	4.0	3.3	4.0	3.1	3.6	3.6	3.4	2.7	2.7	.3	.2	.1	.2
65.	*	3.2	3.2	2.8	2.1	1.5	.9	.3	3.8	3.6	3.9	3.1	3.5	3.4	3.1	2.5	2.3	.2	.1	.1	.2
70.	*	3.0	2.8	2.3	2.0	1.4	.5	.1	3.9	3.2	3.6	3.1	3.6	3.3	2.9	2.1	2.3	.1	.1	.1	.1
75.	*	2.9	2.6	1.9	1.7	.9	.3	.1	3.5	3.1	3.1	3.1	3.4	3.0	2.7	1.8	2.1	.1	.1	.1	.1
80.	*	2.3	2.1	1.6	1.2	.8	.1	.1	3.1	2.9	2.9	2.9	3.0	2.9	2.5	1.7	2.1	.0	.0	.0	.1
85.	*	1.9	1.5	1.1	.9	.4	.1	.0	2.9	2.3	2.7	2.4	2.7	2.5	2.0	1.6	2.0	.0	.0	.1	.0
90.	*	1.2	.9	.7	.4	.1	.0	.0	2.4	1.8	1.7	1.8	2.0	2.0	1.9	1.4	2.1	.0	.0	.1	.0
95.	*	.8	.7	.6	.1	.0	.0	.0	1.9	1.5	1.3	1.1	1.1	1.7	1.6	1.6	2.0	.0	.0	.1	.0
100.	*	.4	.3	.2	.0	.0	.0	.0	1.5	1.0	.8	.9	.6	1.7	1.6	1.6	1.9	.1	.0	.1	.0
105.	*	.2	.1	.2	.0	.0	.0	.0	1.4	1.0	.8	.5	.3	1.5	1.5	1.5	1.9	.2	.0	.1	.0
110.	*	.1	.1	.1	.0	.0	.0	.1	1.4	.9	.7	.5	.3	1.6	1.6	1.6	2.0	.2	.1	.1	.0
115.	*	.0	.0	.1	.0	.0	.0	.2	1.6	.9	.7	.6	.3	1.7	1.6	1.5	2.0	.2	.1	.1	.0
120.	*	.0	.0	.0	.0	.1	.0	.2	1.6	1.0	.7	.5	.3	1.6	1.7	1.6	1.7	.3	.2	.1	.0
125.	*	.0	.0	.0	.1	.1	.1	.2	1.6	1.1	.8	.5	.1	1.6	1.7	1.5	1.7	.3	.2	.1	.0
130.	*	.0	.0	.0	.1	.1	.1	.2	1.7	1.2	.7	.4	.2	1.7	1.7	1.6	1.8	.3	.2	.0	.0
135.	*	.0	.0	.0	.1	.1	.1	.2	1.8	1.0	.7	.4	.2	1.8	1.7	1.7	1.9	.3	.2	.0	.0
140.	*	.0	.0	.0	.1	.1	.1	.2	1.8	1.0	.7	.5	.1	1.9	1.8	1.8	1.9	.4	.2	.1	.0
145.	*	.0	.0	.0	.1	.1	.1	.1	1.8	1.0	.8	.3	.1	1.8	1.7	1.9	2.0	.4	.2	.2	.0
150.	*	.0	.0	.0	.1	.2	.2	.1	1.8	1.1	.6	.4	.1	1.8	1.9	1.9	2.1	.4	.2	.2	.0
155.	*	.0	.0	.0	.2	.2	.2	.2	1.9	1.0	.7	.2	.0	2.0	1.8	2.1	2.0	.4	.2	.2	.0
160.	*	.0	.0	.0	.4	.4	.3	.3	1.9	.9	.7	.2	.0	1.8	1.8	2.1	1.9	.4	.2	.2	.0
165.	*	.0	.0	.0	.6	.8	.5	.4	1.9	.9	.5	.1	.0	2.0	1.8	2.1	1.9	.4	.2	.2	.0
170.	*	.0	.0	.0	1.1	1.0	.9	.6	1.6	.7	.3	.0	.0	1.7	1.5	1.9	1.7	.4	.2	.2	.0
175.	*	.0	.0	.0	1.6	1.6	1.2	.9	1.4	.6	.1	.0	.0	1.3	1.3	1.5	1.3	.5	.2	.2	.0
180.	*	.1	.0	.0	2.3	2.3	1.7	1.5	1.0	.3	.0	.0	.0	1.1	1.1	1.3	1.1	.7	.2	.2	.0
185.	*	.3	.0	.0	2.9	2.7	2.3	1.8	.8	.1	.0	.0	.0	.8	.7	.8	.7	.8	.2	.2	.0
190.	*	.3	.0	.0	3.1	3.2	2.5	2.2	.4	.0	.0	.0	.0	.4	.4	.5	.5	1.0	.2	.1	.0
195.	*	.5	.1	.0	3.3	3.3	2.7	2.3	.1	.0	.0	.0	.0	.1	.1	.2	.1	1.1	.2	.1	.0
200.	*	.8	.2	.0	3.2	3.5	2.8	2.6	.1	.0	.0	.0	.0	.1	.0	.1	.1	1.4	.4	.1	.0
205.	*	.9	.3	.1	3.0	3.3	2.8	2.4	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	.4	.1	.0

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JOB: US 6 & Federal Blvd BDAM RUN: US 6 & Federal Blvd BDAM

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
210.	*	.9	.3	.2	2.9	2.9	2.7	2.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.6	.5	.1	.0
215.	*	.9	.4	.2	2.8	2.9	2.5	2.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.6	.5	.1	.0
220.	*	.8	.6	.2	2.7	2.8	2.3	2.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.5	.3	.0
225.	*	1.0	.6	.2	2.6	2.6	2.3	2.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	.7	.3	.1
230.	*	.9	.6	.2	2.5	2.5	2.3	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.2	.7	.2	.2
235.	*	.9	.6	.2	2.4	2.4	2.1	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.1	.7	.2	.2
240.	*	.9	.6	.3	2.3	2.3	2.1	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.0	.7	.4	.2
245.	*	.9	.5	.4	2.3	2.3	1.9	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.8	.5	.1
250.	*	.9	.6	.3	2.2	2.2	1.9	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.9	.9	.5	.2
255.	*	.9	.6	.4	2.2	2.2	2.0	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	.8	.8	.5	.2
260.	*	1.2	.9	.8	2.3	2.3	2.1	2.0	.1	.1	.1	.1	.1	.0	.0	.0	.0	1.0	.7	.3	.1
265.	*	1.7	1.3	.8	2.5	2.3	2.1	2.0	.3	.3	.3	.3	.2	.1	.0	.0	.0	1.1	.7	.3	.1
270.	*	2.1	2.1	1.5	2.6	2.6	2.3	2.0	.7	.7	.6	.5	.5	.2	.1	.0	.0	.9	.5	.3	.2
275.	*	2.6	2.4	2.3	2.9	2.7	2.3	2.1	.9	.9	1.0	.9	.8	.3	.2	.0	.0	1.0	.5	.3	.5
280.	*	3.1	2.8	2.8	3.4	2.8	2.5	2.0	1.4	1.4	1.3	1.4	1.2	.7	.3	.0	.0	1.0	.5	.3	.5
285.	*	3.5	3.1	2.9	3.6	3.0	2.7	2.0	1.7	1.6	1.7	1.9	1.7	1.0	.7	.2	.0	1.0	.6	.4	.7
290.	*	3.6	3.3	3.5	3.8	3.4	2.8	2.2	2.1	2.0	2.1	2.0	2.0	1.3	.9	.3	.1	1.2	.7	.6	.9
295.	*	3.8	3.2	3.6	4.0	3.8	3.1	2.2	2.4	2.1	2.2	2.2	2.4	1.5	1.1	.4	.2	1.2	1.0	.9	.9
300.	*	3.6	3.2	3.6	4.1	3.8	3.2	2.3	2.5	2.4	2.3	2.6	2.6	1.7	1.4	.7	.3	1.4	1.2	1.1	1.3
305.	*	3.6	3.4	3.6	4.3	4.1	3.5	2.6	2.7	2.4	2.4	2.6	2.8	1.8	1.4	.8	.4	1.7	1.3	1.1	1.3
310.	*	3.5	3.4	3.5	4.5	4.0	3.6	2.7	2.7	2.5	2.4	2.6	2.8	1.8	1.5	.8	.6	1.7	1.2	1.0	1.2
315.	*	3.5	3.2	3.6	4.3	4.1	3.7	2.9	2.6	2.4	2.4	2.5	2.9	1.7	1.4	.9	.6	1.5	1.4	1.0	1.3
320.	*	3.6	3.3	3.5	4.3	4.4	3.9	2.7	2.5	2.7	2.3	2.6	2.8	1.8	1.5	.9	.7	1.8	1.2	1.2	1.4
325.	*	3.5	3.4	3.1	4.2	4.3	4.1	3.1	2.6	2.6	2.3	2.5	2.8	1.8	1.5	1.0	.7	2.0	1.4	1.1	1.3
330.	*	3.5	3.4	3.1	4.4	4.3	4.2	3.1	2.6	2.5	2.2	2.5	2.7	1.8	1.5	1.1	.7	2.0	1.3	1.2	1.2
335.	*	3.2	3.2	3.1	4.3	4.4	4.2	3.2	2.3	2.4	2.2	2.4	2.7	1.9	1.5	1.0	.7	2.0	1.5	1.0	1.4
340.	*	3.2	3.0	3.1	4.5	4.3	4.3	3.2	2.2	2.5	2.2	2.4	2.7	2.1	1.6	1.3	1.0	1.7	1.3	1.1	1.4
345.	*	3.2	3.0	3.1	4.5	4.5	4.4	3.4	2.1	2.6	2.2	2.4	2.7	2.0	1.7	1.3	1.0	1.9	1.3	.9	1.4
350.	*	3.1	3.1	2.8	4.4	4.6	4.4	3.5	2.5	2.5	2.1	2.4	2.8	2.1	1.9	1.3	1.0	1.8	1.0	1.0	1.4
355.	*	3.0	3.1	3.0	4.3	4.1	4.2	3.2	2.9	2.5	2.2	2.4	2.8	2.3	2.0	2.0	1.5	2.0	1.1	.8	1.4
360.	*	2.8	3.0	3.0	3.6	3.7	3.9	3.2	3.2	2.9	2.2	2.4	2.8	2.9	2.8	2.1	1.9	1.6	1.1	1.0	1.4
MAX	*	3.8	3.4	3.6	4.5	4.6	4.4	3.5	4.0	3.8	4.0	3.2	3.6	3.9	3.5	3.4	3.4	2.0	1.5	1.2	1.5
DEGR.	*	295	60	295	345	350	345	350	35	30	60	50	50	20	45	20	20	330	335	320	5

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JOB: US 6 & Federal Blvd BDAM RUN: US 6 & Federal Blvd BDAM

