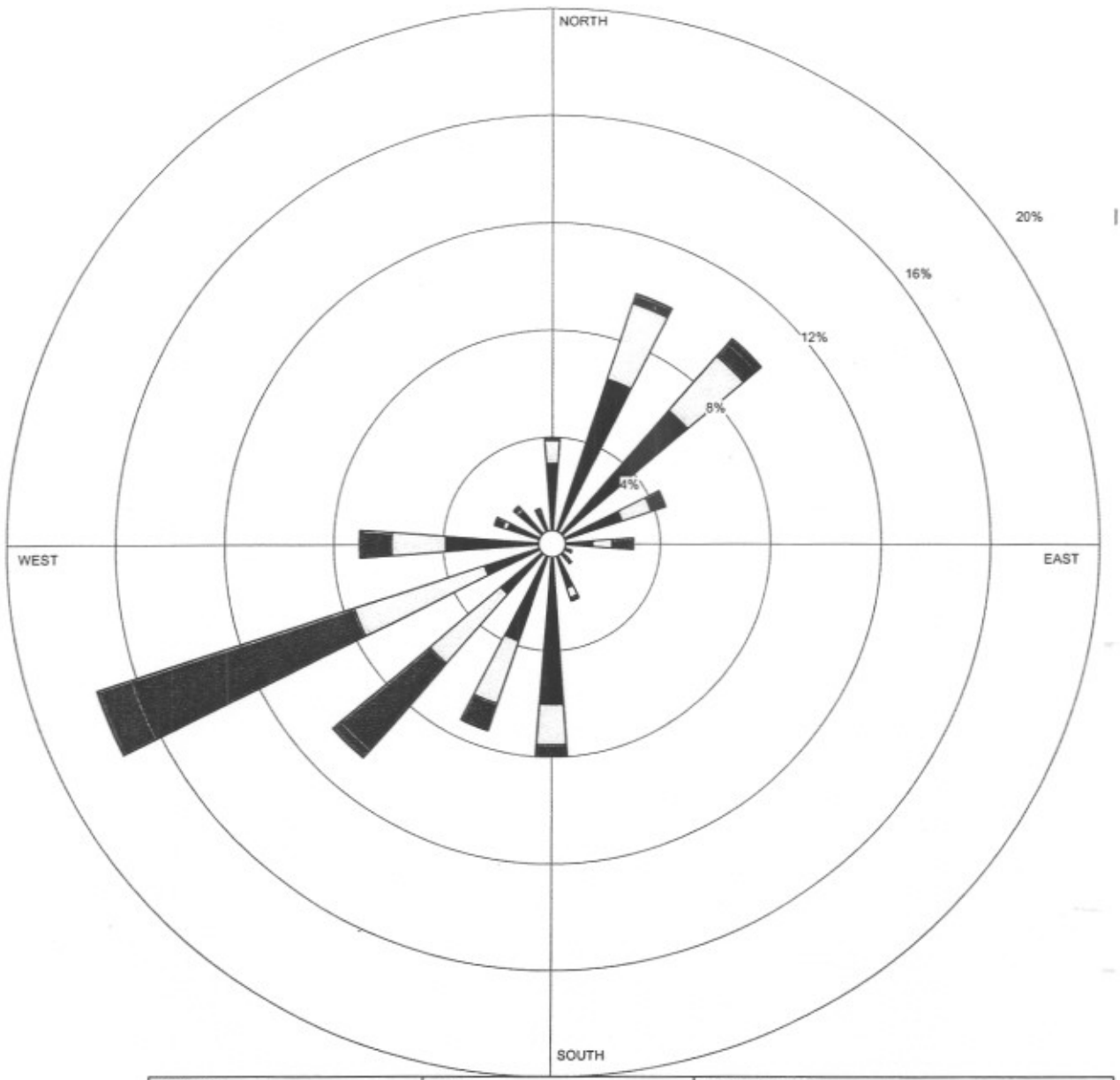
APPENDIX B

AIR QUALITY DATA

WIND ROSE PLOT

Station #52075 - Downtown Los Angeles, CA 1/1-12/31



Wind Speed (m/s)

> 10.8
8.8-10.8
5.7- 8.8
3.6- 5.7
2.1- 3.6
0.5- 2.1

MODELER	DATE	COMPANY NAME
	3/18/2002	
DISPLAY	UNIT	COMMENTS
Wind Speed	**m/s**	
AVG. WIND SPEED	CALM WINDS	
2.41 m/s	**7.90%**	
ORIENTATION	PLOT YEAR-DATE-TIME	PROJECT/PLOT NO.
Direction (blowing from)	**1981 Midnight - 11 PM**	