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 ANGLE (DEGR)	*	CONCENTRATION (PPM) REC41	REC42	REC43	REC44	REC45
0.	*	1.7	1.3	2.1	1.1	1.0
5.	*	1.6	1.3	2.1	1.0	1.0
10.	*	1.5	1.3	1.6	.8	1.0
15.	*	1.5	1.1	1.4	.9	1.0
20.	*	1.5	.8	1.2	1.0	1.0
25.	*	1.4	.7	1.0	.9	.7
30.	*	1.2	.4	1.0	.9	.6
35.	*	1.0	.4	1.0	.8	.5
40.	*	.8	.2	.9	.6	.5
45.	*	.5	.2	.9	.4	.3

50.	*	.4	.2	.7	.4	.3
55.	*	.3	.2	.6	.3	.1
60.	*	.2	.2	.6	.2	.1
65.	*	.2	.2	.3	.2	.1
70.	*	.2	.1	.3	.2	.1
75.	*	.2	.1	.2	.2	.0
80.	*	.1	.1	.1	.1	.0
85.	*	.1	.0	.1	.1	.0
90.	*	.0	.0	.1	.1	.0
95.	*	.0	.0	.1	.0	.0
100.	*	.0	.0	.0	.0	.0
105.	*	.0	.0	.0	.0	.0
110.	*	.0	.0	.0	.0	.0
115.	*	.0	.0	.0	.0	.0
120.	*	.0	.0	.0	.0	.0
125.	*	.0	.0	.0	.0	.0
130.	*	.0	.0	.0	.0	.0
135.	*	.0	.0	.0	.0	.0
140.	*	.0	.0	.0	.0	.0
145.	*	.0	.0	.0	.0	.0
150.	*	.0	.0	.0	.0	.0
155.	*	.0	.0	.0	.0	.0
160.	*	.0	.0	.0	.0	.0
165.	*	.0	.0	.1	.0	.0
170.	*	.0	.0	.2	.0	.0
175.	*	.0	.0	.3	.0	.0
180.	*	.0	.0	.6	.0	.0
185.	*	.0	.0	.8	.0	.0
190.	*	.0	.0	1.1	.0	.0
195.	*	.0	.0	1.4	.0	.0
200.	*	.0	.0	1.7	.0	.0
205.	*	.0	.0	1.8	.2	.0

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JOB: US 6 & Federal Blvd BDAM RUN: US 6 & Federal Blvd BDAM

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC41	REC42	REC43	REC44	REC45
210.	*	.0	.0	1.8	.2	.0
215.	*	.0	.0	1.9	.3	.0
220.	*	.1	.0	1.8	.3	.0
225.	*	.2	.0	1.9	.3	.0
230.	*	.2	.1	1.8	.4	.2
235.	*	.1	.2	1.7	.5	.2
240.	*	.2	.2	1.7	.5	.2
245.	*	.2	.1	1.7	.5	.3
250.	*	.1	.2	1.8	.5	.3
255.	*	.1	.2	1.7	.6	.4
260.	*	.2	.1	1.5	.6	.4
265.	*	.3	.1	1.4	.7	.5
270.	*	.4	.1	1.4	.7	.5
275.	*	.5	.5	1.4	.7	.6
280.	*	.8	.5	1.4	.8	.5
285.	*	1.1	.7	1.5	.7	.6
290.	*	1.5	.9	1.4	.8	.6
295.	*	1.6	1.0	1.7	.9	.7
300.	*	1.6	1.1	1.7	1.2	.9
305.	*	1.6	1.0	2.0	1.3	1.0
310.	*	1.6	1.3	2.2	1.5	1.0
315.	*	1.6	1.3	2.3	1.4	.8
320.	*	1.7	1.3	2.3	1.4	1.0
325.	*	1.5	1.2	2.3	1.3	1.1
330.	*	1.8	1.5	2.7	1.4	1.2
335.	*	1.6	1.3	2.6	1.6	1.1
340.	*	1.6	1.4	2.8	1.4	1.3
345.	*	1.6	1.2	2.6	1.1	1.0
350.	*	1.7	1.3	2.6	1.2	1.0
355.	*	1.6	1.4	2.5	1.0	.9
360.	*	1.7	1.3	2.1	1.1	1.0
MAX	*	1.8	1.5	2.8	1.6	1.3
DEGR.	*	330	330	340	335	340

THE HIGHEST CONCENTRATION IS 5.90 PPM AT 245 DEGREES FROM REC5 .
THE 2ND HIGHEST CONCENTRATION IS 5.70 PPM AT 240 DEGREES FROM REC3 .
THE 3RD HIGHEST CONCENTRATION IS 5.60 PPM AT 250 DEGREES FROM REC4 .

```
US 6 & Federal Blvd BDPM               60.0321.0.0000.000450.30480000    1    1
NE COR                   2820.     2000.      6.0
NE E80                   2858.     1993.      6.0
NE E160                  2936.     1990.      6.0
NE EMID                  3094.     1984.      6.0
NE EMID                  3263.     1974.      6.0
NE N80                   2780.     2065.      6.0
NE N160                  2775.     2145.      6.0
NE NMID                  2767.     2308.      6.0
NE NMID                  2760.     2447.      6.0
NW COR                   2604.     2008.      6.0
NW W80                   2545.     1980.      6.0
NW W160                  2468.     1971.      6.0
NW WMID                  2307.     1951.      6.0
NW WMID                  2083.     1923.      6.0
NW N80                   2614.     2051.      6.0
NW N160                  2614.     2134.      6.0
NW NMID                  2615.     2294.      6.0
NW NMID                  2625.     2443.      6.0
SE COR                   2805.     1622.      6.0
SE E80                   2848.     1638.      6.0
SE E160                  2925.     1640.      6.0
SE EMID                  3086.     1640.      6.0
SE EMID                  3269.     1636.      6.0
SE S80                   2776.     1564.      6.0
SE S160                  2774.     1489.      6.0
SE SMID                  2770.     1332.      6.0
SE SMID                  2766.     1160.      6.0
SW COR                   2628.     1611.      6.0
SW W80                   2558.     1619.      6.0
SW W160                  2478.     1626.      6.0
SW WMID                  2316.     1640.      6.0
SW WMID                  2086.     1660.      6.0
SW S80                   2633.     1542.      6.0
SW S160                  2633.     1479.      6.0
SW SMID                  2640.     1301.      6.0
SW SMID                  2640.     1155.      6.0
5th Ave                  2837.     1130.      6.0
5th Ave                  2995.     1130.      6.0
5th Ave                  3229.     1143.      6.0
5th Ave                  3414.     1311.      6.0
5th Ave                  3442.     1434.      6.0
5th Ave                  3492.     1291.      6.0
5th Ave                  2779.     1035.      6.0
5th Ave                  2990.     1043.      6.0
5th Ave                  3248.     1064.      6.0
US 6 & Federal Blvd BDPM             75  1   0
  1
EB        EBRAMP    AG  1548.  1747.  1860.  1721.     51013.9  0. 32.   39.
  1
EB        EBRAMP    AG  1861.  1721.  2127.  1699.     51013.9  0. 32.   39.
  1
EB        EBRAMP    AG  2129.  1700.  2697.  1665.     51013.9  0. 44.   39.
  2
EB        EBRamp    AG  2612.  1670.  2358.  1686.      0. 24.   2
        96        69       2.0  510  73.65 1588 1 3
  1
EBDP      EBRAMP    AG  2701.  1666.  3149.  1674.    116513.7  0. 44.   26.
  1
EBDP      EBRAMP    AG  3158.  1674.  3711.  1644.     94013.7  0. 44.   26.
  1
toUS6     EBRAMP    AG  3139.  1674.  3251.  1734.     40013.7  0. 44.   26.
  1
toUS6     EBRAMP    AG  3251.  1734.  3346.  1754.     40013.7  0. 44.   26.
  1
toUS6     EBRAMP    AG  3346.  1754.  3709.  1732.     40013.7  0. 44.   26.
  1
NB        EBRAMP    AG  2725.  1077.  2742.  1358.    313513.6  0. 56.   34.
  1
NB        EBRAMP    AG  2743.  1358.  2746.  1670.    313513.6  0. 56.   34.
  2
NB        EBRamp    AG  2745.  1609.  2744.  1480.      0. 36.   3
        96        33       2.0 3135  73.65 1604 1 3
  1
SBL       EBRAMP    AG  2691.  1963.  2695.  1665.     22013.6  12 44.   34.
  2
SBL       EBRamp    AG  2694.  1744.  2693.  1827.     12. 24.   2
        96        33       2.0  220  73.65  117 1 3
  1
SBT       EBRAMP    AG  2666.  1963.  2666.  1667.    305013.6 12. 56.   34.
  2
SBT       EBRamp    AG  2666.  1739.  2666.  1874.     12. 36.   3
        96        33       2.0 3050  73.65 1679 1 3
  1
NBT       WBRAMP    AG  2746.  1670.  2746.  1957.    210013.6 12. 56.   34.
  2
NBT       WBRamp    AG  2746.  1904.  2746.  1786.     12. 36.   3
       100        33       2.0 2100  73.65 1679 1 3
  1
NBL       WBRAMP    AG  2745.  1667.  2717.  1721.     34013.6 12. 56.   34.
  1
NBL       WBRAMP    AG  2717.  1721.  2717.  1964.     34013.6 12. 56.   34.
  2
NBL       WBRamp    AG  2717.  1896.  2717.  1820.     12. 24.   2
       100        33       2.0  340  73.65  124 1 3
  1
NBdp      WBRAMP    AG  2745.  1958.  2737.  2215.    231513.6  0. 56.   34.
  1
NBdp      WBRAMP    AG  2737.  2215.  2705.  2405.    231513.6  0. 56.   34.
  1
NBdp      WBRAMP    AG  2705.  2405.  2705.  2664.    231513.6  0. 56.   34.
  1
SB        WBRAMP    AG  2664.  2662.  2668.  2311.    322513.6  0. 56.   34.
  1
SBT       WBRAMP    AG  2668.  2309.  2668.  1962.    270013.6  0. 56.   34.
  2
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SBT       WBRamp    AG  2668.  1995.  2668.  2232.     12. 36.   3
       100        45       2.0 2700  73.65 1679 1 3
  1
SBL       WBRAMP    AG  2668.  2309.  2690.  2228.     52513.6  0. 32.   34.
  1
SBL       WBRAMP    AG  2690.  2228.  2693.  2123.     52513.6  0. 32.   34.
  1
SBL       WBRAMP    AG  2693.  2123.  2691.  1963.     52513.6  0. 44.   34.
  2
SBL       WBRamp    AG  2691.  1998.  2692.  2101.     12. 24.   2
       100        45       2.0  525  73.65 1568 1 3
  1
WB        WBRAMP    AG  3700.  1882.  3373.  1927.    109513.9  0. 56.   39.
  1
WB        WBRAMP    AG  3373.  1927.  3171.  1946.    109513.9  0. 56.   39.
  1
WB        WBRAMP    AG  3171.  1946.  2705.  1961.    109513.9  0. 56.   39.
  2
WB        WBRamp    AG  2791.  1958.  3041.  1950.     12. 36.   3
       100        73       2.0 1095  73.65 1654 1 3
  1
WBDP      WBRAMP    AG  2705.  1961.  2593.  1961.    119513.7  0. 44.   26.
  1
WBDP      WBRAMP    AG  2593.  1961.  1725.  1858.    119513.7  0. 44.   26.
  1
EB        US6       AG  1715.  1751.  2153.  1767.    820013.1  0. 68.   35.
  1
EB        US6       AG  2152.  1767.  2330.  1802.    820013.1  0. 56.   35.
  1
EB        US6       AG  2330.  1802.  2845.  1810.    820013.1  0. 56.   35.
  1
EB        US6       AG  2845.  1810.  3347.  1791.    820013.1  0. 56.   35.
  1
EB        US6       AG  3347.  1791.  3683.  1768.    820013.1  0. 56.   35.
  1
EB        I-25      AG  2155.  1768.  2541.  1761.     94013.1  0. 56.   35.
  1
EB        I-25      AG  2541.  1761.  2976.  1746.     94013.1  0. 56.   35.
  1
EB        I-25      AG  2976.  1746.  3665.  1697.     94013.1  0. 56.   35.
  1
WB        US6       AG  3696.  1836.  3115.  1870.    855013.1  0. 68.   35.
  1
WB        US6       AG  3115.  1870.  2798.  1878.    855013.1  0. 68.   35.
  1
WB        US6       AG  2798.  1878.  2469.  1863.    855013.1  0. 68.   35.
  1
WB        US6       AG  2469.  1863.  1718.  1812.    855013.1  0. 68.   35.
  1
NB        5Ave      AG  2708.   665.  2725.  1075.    284513.0  0. 56.   35.
  2
NB        5Ave      AG  2723.  1025.  2717.   887.     12. 36.   3
       100        37       2.0 2845  73.65 1675 1 3
  1
SB        5Ave      AG  2667.  1668.  2681.  1291.    330013.0  0. 56.   35.
  1
SBL       5Ave      AG  2681.  1291.  2702.  1236.     10013.0  0. 32.   35.
  1
SBL       5Ave      AG  2702.  1236.  2702.  1086.     10013.0  0. 32.   35.
  2
SBL       5Ave      AG  2702.  1109.  2702.  1185.      0. 12.   1
       100        28       2.0  100  73.65  112 1 3
  1
SBT       5Ave      AG  2680.  1291.  2676.  1082.    320013.0  0. 56.   35.
  2
SBT       5Ave      AG  2677.  1127.  2679.  1250.      0. 36.   3
       100        28       2.0 3200  73.65 1679 1 3
  1
SBdp      5Ave      AG  2676.  1081.  2667.   855.    328513.0  0. 56.   35.
  1
WB        5Ave      AG  3398.  1229.  3338.  1182.     42513.7  0. 32.   25.
  1
WB        5Ave      AG  3338.  1182.  3301.  1150.     42513.7  0. 32.   25.
  1
WB        5Ave      AG  3301.  1150.  3253.  1120.     42513.7  0. 32.   25.
  1
WB        5Ave      AG  3253.  1120.  3190.  1100.     42513.7  0. 32.   25.
  1
WB        5Ave      AG  3192.  1101.  3130.  1093.     42513.7  0. 32.   25.
  1
WBR       5Ave      AG  3129.  1093.  2788.  1093.     34013.7  0. 32.   25.
  2
WBR       5Ave      AG  2803.  1093.  2884.  1093.      0. 12.   1
       100        76       2.0  340  73.65 1568 1 3
  1
WBR       5Ave      AG  2788.  1093.  2730.  1151.     34013.7  0. 32.   25.
  1
WBL       5Ave      AG  3131.  1093.  2993.  1081.      8513.7  0. 32.   25.
  1
WBL       5Ave      AG  2993.  1081.  2727.  1081.      8513.7  0. 32.   25.
  2
WBL       5Ave      AG  2805.  1081.  2903.  1081.      0. 12.   1
       100        80       2.0   85  73.65 1752 1 3
  1
WBdp      5Ave      AG  2724.  1067.  3152.  1069.     14513.7  0. 32.   25.
  1
WBdp      5Ave      AG  3152.  1069.  3210.  1076.     14513.7  0. 32.   25.
  1
WBdp      5Ave      AG  3210.  1076.  3278.  1103.     14513.7  0. 32.   25.
  1
WBdp      5Ave      AG  3278.  1103.  3334.  1142.     14513.7  0. 32.   25.
  1
WBdp      5Ave      AG  3334.  1142.  3364.  1174.     14513.7  0. 32.   25.
  1
WBdp      5Ave      AG  3364.  1174.  3426.  1210.     14513.7  0. 32.   25.