WRPLOT View 3.01 by Lakes Environmental Software - www.lakes-environmental.com

Station ID : 52075
Years : 1981
1/1-12/31
Start Time : Midnight

RUN ID : Downtown Los Angeles

End Time : 11 PM

Frequency Distribution
(Count)

Wind Direction (Blowing From) / Wind Speed (m/s)

	0.51-2.06	2.06-3.60	3.60-5.66	5.66-8.75	8.75-10.80	>10.80	Total
N	264	74	12	0	0	0	350
NNE	568	257	33	4	0	0	862
NE	577	231	56	21	0	0	885
ENE	239	98	45	8	1	0	391
E	134	62	63	7	0	0	266
ESE	40	9	21	0	0	0	70
SE	66	9	14	0	0	0	89
SSE	152	34	13	1	0	0	200
S	527	131	41	1	0	0	700
SSW	335	215	94	2	0	0	646
SW	218	300	373	35	2	0	928
WSW	230	438	745	117	4	0	1534
W	342	175	93	9	0	1	620
WNW	152	15	23	8	0	0	198
NW	144	10	10	4	0	0	168
NNW	108	8	10	1	0	0	127
Total	4096	2066	1646	218	7	1	

Frequency of Calm Winds : 689
Average Wind Speed : 2.41 m/s

Station ID : 52075
Years : 1981
1/1-12/31
Start Time : Midnight

RUN ID : Downtown Los Angeles

End Time : 11 PM

Frequency Distribution
(Normalized)

Wind Direction (Blowing From) / Wind Speed (m/s)

	0.51-2.06	2.06-3.60	3.60-5.66	5.66-8.75	8.75-10.80	>10.80	Total
N	0.030265	0.008483	0.001376	0.000000	0.000000	0.000000	0.040124
NNE	0.065115	0.029462	0.003783	0.000459	0.000000	0.000000	0.098819
NE	0.066147	0.026482	0.006420	0.002407	0.000000	0.000000	0.101456
ENE	0.027399	0.011235	0.005159	0.000917	0.000115	0.000000	0.044824
E	0.015362	0.007108	0.007222	0.000802	0.000000	0.000000	0.030494
ESE	0.004586	0.001032	0.002407	0.000000	0.000000	0.000000	0.008025
SE	0.007566	0.001032	0.001605	0.000000	0.000000	0.000000	0.010203
SSE	0.017425	0.003898	0.001490	0.000115	0.000000	0.000000	0.022928
S	0.060415	0.015018	0.004700	0.000115	0.000000	0.000000	0.080248
SSW	0.038404	0.024647	0.010776	0.000229	0.000000	0.000000	0.074057
SW	0.024991	0.034392	0.042761	0.004012	0.000229	0.000000	0.106385
WSW	0.026367	0.050212	0.085406	0.013413	0.000459	0.000000	0.175857
W	0.039207	0.020062	0.010661	0.001032	0.000000	0.000115	0.071076
WNW	0.017425	0.001720	0.002637	0.000917	0.000000	0.000000	0.022699
NW	0.016508	0.001146	0.001146	0.000459	0.000000	0.000000	0.019259
NNW	0.012381	0.000917	0.001146	0.000115	0.000000	0.000000	0.014559
Total	0.469563	0.236845	0.188697	0.024991	0.000802	0.000115	

Frequency of Calm Winds : 7.90%
Average Wind Speed : 2.41 m/s

LOS ANGELES CIVIC CENTE, CALIFORNIA (045115)

Period of Record Monthly Climate Summary

Period of Record : 1/ 1/1914 to 12/31/2000

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual
Average Max. Temperature (F)	66.3	67.4	68.8	71.1	73.0	77.1	82.4	83.2	81.8	77.6	73.0	67.7	74.1
Average Min. Temperature (F)	48.4	49.7	51.1	53.5	56.5	59.7	63.1	64.0	62.7	58.8	53.4	49.4	55.9
Average Total Precipitation (in.)	3.19	3.31	2.48	1.07	0.26	0.06	0.01	0.06	0.29	0.40	1.32	2.34	14.79
Average Total SnowFall (in.)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Average Snow Depth (in.)	0	0	0	0	0	0	0	0	0	0	0	0	0

Percent of possible observations for period of record.
Max. Temp.: 99.5% Min. Temp.: 99.5% Precipitation: 99.5% Snowfall: 41.6% Snow Depth: 41.6%
Check Station Metadata or Metadata graphics for more detail about data completeness.