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: US 6 & Federal Blvd BDPM RUN: US 6 & Federal Blvd BDPM
DATE: 07/23/2012 TIME: 10:01:52.08

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		X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. EB	EBRAMP	1548.0	1747.0	1860.0	1721.0	313.	95.	AG	510.	13.9	.0	32.0		
2. EB	EBRAMP	1861.0	1721.0	2127.0	1699.0	267.	95.	AG	510.	13.9	.0	32.0		
3. EB	EBRAMP	2129.0	1700.0	2697.0	1665.0	569.	94.	AG	510.	13.9	.0	44.0		
4. EB	EBRamp	2612.0	1670.0	2516.0	1676.0	96.	274.	AG	284.	100.0	.0	24.0	.67	4.9
5. EBDP	EBRAMP	2701.0	1666.0	3149.0	1674.0	448.	89.	AG	1165.	13.7	.0	44.0		
6. EBDP	EBRAMP	3158.0	1674.0	3711.0	1644.0	554.	93.	AG	940.	13.7	.0	44.0		
7. toUS6	EBRAMP	3139.0	1674.0	3251.0	1734.0	127.	62.	AG	400.	13.7	.0	44.0		
8. toUS6	EBRAMP	3251.0	1734.0	3346.0	1754.0	97.	78.	AG	400.	13.7	.0	44.0		
9. toUS6	EBRAMP	3346.0	1754.0	3709.0	1732.0	364.	93.	AG	400.	13.7	.0	44.0		
10. NB	EBRAMP	2725.0	1077.0	2742.0	1358.0	282.	3.	AG	3135.	13.6	.0	56.0		
11. NB	EBRAMP	2743.0	1358.0	2746.0	1670.0	312.	1.	AG	3135.	13.6	.0	56.0		
12. NB	EBRamp	2745.0	1609.0	2737.7	667.3	942.	180.	AG	204.	100.0	.0	36.0	1.06	47.8
13. SBL	EBRAMP	2691.0	1963.0	2695.0	1665.0	298.	179.	AG	220.	13.6	12.0	44.0		
14. SBL	EBRamp	2694.0	1744.0	2688.4	2211.8	468.	359.	AG	136.	100.0	12.0	24.0	1.55	23.8
15. SBT	EBRAMP	2666.0	1963.0	2666.0	1667.0	296.	180.	AG	3050.	13.6	12.0	56.0		
16. SBT	EBRamp	2666.0	1739.0	2666.0	2052.2	313.	360.	AG	204.	100.0	12.0	36.0	.99	15.9
17. NBT	WBRAMP	2746.0	1670.0	2746.0	1957.0	287.	360.	AG	2100.	13.6	12.0	56.0		
18. NBT	WBRamp	2746.0	1904.0	2746.0	1777.7	126.	180.	AG	196.	100.0	12.0	36.0	.66	6.4
19. NBL	WBRAMP	2745.0	1667.0	2717.0	1721.0	61.	333.	AG	340.	13.6	12.0	56.0		
20. NBL	WBRAMP	2717.0	1721.0	2717.0	1964.0	243.	360.	AG	340.	13.6	12.0	56.0		
21. NBL	WBRamp	2717.0	1896.0	2717.0	865.3	1031.	180.	AG	130.	100.0	12.0	24.0	2.18	52.4
22. NBdp	WBRAMP	2745.0	1958.0	2737.0	2215.0	257.	358.	AG	2315.	13.6	.0	56.0		
23. NBdp	WBRAMP	2737.0	2215.0	2705.0	2405.0	193.	350.	AG	2315.	13.6	.0	56.0		
24. NBdp	WBRAMP	2705.0	2405.0	2705.0	2664.0	259.	360.	AG	2315.	13.6	.0	56.0		
25. SB	WBRAMP	2664.0	2662.0	2668.0	2311.0	351.	179.	AG	3225.	13.6	.0	56.0		
26. SBT	WBRAMP	2668.0	2309.0	2668.0	1962.0	347.	180.	AG	2700.	13.6	.0	56.0		
27. SBT	WBRamp	2668.0	1995.0	2668.0	2799.5	805.	360.	AG	267.	100.0	12.0	36.0	1.05	40.9
28. SBL	WBRAMP	2668.0	2309.0	2690.0	2228.0	84.	165.	AG	525.	13.6	.0	32.0		
29. SBL	WBRAMP	2690.0	2228.0	2693.0	2123.0	105.	178.	AG	525.	13.6	.0	32.0		
30. SBL	WBRAMP	2693.0	2123.0	2691.0	1963.0	160.	181.	AG	525.	13.6	.0	44.0		
31. SBL	WBRamp	2691.0	1998.0	2691.6	2062.5	64.	1.	AG	178.	100.0	12.0	24.0	.33	3.3
32. WB	WBRAMP	3700.0	1882.0	3373.0	1927.0	330.	278.	AG	1095.	13.9	.0	56.0		
33. WB	WBRAMP	3373.0	1927.0	3171.0	1946.0	203.	275.	AG	1095.	13.9	.0	56.0		
34. WB	WBRAMP	3171.0	1946.0	2705.0	1961.0	466.	272.	AG	1095.	13.9	.0	56.0		
35. WB	WBRamp	2791.0	1958.0	3003.2	1951.2	212.	92.	AG	433.	100.0	12.0	36.0	.96	10.8
36. WBDP	WBRAMP	2705.0	1961.0	2593.0	1961.0	112.	270.	AG	1195.	13.7	.0	44.0		
37. WBDP	WBRAMP	2593.0	1961.0	1725.0	1858.0	874.	263.	AG	1195.	13.7	.0	44.0		
38. EB	US6	1715.0	1751.0	2153.0	1767.0	438.	88.	AG	8200.	13.1	.0	68.0		
39. EB	US6	2152.0	1767.0	2330.0	1802.0	181.	79.	AG	8200.	13.1	.0	56.0		
40. EB	US6	2330.0	1802.0	2845.0	1810.0	515.	89.	AG	8200.	13.1	.0	56.0		
41. EB	US6	2845.0	1810.0	3347.0	1791.0	502.	92.	AG	8200.	13.1	.0	56.0		
42. EB	US6	3347.0	1791.0	3683.0	1768.0	337.	94.	AG	8200.	13.1	.0	56.0		
43. EB	I-25	2155.0	1768.0	2541.0	1761.0	386.	91.	AG	940.	13.1	.0	56.0		
44. EB	I-25	2541.0	1761.0	2976.0	1746.0	435.	92.	AG	940.	13.1	.0	56.0		

1 PAGE 2

JOB: US 6 & Federal Blvd BDPM RUN: US 6 & Federal Blvd BDPM
DATE: 07/23/2012 TIME: 10:01:52.08

LINK VARIABLES

LINK DESCRIPTION		X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
45. EB	I-25	2976.0	1746.0	3665.0	1697.0	691.	94.	AG	940.	13.1	.0	56.0		
46. WB	US6	3696.0	1836.0	3115.0	1870.0	582.	273.	AG	8550.	13.1	.0	68.0		
47. WB	US6	3115.0	1870.0	2798.0	1878.0	317.	271.	AG	8550.	13.1	.0	68.0		
48. WB	US6	2798.0	1878.0	2469.0	1863.0	329.	267.	AG	8550.	13.1	.0	68.0		
49. WB	US6	2469.0	1863.0	1718.0	1812.0	753.	266.	AG	8550.	13.1	.0	68.0		
50. NB	5Ave	2708.0	665.0	2725.0	1075.0	410.	2.	AG	2845.	13.0	.0	56.0		
51. NB	5Ave	2723.0	1025.0	2710.8	743.5	282.	182.	AG	219.	100.0	12.0	36.0	.96	14.3
52. SB	5Ave	2667.0	1668.0	2681.0	1291.0	377.	178.	AG	3300.	13.0	.0	56.0		
53. SBL	5Ave	2681.0	1291.0	2702.0	1236.0	59.	159.	AG	100.	13.0	.0	32.0		
54. SBL	5Ave	2702.0	1236.0	2702.0	1086.0	150.	180.	AG	100.	13.0	.0	32.0		
55. SBL	5Ave	2702.0	1109.0	2702.0	1416.9	308.	360.	AG	55.	100.0	.0	12.0	1.32	15.6
56. SBT	5Ave	2680.0	1291.0	2676.0	1082.0	209.	181.	AG	3200.	13.0	.0	56.0		
57. SBT	5Ave	2677.0	1127.0	2680.7	1353.4	226.	1.	AG	166.	100.0	.0	36.0	.93	11.5
58. SBdp	5Ave	2676.0	1081.0	2667.0	855.0	226.	182.	AG	3285.	13.0	.0	56.0		
59. WB	5Ave	3398.0	1229.0	3338.0	1182.0	76.	232.	AG	425.	13.7	.0	32.0		
60. WB	5Ave	3338.0	1182.0	3301.0	1150.0	49.	229.	AG	425.	13.7	.0	32.0		
61. WB	5Ave	3301.0	1150.0	3253.0	1120.0	57.	238.	AG	425.	13.7	.0	32.0		
62. WB	5Ave	3253.0	1120.0	3190.0	1100.0	66.	252.	AG	425.	13.7	.0	32.0		
63. WB	5Ave	3192.0	1101.0	3130.0	1093.0	63.	263.	AG	425.	13.7	.0	32.0		
64. WBR	5Ave	3129.0	1093.0	2788.0	1093.0	341.	270.	AG	340.	13.7	.0	32.0		
65. WBR	5Ave	2803.0	1093.0	3303.7	1093.0	501.	90.	AG	150.	100.0	.0	12.0	1.09	25.4
66. WBR	5Ave	2788.0	1093.0	2730.0	1151.0	82.	315.	AG	340.	13.7	.0	32.0		
67. WBL	5Ave	3131.0	1093.0	2993.0	1081.0	139.	265.	AG	85.	13.7	.0	32.0		
68. WBL	5Ave	2993.0	1081.0	2727.0	1081.0	266.	270.	AG	85.	13.7	.0	32.0		
69. WBL	5Ave	2805.0	1081.0	2842.2	1081.0	37.	90.	AG	158.	100.0	.0	12.0	.30	1.9
70. WBdp	5Ave	2724.0	1067.0	3152.0	1069.0	428.	90.	AG	145.	13.7	.0	32.0		
71. WBdp	5Ave	3152.0	1069.0	3210.0	1076.0	58.	83.	AG	145.	13.7	.0	32.0		
72. WBdp	5Ave	3210.0	1076.0	3278.0	1103.0	73.	68.	AG	145.	13.7	.0	32.0		
73. WBdp	5Ave	3278.0	1103.0	3334.0	1142.0	68.	55.	AG	145.	13.7	.0	32.0		
74. WBdp	5Ave	3334.0	1142.0	3364.0	1174.0	44.	43.	AG	145.	13.7	.0	32.0		
75. WBdp	5Ave	3364.0	1174.0	3426.0	1210.0	72.	60.	AG	145.	13.7	.0	32.0		

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JOB: US 6 & Federal Blvd BDPM RUN: US 6 & Federal Blvd BDPM
DATE: 07/23/2012 TIME: 10:01:52.08

ADDITIONAL QUEUE LINK PARAMETERS

LINK DESCRIPTION		CYCLE LENGTH (SEC)	RED TIME (SEC)	CLEARANCE LOST TIME (SEC)	APPROACH VOL (VPH)	SATURATION FLOW RATE (VPH)	IDLE EM FAC (gm/hr)	SIGNAL TYPE	ARRIVAL RATE
4. EB	EBRamp	96	69	2.0	510	1588	73.65	1	3
12. NB	EBRamp	96	33	2.0	3135	1604	73.65	1	3
14. SBL	EBRamp	96	33	2.0	220	117	73.65	1	3
16. SBT	EBRamp	96	33	2.0	3050	1679	73.65	1	3
18. NBT	WBRamp	100	33	2.0	2100	1679	73.65	1	3
21. NBL	WBRamp	100	33	2.0	340	124	73.65	1	3
27. SBT	WBRamp	100	45	2.0	2700	1679	73.65	1	3
31. SBL	WBRamp	100	45	2.0	525	1568	73.65	1	3
35. WB	WBRamp	100	73	2.0	1095	1654	73.65	1	3
51. NB	5Ave	100	37	2.0	2845	1675	73.65	1	3
55. SBL	5Ave	100	28	2.0	100	112	73.65	1	3
57. SBT	5Ave	100	28	2.0	3200	1679	73.65	1	3
65. WBR	5Ave	100	76	2.0	340	1568	73.65	1	3
69. WBL	5Ave	100	80	2.0	85	1752	73.65	1	3

RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
1. NE COR	2820.0	2000.0	6.0
2. NE E80	2858.0	1993.0	6.0
3. NE E160	2936.0	1990.0	6.0
4. NE EMID	3094.0	1984.0	6.0
5. NE EMID	3263.0	1974.0	6.0
6. NE N80	2780.0	2065.0	6.0
7. NE N160	2775.0	2145.0	6.0
8. NE NMID	2767.0	2308.0	6.0
9. NE NMID	2760.0	2447.0	6.0
10. NW COR	2604.0	2008.0	6.0
11. NW W80	2545.0	1980.0	6.0
12. NW W160	2468.0	1971.0	6.0
13. NW WMID	2307.0	1951.0	6.0
14. NW WMID	2083.0	1923.0	6.0
15. NW N80	2614.0	2051.0	6.0
16. NW N160	2614.0	2134.0	6.0
17. NW NMID	2615.0	2294.0	6.0
18. NW NMID	2625.0	2443.0	6.0
19. SE COR	2805.0	1622.0	6.0
20. SE E80	2848.0	1638.0	6.0
21. SE E160	2925.0	1640.0	6.0
22. SE EMID	3086.0	1640.0	6.0
23. SE EMID	3269.0	1636.0	6.0
24. SE S80	2776.0	1564.0	6.0
25. SE S160	2774.0	1489.0	6.0
26. SE SMID	2770.0	1332.0	6.0
27. SE SMID	2766.0	1160.0	6.0
28. SW COR	2628.0	1611.0	6.0
29. SW W80	2558.0	1619.0	6.0
30. SW W160	2478.0	1626.0	6.0
31. SW WMID	2316.0	1640.0	6.0

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RECEPTOR LOCATIONS

RECEPTOR	X (FT)	Y (FT)	Z (FT)
32. SW WMID	2086.0	1660.0	6.0
33. SW S80	2633.0	1542.0	6.0
34. SW S160	2633.0	1479.0	6.0
35. SW SMID	2640.0	1301.0	6.0
36. SW SMID	2640.0	1155.0	6.0
37. 5th Ave	2837.0	1130.0	6.0
38. 5th Ave	2995.0	1130.0	6.0
39. 5th Ave	3229.0	1143.0	6.0
40. 5th Ave	3414.0	1311.0	6.0
41. 5th Ave	3442.0	1434.0	6.0
42. 5th Ave	3492.0	1291.0	6.0
43. 5th Ave	2779.0	1035.0	6.0
44. 5th Ave	2990.0	1043.0	6.0
45. 5th Ave	3248.0	1064.0	6.0

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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 ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
0.	.5	.2	.0	.0	.0	1.0	1.0	.6	.4	1.1	.2	.1	.0	.0	1.2	1.1	1.0	1.1	3.6	3.6
5.	.1	.0	.0	.0	.0	.7	.7	.4	.1	1.3	.6	.2	.0	.0	1.5	1.6	1.4	1.5	3.4	3.1
10.	.0	.0	.0	.0	.0	.4	.3	.1	.1	1.5	.9	.3	.0	.0	1.8	1.8	1.8	1.9	3.1	2.9
15.	.0	.0	.0	.0	.0	.2	.2	.0	.0	2.0	1.0	.6	.1	.0	2.1	2.1	2.0	2.2	2.8	2.9
20.	.0	.0	.0	.0	.0	.1	.1	.0	.0	2.0	1.0	.7	.2	.0	2.3	2.2	2.2	2.5	2.8	2.9
25.	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	1.3	.7	.3	.0	2.3	2.2	2.3	2.6	2.7	2.9

30.	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	1.3	.8	.4	.1	2.4	2.2	2.3	2.6	2.6	3.0
35.	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.0	1.2	.8	.5	.2	2.4	2.2	2.2	2.6	2.8	2.9
40.	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.1	1.2	.8	.7	.4	2.1	2.1	2.2	2.5	2.7	2.8
45.	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.1	1.2	.9	.7	.4	2.2	2.0	2.1	2.5	2.7	3.1
50.	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.1	1.4	.9	.6	.5	2.1	1.9	2.0	2.3	2.7	3.0
55.	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	1.5	1.0	.7	.5	2.1	2.0	2.0	2.3	2.8	3.2