Western Regional Climate Center, wrcc@dri.edu

LOS ANGELES CIVIC CENTE, CALIFORNIA

Period of Record General Climate Summary - Temperature

Station:(045115) LOS ANGELES CIVIC CENTE

From Year=1914 To Year=2000

	Monthly Averages			Daily Extremes				Monthly Extremes				Max. Temp.		Min. Temp.	
	Max.	Min.	Mean	High	Date	Low	Date	Highest Mean	Year	Lowest Mean	Year	>= 90 F	<= 32 F	<= 32 F	<= 0 F
	F	F	F	F	dd/yyyy or yyyymmdd	F	dd/yyyy or yyyymmdd	F	-	F	-	# Days	# Days	# Days	# Days
January	66.3	48.4	57.4	95	18/1971	28	04/1949	65.9	86	46.9	49	0.1	0.0	0.1	0.0
February	67.4	49.7	58.6	95	20/1995	34	14/1949	65.3	95	52.7	49	0.1	0.0	0.0	0.0
March	68.8	51.1	60.0	98	26/1988	35	04/1976	66.0	31	54.6	45	0.2	0.0	0.0	0.0
April	71.1	53.5	62.3	106	06/1989	39	07/1975	69.6	92	56.0	75	0.8	0.0	0.0	0.0
May	73.0	56.5	64.7	102	16/1967	40	12/1933	72.6	97	58.7	17	0.9	0.0	0.0	0.0
June	77.1	59.7	68.4	112	26/1990	49	01/1917	77.4	81	63.4	44	1.3	0.0	0.0	0.0
July	82.4	63.1	72.8	107	01/1985	54	09/1920	79.2	85	66.6	44	3.2	0.0	0.0	0.0
August	83.2	64.0	73.6	105	06/1983	53	26/1943	80.8	83	68.1	14	4.1	0.0	0.0	0.0
September	81.8	62.7	72.3	110	01/1955	50	22/1921	81.3	84	64.6	33	5.0	0.0	0.0	0.0
October	77.6	58.8	68.2	108	03/1987	41	30/1971	74.2	83	59.7	16	3.0	0.0	0.0	0.0
November	73.0	53.4	63.2	100	01/1966	37	28/1919	68.9	32	58.4	78	0.7	0.0	0.0	0.0
December	67.7	49.4	58.5	92	08/1938	30	08/1978	64.2	39	52.6	16	0.0	0.0	0.0	0.0
Annual	74.1	55.9	65.0	112	19900626	28	19490104	68.9	81	60.9	16	19.5	0.0	0.1	0.0
Winter	67.1	49.2	58.2	95	19710118	28	19490104	63.3	86	51.0	49	0.2	0.0	0.1	0.0

Spring	71.0	53.7	62.3	106	19890406	35	19760304	67.8	97	57.8	17	1.9	0.0	0.0	0.0
Summer	80.9	62.3	71.6	112	19900626	49	19170601	77.6	81	66.4	16	8.7	0.0	0.0	0.0
Fall	77.5	58.3	67.9	110	19550901	37	19191128	72.2	83	61.4	16	8.7	0.0	0.0	0.0

Table updated on Jun 4, 2001

For monthly and annual means, thresholds, and sums:
Months with 5 or more missing days are not considered
Years with 1 or more missing months are not considered
Seasons are climatological not calendar seasons

Winter = Dec., Jan., and Feb. Spring = Mar., Apr., and May

Summer = Jun., Jul., and Aug. Fall = Sep., Oct., and Nov.