60.	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	1.6	.9	.6	.6	2.0	1.9	1.9	2.3	2.8	3.0
65.	.0	.0	.0	.0	.0	.0	.0	.0	.0	2.2	1.7	1.0	.6	.5	2.0	2.0	1.8	2.2	2.5	2.9
70.	.0	.1	.1	.0	.0	.0	.0	.0	.0	2.4	1.8	1.1	.8	.9	2.1	1.9	1.9	2.2	2.4	2.9
75.	.1	.1	.1	.0	.0	.0	.0	.0	.0	2.5	2.0	1.6	1.4	1.4	2.1	1.9	1.9	2.2	2.1	2.6
80.	.3	.3	.2	.3	.2	.0	.0	.0	.0	2.7	2.5	2.1	2.1	2.2	2.2	1.9	1.7	2.1	1.7	2.2
85.	.8	.8	.7	.5	.3	.1	.0	.0	.0	3.0	3.1	2.8	3.0	3.3	2.4	2.0	1.7	2.1	1.3	1.6
90.	1.4	1.5	1.2	.9	.4	.3	.1	.0	.0	3.3	3.7	3.7	3.7	4.3	3.0	2.0	1.8	2.2	.9	1.1
95.	2.0	2.3	1.9	1.4	.9	.6	.3	.0	.0	4.3	4.3	4.2	4.7	4.9	3.4	2.3	1.7	2.2	.6	.8
100.	2.9	3.1	2.5	1.9	1.4	1.2	.4	.1	.0	4.8	4.8	4.9	5.0	5.4	4.2	2.8	1.9	2.2	.2	.4
105.	3.6	3.7	3.2	2.6	1.9	1.7	.8	.2	.0	5.4	5.6	5.3	5.3	5.7	4.7	3.2	2.2	2.3	.0	.1
110.	4.0	4.4	3.9	3.0	2.4	2.1	1.1	.3	.1	5.6	5.6	5.7	5.3	5.6	5.1	3.5	2.4	2.3	.0	.1
115.	4.5	4.7	4.2	3.6	2.8	2.6	1.7	.5	.3	5.6	5.7	5.7	5.3	5.0	5.4	4.0	2.6	2.5	.0	.0
120.	4.7	4.9	4.3	3.7	3.1	3.0	2.0	.7	.3	5.7	5.6	5.4	5.2	4.9	5.4	4.3	3.2	2.8	.0	.0
125.	4.6	4.8	4.4	3.9	3.5	3.2	2.0	1.0	.6	5.4	5.1	5.1	4.9	4.6	5.5	4.6	3.2	3.1	.0	.0
130.	4.6	4.8	4.4	3.7	3.6	3.0	2.1	1.1	.7	5.3	5.1	4.9	4.7	4.8	5.3	4.8	3.5	3.2	.0	.0
135.	4.4	4.5	4.5	3.5	3.7	3.0	2.4	1.5	.9	5.4	5.1	4.8	4.7	4.5	5.3	4.5	3.5	3.6	.0	.0
140.	4.3	4.6	4.5	3.6	3.6	3.0	2.3	1.5	1.0	5.2	5.0	4.6	4.5	4.3	5.3	4.5	3.9	3.9	.0	.0
145.	4.0	4.3	4.3	3.3	3.5	2.9	2.2	1.5	1.0	5.2	4.9	4.5	4.4	4.2	5.3	4.8	3.6	3.9	.0	.0
150.	4.0	4.2	4.3	3.3	3.4	2.8	2.3	1.4	1.2	5.6	4.9	4.3	4.5	4.1	5.0	5.0	3.8	4.0	.0	.0
155.	3.9	4.2	4.1	3.3	3.3	2.9	2.3	1.6	1.2	5.3	4.6	4.4	4.2	3.9	5.2	5.0	4.0	4.1	.0	.0
160.	3.9	4.0	4.1	3.3	3.3	3.0	2.4	1.6	1.4	5.1	4.5	4.5	4.3	3.8	5.0	4.8	4.1	4.1	.0	.0
165.	4.0	4.0	4.0	3.1	3.3	2.9	2.5	2.0	1.3	4.9	4.7	4.4	3.8	3.7	4.9	4.4	3.9	4.5	.1	.0
170.	4.1	4.1	3.9	3.2	3.4	3.6	2.9	2.2	1.9	4.8	4.6	4.2	3.6	3.7	4.7	4.2	3.6	3.9	.4	.0
175.	4.6	4.4	4.0	3.2	3.3	3.9	3.4	2.8	2.6	4.7	4.4	3.8	3.7	3.7	4.5	3.9	3.3	3.8	.8	.3
180.	4.8	4.6	4.1	3.3	3.2	4.4	4.0	3.4	2.9	4.3	4.0	3.4	3.7	3.8	4.0	3.7	2.7	3.0	1.2	.4
185.	5.3	5.0	4.5	3.4	3.3	5.0	4.4	3.7	3.0	3.8	3.6	3.4	3.7	3.7	3.5	2.7	2.4	2.1	1.7	.9
190.	5.6	5.3	4.7	3.5	3.3	5.1	4.3	3.6	3.2	3.2	3.4	3.4	3.5	3.7	2.7	2.3	1.9	1.8	2.3	1.3
195.	5.4	5.4	4.9	3.5	3.2	4.8	4.3	3.6	3.0	3.0	3.3	3.5	3.6	3.8	2.4	1.8	1.6	1.4	2.5	1.5
200.	5.5	5.3	5.1	3.6	3.2	4.8	4.7	3.7	3.1	2.9	3.3	3.4	3.6	3.8	2.5	1.9	1.2	1.2	2.6	1.8
205.	5.4	5.3	5.1	3.9	3.6	4.9	4.5	3.6	3.1	3.0	3.4	3.5	3.7	3.8	2.5	1.8	1.3	1.1	2.6	1.9

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WIND ANGLE (DEGR)	CONCENTRATION (PPM) REC1	REC2	REC3	REC4	REC5	REC6	REC7	REC8	REC9	REC10	REC11	REC12	REC13	REC14	REC15	REC16	REC17	REC18	REC19	REC20
210.	5.3	5.1	5.2	3.8	3.7	4.6	4.2	3.7	3.0	3.1	3.5	3.5	3.8	3.8	2.5	1.9	1.3	1.1	2.5	1.7
215.	5.2	5.3	5.3	3.9	4.0	4.3	4.4	3.5	2.8	3.2	3.6	3.7	3.8	3.9	2.4	2.0	1.3	1.1	2.3	1.7
220.	5.1	5.4	5.2	4.2	4.0	4.4	4.5	3.5	3.0	3.1	3.7	3.8	3.9	4.0	2.7	2.1	1.2	1.0	2.1	1.7
225.	5.1	5.7	5.4	4.5	4.0	4.6	4.6	3.4	2.8	3.2	3.8	4.0	3.9	4.2	2.7	2.1	1.3	1.0	2.1	1.5
230.	5.3	5.7	5.8	4.3	4.3	4.8	4.4	3.1	2.8	3.4	3.9	4.0	4.0	4.1	2.8	2.0	1.1	.8	2.1	1.5
235.	5.2	5.9	5.7	4.3	4.1	4.9	4.0	3.0	2.7	3.4	4.0	4.2	4.0	4.0	2.8	1.9	1.0	.6	1.9	1.3
240.	5.3	5.7	5.8	5.0	4.5	4.6	4.0	2.7	2.4	3.4	4.0	4.2	3.9	3.9	2.5	1.7	.8	.3	1.9	1.3
245.	5.2	5.6	5.8	5.1	4.6	4.7	3.7	2.4	2.0	3.2	3.9	3.8	3.9	3.5	2.3	1.5	.6	.2	1.9	1.3
250.	4.8	5.4	5.7	5.3	4.5	4.1	3.3	2.3	1.9	2.9	3.8	3.7	3.5	3.1	2.1	1.1	.3	.1	1.7	1.4
255.	4.4	4.9	5.3	5.0	4.7	3.8	3.0	2.1	1.7	2.4	3.0	3.1	2.9	2.5	1.5	.7	.1	.0	1.7	1.3
260.	4.1	4.4	4.7	4.7	4.4	3.4	2.5	1.9	1.7	1.8	2.5	2.5	2.4	1.9	1.1	.5	.0	.0	1.9	1.6
265.	3.4	3.5	3.7	4.0	4.0	2.8	2.4	1.8	1.7	1.2	2.0	1.7	1.7	1.4	.6	.2	.0	.0	2.2	2.3
270.	2.8	3.0	3.0	3.1	3.2	2.6	2.1	1.7	1.7	.7	1.1	1.1	1.1	.9	.4	.1	.0	.0	2.8	2.4
275.	2.5	2.3	2.3	2.3	2.2	2.2	2.0	1.7	1.7	.3	.8	.8	.7	.6	.1	.0	.0	.0	3.1	3.2
280.	1.9	1.7	1.6	1.4	1.2	1.9	2.0	1.8	1.7	.2	.3	.3	.3	.4	.0	.0	.0	.0	3.5	3.4
285.	1.6	1.5	1.1	1.2	.9	1.8	1.8	1.7	1.7	.0	.2	.2	.2	.2	.0	.0	.0	.0	4.0	4.0
290.	1.6	1.3	1.0	.7	.5	1.9	1.8	1.8	1.7	.0	.1	.1	.1	.1	.0	.0	.0	.0	4.1	4.1
295.	1.6	1.3	.9	.6	.5	1.9	1.8	1.7	1.7	.0	.1	.1	.1	.1	.0	.0	.0	.0	4.4	4.4
300.	1.6	1.2	.9	.5	.5	2.0	2.0	1.7	1.7	.0	.1	.0	.1	.1	.0	.0	.0	.0	4.7	4.2
305.	1.5	1.1	1.0	.5	.4	2.1	2.1	1.9	1.8	.0	.0	.0	.0	.1	.0	.0	.0	.0	4.2	4.3
310.	1.5	1.0	.9	.5	.4	2.0	2.2	2.0	1.8	.0	.0	.0	.0	.1	.0	.0	.0	.0	4.2	4.2
315.	1.4	1.2	.8	.6	.3	2.1	2.3	2.1	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.3	4.3
320.	1.6	1.2	.9	.5	.3	2.3	2.2	2.0	1.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.5	4.3
325.	1.6	1.3	.8	.4	.2	2.3	2.3	2.1	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.8	4.1
330.	1.6	1.2	.8	.3	.0	2.4	2.4	2.1	1.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	4.6	4.3
335.	1.6	1.0	.6	.3	.0	2.3	2.4	1.9	1.6	.0	.0	.0	.0	.0	.0	.0	.0	.1	4.6	4.3
340.	1.5	1.0	.5	.0	.0	2.3	2.4	1.7	1.4	.0	.0	.0	.0	.0	.0	.0	.1	.1	4.7	4.0
345.	1.2	.9	.4	.0	.0	2.0	2.1	1.5	1.2	.2	.0	.0	.0	.0	.3	.2	.2	.3	4.4	4.2
350.	1.0	.6	.3	.0	.0	1.9	1.8	1.1	.9	.3	.0	.0	.0	.0	.5	.4	.3	.4	4.7	4.1
355.	.6	.4	.0	.0	.0	1.4	1.4	.8	.5	.7	.2	.0	.0	.0	.8	.7	.7	.7	4.2	3.8
360.	.5	.2	.0	.0	.0	1.0	1.0	.6	.4	1.1	.2	.1	.0	.0	1.2	1.1	1.0	1.1	3.6	3.6
MAX	5.6	5.9	5.8	5.3	4.7	5.1	4.7	3.7	3.2	5.7	5.7	5.7	5.3	5.7	5.5	5.0	4.1	4.5	4.8	4.4
DEGR.	190	235	230	250	255	190	200	210	190	120	115	110	105	105	125	150	160	165	325	295

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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 ANGLE (DEGR)	CONCENTRATION (PPM) REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
0.	3.1	2.9	2.9	4.3	4.4	4.4	4.1	4.2	3.3	2.6	2.6	3.1	3.9	3.5	3.2	3.2	2.0	1.1	.9	1.2
5.	3.1	2.8	3.0	3.9	3.8	3.7	3.3	4.6	3.8	2.7	2.7	3.2	4.3	3.7	3.6	3.7	1.3	1.0	1.0	1.2
10.	3.0	2.8	3.0	3.1	2.9	2.9	2.6	4.8	3.8	3.0	2.8	3.2	4.6	4.0	4.1	4.0	1.2	.8	1.0	1.3
15.	2.8	2.8	2.9	2.6	2.4	2.4	1.8	5.2	4.0	3.4	2.9	3.0	4.6	4.4	4.1	4.4	.9	.9	1.0	1.2
20.	2.9	2.8	3.1	2.5	2.3	1.8	1.4	5.2	4.0	3.6	3.1	3.1	4.9	4.6	4.1	4.7	.9	.8	1.0	1.0
25.	2.9	2.8	3.0	2.2	2.1	1.6	1.2	5.1	4.0	3.5	3.1	3.5	4.4	4.1	4.2	4.4	.9	1.0	.7	.9
30.	2.9	2.9	2.9	2.2	2.1	1.2	1.2	4.7	4.5	3.7	3.3	3.5	4.2	4.0	4.1	4.3	.8	.9	.7	.6
35.	2.9	2.9	2.9	2.3	1.9	1.2	.9	4.8	4.3	3.8	3.2	3.6	4.0	4.1	3.9	4.3	.8	.7	.4	.5
40.	2.9	3.0	2.9	2.2	1.8	1.4	.9	4.6	4.1	3.9	3.4	3.8	4.2	4.0	3.9	4.1	.7	.7	.3	.2

45. *	3.0	3.2	3.0	2.3	1.9	1.2	.7	4.4	4.3	4.1	3.4	3.9	4.4	4.2	4.0	4.0	.6	.4	.2	.1
50. *	3.3	3.2	3.0	2.3	1.8	1.0	.6	4.5	4.2	4.3	3.6	4.0	4.2	4.0	4.0	3.6	.5	.3	.1	.0
55. *	3.1	3.2	2.9	2.2	1.8	1.0	.5	4.6	4.0	4.3	3.7	4.2	4.0	3.8	4.0	3.5	.4	.2	.0	.0
60. *	3.1	3.2	2.8	2.2	1.7	.9	.3	4.5	3.6	4.1	3.6	4.0	3.9	3.8	3.5	3.4	.2	.1	.0	.0
65. *	3.0	3.0	2.4	1.9	1.5	.6	.2	4.2	3.6	4.0	3.7	4.2	3.9	3.6	3.3	3.0	.1	.0	.0	.0
70. *	2.9	2.7	2.0	1.8	1.2	.3	.1	4.1	3.6	3.5	3.6	3.8	3.6	3.1	3.3	3.0	.0	.0	.1	.0
75. *	2.6	2.2	1.7	1.3	.9	.2	.0	3.8	3.3	3.2	3.5	3.8	3.4	3.0	2.9	2.8	.0	.0	.2	.0
80. *	2.1	1.8	1.3	1.1	.6	.1	.0	3.7	2.8	2.9	2.9	2.9	3.1	2.8	2.9	2.8	.1	.1	.2	.0
85. *	1.5	1.1	1.0	.8	.3	.0	.1	3.1	2.6	2.5	2.5	2.7	3.0	2.3	2.7	2.9	.1	.1	.1	.0
90. *	1.1	.9	.6	.3	.1	.0	.1	2.8	2.1	2.0	1.8	1.8	2.5	2.2	2.8	3.0	.3	.2	.1	.0
95. *	.7	.4	.5	.1	.0	.0	.1	2.3	1.6	1.4	1.5	1.2	2.3	2.1	2.8	3.0	.3	.2	.1	.0
100. *	.4	.3	.2	.0	.0	.0	.3	2.1	1.4	1.2	1.2	.6	2.1	2.1	2.8	3.0	.4	.3	.1	.0
105. *	.2	.1	.1	.0	.0	.0	.3	2.0	1.2	.9	.6	.5	2.0	2.0	2.9	3.0	.4	.4	.1	.0
110. *	.1	.1	.1	.0	.0	.0	.3	2.0	1.3	.9	.7	.4	2.1	2.1	2.7	2.8	.4	.4	.2	.0
115. *	.0	.0	.0	.0	.0	.1	.3	2.1	1.3	.9	.7	.4	2.3	2.2	2.9	2.8	.4	.4	.2	.0
120. *	.0	.0	.0	.0	.1	.2	.3	2.2	1.3	.9	.6	.5	2.3	2.3	2.8	2.7	.4	.4	.2	.0
125. *	.0	.0	.0	.1	.1	.2	.3	2.2	1.3	1.0	.7	.4	2.3	2.3	2.8	2.6	.4	.4	.3	.0
130. *	.0	.0	.0	.1	.1	.2	.4	2.4	1.4	.9	.7	.4	2.5	2.4	2.9	2.6	.4	.4	.4	.0
135. *	.0	.0	.0	.1	.1	.2	.4	2.4	1.3	1.0	.5	.5	2.4	2.6	3.1	2.8	.4	.4	.4	.0
140. *	.0	.0	.0	.1	.2	.2	.3	2.6	1.3	1.1	.7	.3	2.6	2.5	3.0	2.8	.4	.4	.4	.0
145. *	.0	.0	.0	.1	.2	.2	.3	2.5	1.4	1.2	.7	.2	2.5	2.7	3.0	2.9	.4	.4	.3	.0
150. *	.0	.0	.0	.2	.3	.3	.4	2.6	1.6	1.1	.5	.1	2.8	2.8	3.3	3.0	.4	.4	.3	.0
155. *	.0	.0	.0	.2	.3	.4	.5	2.8	1.5	1.1	.4	.0	2.9	2.9	3.2	3.0	.4	.4	.3	.0
160. *	.0	.0	.0	.5	.6	.5	.5	2.9	1.5	.8	.2	.0	3.1	3.1	3.3	2.8	.3	.3	.3	.0
165. *	.0	.0	.0	.7	.9	.8	.6	2.9	1.4	.6	.1	.0	3.0	3.0	3.0	2.6	.4	.3	.3	.0
170. *	.0	.0	.0	1.3	1.3	1.1	1.0	2.6	1.1	.4	.0	.0	2.8	2.4	2.6	2.4	.4	.3	.4	.0
175. *	.0	.0	.0	1.9	2.0	1.9	1.5	2.1	.7	.2	.0	.0	2.2	2.2	2.2	2.1	.4	.3	.4	.0
180. *	.2	.0	.0	2.6	2.7	2.4	2.1	1.5	.5	.0	.0	.0	1.7	1.7	1.8	1.4	.6	.3	.4	.0
185. *	.3	.0	.0	3.5	3.5	3.1	2.6	1.2	.2	.0	.0	.0	1.3	1.0	1.2	1.0	.8	.3	.4	.0
190. *	.4	.0	.0	3.8	3.9	3.5	3.2	.6	.0	.0	.0	.0	.7	.6	.7	.6	1.1	.3	.4	.0
195. *	.9	.2	.0	3.7	4.1	4.0	3.5	.3	.0	.0	.0	.0	.3	.3	.3	.3	1.4	.3	.4	.1
200. *	1.0	.4	.0	4.0	4.2	4.2	3.5	.1	.0	.0	.0	.0	.1	.1	.2	.2	1.7	.4	.4	.1
205. *	1.2	.4	.1	3.9	4.2	4.0	3.8	.0	.0	.0	.0	.0	.1	.0	.0	.1	1.7	.6	.4	.1

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JOB: US 6 & Federal Blvd BDPM RUN: US 6 & Federal Blvd BDPM

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)*	CONCENTRATION (PPM) REC21	REC22	REC23	REC24	REC25	REC26	REC27	REC28	REC29	REC30	REC31	REC32	REC33	REC34	REC35	REC36	REC37	REC38	REC39	REC40
210. *	1.2	.5	.2	3.4	3.7	4.0	3.6	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.8	.8	.3	.2
215. *	1.2	.7	.3	3.4	3.6	3.7	3.7	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	.8	.3	.1
220. *	1.1	.9	.4	3.0	3.3	3.6	3.3	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.8	.9	.5	.1
225. *	1.2	.7	.5	3.0	3.2	3.4	3.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.9	1.0	.5	.2
230. *	1.0	.6	.5	2.8	2.8	3.4	3.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.6	1.1	.6	.2
235. *	1.0	.8	.5	2.7	2.7	3.2	3.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.8	1.2	.8	.4
240. *	1.0	.7	.5	2.7	2.7	3.2	2.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.8	1.2	1.0	.4
245. *	1.0	.6	.4	2.6	2.6	3.0	3.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.4	1.2	1.0	.5
250. *	1.0	.7	.4	2.5	2.6	3.1	2.9	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.6	1.3	.9	.6