Western Regional Climate Center, wrcc@dri.edu

LOS ANGELES CIVIC CENTE, CALIFORNIA

Period of Record General Climate Summary - Precipitation

Station:(045115) LOS ANGELES CIVIC CENTE															
From Year=1914 To Year=2000															
	Precipitation											Total Snowfall			
	Mean	High	Year	Low	Year	1 Day Max.		>= 0.01 in.	>= 0.10 in.	>= 0.50 in.	>= 1.00 in.	Mean	High	Year	
	in.	in.	-	in.	-	in.	dd/yyyy or yyyymmdd	# Days	# Days	# Days	# Days	in.	in.	-	
January	3.19	14.94	69	0.00	48	5.71	26/1956	6	4	2	1	0.0	0.3	49	
February	3.31	13.68	98	0.00	33	4.26	18/1914	6	5	2	1	0.0	0.0	49	
March	2.48	8.37	83	0.00	31	5.88	02/1938	6	4	2	1	0.0	0.0	49	
April	1.07	7.53	26	0.00	16	2.74	05/1926	4	2	1	0	0.0	0.2	50	
May	0.26	3.57	21	0.00	23	2.02	08/1977	2	1	0	0	0.0	0.0	49	
June	0.06	0.76	93	0.00	15	0.76	05/1993	1	0	0	0	0.0	0.0	49	
July	0.01	0.18	86	0.00	15	0.13	08/1991	0	0	0	0	0.0	0.0	48	
August	0.06	2.26	77	0.00	14	2.06	17/1977	1	0	0	0	0.0	0.0	48	
September	0.29	5.67	39	0.00	14	3.96	25/1939	1	1	0	0	0.0	0.0	48	
October	0.40	2.71	16	0.00	15	1.72	17/1934	2	1	0	0	0.0	0.0	48	
November	1.32	9.68	65	0.00	29	3.85	07/1966	3	2	1	0	0.0	0.0	48	
December	2.34	8.48	33	0.00	29	4.86	31/1933	5	4	2	1	0.0	0.0	48	
Annual	14.79	34.04	83	3.85	53	5.88	19380302	36	23	10	4	0.0	0.3	49	
Winter	8.84	24.25	69	1.19	24	5.71	19560126	18	12	6	3	0.0	0.3	49	
Spring	3.81	13.89	83	0.00	97	5.88	19380302	11	7	3	1	0.0	0.2	50	
Summer	0.12	2.26	77	0.00	15	2.06	19770817	1	0	0	0	0.0	0.0	49	
Fall	2.01	11.48	65	0.00	80	3.96	19390925	6	4	1	0	0.0	0.0	48	

Table updated on Jun 4, 2001
For monthly and annual means, thresholds, and sums:
Months with 5 or more missing days are not considered
Years with 1 or more missing months are not considered
Seasons are climatological not calendar seasons

View this page for another pollutant:

Hourly O_3
8-Hour O_3
PM 10
CO
NO_2
SO_2
H_2S

Start Over:
Data Statistics Home

Highest 4 Daily Maximum Hourly Ozone Measurements

and Number of Days Above the Hourly Standards

at Los Angeles-North Main Street

parts per million

	1998		1999		2000	
High	Aug 30	0.148	Apr 18	0.128	May 20	0.136
2nd High	Jul 16	0.147	Apr 19	0.114	May 28	0.120
3rd High	Aug 29	0.141	Aug 23	0.107	Sep 17	0.119
4th High	Jul 17	0.138	Oct 24	0.107	Aug 12	0.114
*Days > State Standard		17		13		8
*Days > National Standard		5		1		1
**Year Coverage		99		96		100

← Go Backward a Year | Go Forward a Year →

Make a New Request

* The number of days at least one measurement was greater than the level of the state hourly standard (0.09 parts per million) or the national hourly standard (0.12 parts per million). The number of days above the standard is not necessarily the number of violations of the standard for the year.

** Year Coverage is an indicator of how extensive monitoring was during the time of year when high pollutant concentrations are expected. Year coverage ranges from 0 to 100. For example, a Year Coverage of 75 indicates that monitoring occurred 75% of the time when high pollutant concentrations are expected. For the current year, Year Coverage will be 0 at the beginning of the year and will increase as the data for the year become available.

California Air Resources Board

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View this page for another pollutant:

Hourly O_3
8-Hour O_3
PM 10
Fine PM
CO
NO_2
SO_2
H_2S

Start Over:

Data Statistics Home

Highest 4 Daily Maximum 8-Hour Ozone Averages

and Number of Days Above the 8-Hour Standard

at Los Angeles-North Main Street

parts per million

	1998		1999		2000	
High	Aug 29	0.111	Apr 18	0.108	May 28	0.103
2nd High	Jul 16	0.104	Apr 19	0.087	May 27	0.091
3rd High	Aug 23	0.097	Apr 17	0.078	Aug 12	0.090
4th High	Aug 30	0.095	Jun 19	0.076	May 20	0.085
*Days > Nat'l Standard		9		2		4
**Year Coverage		99		96		100

← Go Backward a Year | Go Forward a Year →

Make a New Request

* The number of days at least one overlapping 8-hour average was greater than the level of the national 8-hour standard (0.08 parts per million). The number of days above the standard is not the number of violations of the standard for the year.