255. *	1.0	.7	.6	2.5	2.6	3.0	2.8	.0	.0	.0	.0	.0	.0	.0	.0	.0	1.5	1.1	.7	.5
260. *	1.3	1.1	.8	2.5	2.6	3.1	3.0	.1	.1	.1	.1	.1	.0	.0	.0	.0	1.5	1.0	.8	.3
265. *	2.0	1.5	1.1	2.8	2.7	3.1	3.0	.3	.3	.3	.4	.2	.1	.0	.0	.0	1.5	1.0	.8	.4
270. *	2.2	2.1	1.9	3.0	2.9	3.0	3.0	.7	.7	.7	.6	.5	.3	.1	.0	.0	1.7	1.2	.5	.5
275. *	3.0	2.3	2.5	3.4	3.0	3.1	3.0	.9	1.0	1.0	1.2	1.0	.5	.3	.0	.0	1.6	.9	.5	.6
280. *	3.4	3.0	3.1	3.7	3.3	3.3	3.0	1.6	1.4	1.5	1.5	1.5	.8	.5	.1	.0	1.6	.8	.6	.8
285. *	3.8	3.5	3.3	4.3	3.4	3.3	3.1	2.0	2.1	2.0	2.0	1.8	1.2	.8	.2	.0	1.6	1.1	.7	.8
290. *	4.1	3.7	3.7	4.5	3.8	3.5	3.1	2.4	2.3	2.5	2.5	2.3	1.6	.9	.3	.1	1.7	1.1	.8	1.0
295. *	4.0	3.8	3.8	4.7	4.2	3.7	3.2	2.6	2.5	2.5	2.7	2.7	1.8	1.2	.5	.2	1.9	1.3	1.1	1.4
300. *	4.2	4.0	3.8	4.6	4.4	3.8	3.4	2.8	2.5	2.6	2.9	3.0	2.0	1.7	.7	.4	2.1	1.6	1.3	1.6
305. *	4.1	3.8	4.0	5.0	4.5	4.2	3.9	2.7	2.7	2.6	2.9	3.2	2.0	1.7	.8	.5	2.3	1.6	1.1	1.4
310. *	4.2	3.8	3.5	4.9	4.8	4.3	3.9	2.9	2.7	2.6	2.8	3.3	2.0	1.7	1.1	.7	2.4	1.3	1.3	1.5
315. *	3.9	3.9	3.6	5.1	4.8	4.6	4.1	2.8	2.8	2.6	2.9	3.3	2.1	1.7	1.1	.8	2.4	1.6	1.1	1.6
320. *	3.8	3.8	3.6	5.2	4.9	4.6	4.4	2.8	2.8	2.6	2.8	3.2	2.1	1.8	1.1	.7	2.5	1.8	1.3	1.5
325. *	3.8	3.6	3.3	5.1	5.0	4.6	4.6	2.7	2.7	2.6	2.8	3.2	2.0	1.7	1.2	1.0	2.7	1.6	1.5	1.7
330. *	4.1	3.8	3.3	5.0	4.9	5.1	4.6	2.7	2.7	2.5	2.7	3.2	2.0	1.8	1.4	1.0	2.8	1.6	1.3	1.5
335. *	4.1	3.6	3.2	5.3	5.3	4.7	4.9	2.7	2.7	2.3	2.6	3.2	2.2	1.9	1.3	1.0	2.5	1.8	1.2	1.2
340. *	3.8	3.2	3.0	5.1	5.2	5.3	4.9	2.6	2.6	2.4	2.6	3.2	2.2	1.9	1.3	1.0	2.4	1.6	1.2	1.2
345. *	3.9	3.1	2.7	5.4	5.1	5.4	5.1	2.9	2.6	2.4	2.7	3.2	2.7	2.3	1.6	1.2	2.4	1.5	.8	1.4
350. *	3.8	2.9	2.9	5.1	5.1	5.2	5.2	3.1	2.9	2.5	2.7	3.2	2.9	2.7	1.9	1.7	2.3	1.5	.8	1.2
355. *	3.3	2.9	2.9	5.1	4.7	5.1	4.6	3.7	3.1	2.5	2.7	3.1	3.2	3.0	2.7	2.3	2.2	1.1	.9	1.2
360. *	3.1	2.9	2.9	4.3	4.4	4.4	4.1	4.2	3.3	2.6	2.6	3.1	3.9	3.5	3.2	3.2	2.0	1.1	.9	1.2
MAX *	4.2	4.0	4.0	5.4	5.3	5.4	5.2	5.2	4.5	4.3	3.7	4.2	4.9	4.6	4.2	4.7	2.8	1.8	1.5	1.7
DEGR. *	300	300	305	345	335	345	350	15	30	50	55	55	20	20	25	20	330	320	325	325

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JOB: US 6 & Federal Blvd BDPM RUN: US 6 & Federal Blvd BDPM

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 ANGLE (DEGR)*	CONCENTRATION (PPM) REC41	REC42	REC43	REC44	REC45
0. *	1.6	1.2	2.9	1.2	1.3
5. *	1.5	1.2	2.5	1.0	1.4
10. *	1.5	1.0	1.7	1.1	1.3
15. *	1.5	.8	1.4	1.2	1.3
20. *	1.4	.7	1.3	1.2	1.2
25. *	1.2	.5	1.1	1.1	1.1
30. *	1.1	.2	1.2	1.0	.8
35. *	.9	.2	1.1	1.0	.7
40. *	.6	.0	1.2	.8	.5
45. *	.4	.0	1.1	.8	.4

50.	*	.3	.0	.9	.6	.2
55.	*	.0	.0	.7	.5	.2
60.	*	.0	.0	.7	.4	.2
65.	*	.0	.0	.5	.4	.2
70.	*	.0	.0	.4	.4	.1
75.	*	.0	.0	.4	.4	.1
80.	*	.0	.0	.4	.3	.1
85.	*	.0	.0	.3	.1	.0
90.	*	.0	.0	.1	.1	.0
95.	*	.0	.0	.1	.1	.0
100.	*	.0	.0	.0	.0	.0
105.	*	.0	.0	.0	.0	.0
110.	*	.0	.0	.0	.0	.0
115.	*	.0	.0	.0	.0	.0
120.	*	.0	.0	.0	.0	.0
125.	*	.0	.0	.0	.0	.0
130.	*	.0	.0	.0	.0	.0
135.	*	.0	.0	.0	.0	.0
140.	*	.0	.0	.0	.0	.0
145.	*	.0	.0	.0	.0	.0
150.	*	.0	.0	.0	.0	.0
155.	*	.0	.0	.0	.0	.0
160.	*	.0	.0	.0	.0	.0
165.	*	.0	.0	.2	.0	.0
170.	*	.0	.0	.2	.0	.0
175.	*	.0	.0	.5	.0	.0
180.	*	.0	.0	.8	.0	.0
185.	*	.0	.0	1.1	.0	.0
190.	*	.0	.0	1.7	.0	.0
195.	*	.0	.0	1.9	.0	.0
200.	*	.0	.0	2.2	.0	.0
205.	*	.0	.0	2.5	.1	.0

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JOB: US 6 & Federal Blvd BDPM

RUN: US 6 & Federal Blvd BDPM

WIND ANGLE RANGE: 0.-360.

WIND ANGLE (DEGR)	*	CONCENTRATION (PPM) REC41	REC42	REC43	REC44	REC45
210.	*	.0	.0	2.6	.2	.0
215.	*	.1	.0	2.6	.2	.0
220.	*	.2	.0	2.7	.4	.0
225.	*	.2	.1	2.7	.4	.0
230.	*	.3	.2	2.6	.6	.1
235.	*	.4	.2	2.5	.6	.2
240.	*	.4	.4	2.5	.7	.2
245.	*	.5	.4	2.4	.8	.4
250.	*	.3	.5	2.4	.8	.5
255.	*	.4	.6	2.3	.8	.6
260.	*	.5	.3	2.3	.7	.5
265.	*	.4	.3	2.2	.9	.7
270.	*	.5	.4	2.2	1.0	.8
275.	*	.7	.6	2.2	1.0	.9
280.	*	.9	.7	2.2	1.1	.8
285.	*	1.4	.9	2.1	1.1	1.2
290.	*	1.7	1.0	2.2	1.3	1.1
295.	*	1.6	1.6	2.3	1.4	1.4
300.	*	1.5	1.4	2.4	1.7	1.6
305.	*	2.0	1.3	2.7	1.9	1.7
310.	*	2.2	1.3	2.9	2.1	1.6
315.	*	2.0	1.4	3.0	2.1	1.7
320.	*	2.1	1.6	3.4	2.0	1.6
325.	*	1.8	1.2	3.5	2.0	1.6
330.	*	1.7	1.4	3.8	1.9	1.8
335.	*	1.6	1.2	3.9	2.0	1.5
340.	*	1.5	1.3	4.1	2.1	1.5
345.	*	1.4	1.2	3.6	1.7	1.1
350.	*	1.4	1.3	3.8	1.8	1.2
355.	*	1.5	1.2	3.6	1.4	1.3
360.	*	1.6	1.2	2.9	1.2	1.3
MAX	*	2.2	1.6	4.1	2.1	1.8
DEGR.	*	310	295	340	315	330

THE HIGHEST CONCENTRATION IS 5.90 PPM AT 235 DEGREES FROM REC2 .
THE 2ND HIGHEST CONCENTRATION IS 5.80 PPM AT 230 DEGREES FROM REC3 .
THE 3RD HIGHEST CONCENTRATION IS 5.70 PPM AT 115 DEGREES FROM REC11.

AQ Mobile Results

Raw Data

Site #		2035			
		No Build		Build	
		AM	PM	AM	PM
1	Federal Blvd & US 6	4.20	5.90	5.90	5.90
	Receptor Location	R29	R28	R5	R2
		SW corner of US 6 & Federal Blvd		NE corner of US 6 & Federal Blvd	

1-hour Data

Site #		2035			
		No Build		Build	
		AM	PM	AM	PM
1	Federal Blvd & US 6	10.6	12.3	12.3	12.3

Backgroun 6.4

8-hour Data

Site #		2035			
		No Build		Build	
		AM	PM	AM	PM
1	Federal Blvd & US 6	6.0	6.9	6.9	6.9

Backgroun 3.6