** Year Coverage is an indicator of how extensive monitoring was during the time of year when high pollutant concentrations are expected. Year coverage ranges from 0 to 100. For example, a Year Coverage of 75 indicates that monitoring occurred 75% of the time when high pollutant concentrations are expected. For the current year, Year Coverage will be 0 at the beginning of the year and will increase as the data for the year become available.

View this page for another pollutant:

Hourly O_3 | 8-Hour O_3 | PM 10 | ~~Hour PM~~ | CO | NO_2 | SO_2 | ~~H2S~~

Start Over: Data Statistics Home

Highest 4 Daily PM10 Measurements

and Annual PM10 Statistics

at Los Angeles-North Main Street

micrograms per cubic meter

	1998		1999		2000	
High	Apr 29	80.0	Jan 6	88.0	Dec 2	80.0
2nd High	Jul 16	71.0	Jul 5	87.0	Dec 20	79.0
3rd High	Dec 31	68.0	Jan 18	72.0	Dec 26	71.0
4th High	Jan 17	68.0	May 12	70.0	Mar 13	61.0
Measured:						
*Days > State Standard		11		19		15
*Days > Nat'l Standard		0		0		0
Calculated:						
*Days > State Standard		66.0		114.0		90.0
*Days > Nat'l Standard		0.0		0.0		0.0
99th Percentile		80		88		80
**3-Year Average 99th		107		90		83
***State Annual Average		34.5		42.1		37.0
***Nat'l Annual Average		37.8		44.8		40.0
**3-Year Nat'l Average		40		42		41
****Year Coverage		92		100		98

← Go Backward a Year | Go Forward a Year →

Make a New Request

* Measured days are those days that an actual measurement was greater than the level of the state daily standard (50 micrograms per cubic meter) or the national daily standard (150 micrograms per cubic meter). Measurements are typically collected every six days. Calculated days are the estimated number of days that a measurement would have been greater than the level of the standard had measurements been collected every day. The number of days above the standard is not necessarily the number of violations of the standard for the year.

** The 3-year statistics include data from the listed year and the two years before the listed year.

*** The state annual average is a geometric mean of all measurements. The national annual average is an arithmetic average of the 4 arithmetic quarterly averages.

**** Year Coverage is an indicator of how extensive monitoring was during the time of year when high pollutant concentrations are expected. Year coverage ranges from 0 to 100. For example, a Year Coverage of 75 indicates that monitoring occurred 75% of the time when high pollutant concentrations are expected. For the current year, Year Coverage will be 0 at the beginning of the year and will increase as the data for the year become available.

View this page for another pollutant:

Hourly O_3 | 8-Hour O_3 | PM 10 | Fine PM | CO | NO_2 | SO_2 | H2S

Start Over: Data Statistics Home

Highest 4 Daily Maximum 8-Hour Carbon Monoxide Averages

and Number of Days Above the 8-Hour Standards

at Los Angeles-North Main Street

parts per million

	1998		1999		2000	
High	Dec 26	6.18	Jan 7	6.37	Nov 27	5.98
2nd High	Dec 16	5.85	Nov 12	5.38	Dec 22	5.04
3rd High	Nov 21	5.76	Jan 2	5.36	Dec 28	4.70
4th High	Nov 14	5.41	Jan 10	4.84	Jan 7	4.61
*Days > State Standard		0		0		0
*Days > Nat'l Standard		0		0		0
**Year Coverage		96		98		99

← Go Backward a Year | Go Forward a Year →

Make a New Request

* The number of days at least one non-overlapping 8-hour average was greater than the level of the state 8-hour standard (9.0 parts per million) or the national 8-hour standard (9 parts per million). The number of days above the standard is not necessarily the number of violations of the standard for the year.

** Year Coverage is an indicator of how extensive monitoring was during the time of year when high pollutant concentrations are expected. Year coverage ranges from 0 to 100. For example, a Year Coverage of 75 indicates that monitoring occurred 75% of the time when high pollutant concentrations are expected. For the current year, Year Coverage will be 0 at the beginning of the year and will increase as the data for the year become available.

View this page for another pollutant:

Hourly O_3
8-Hour O_3
PM 10
Fine PM
CO
NO_2
SO_2
H_2S

Start Over:

Data Statistics Home

Highest 4 Daily Maximum Hourly Nitrogen Dioxide Measurements

and Number of Days Above the Hourly Standard

at Los Angeles-North Main Street

parts per million

	1998		1999		2000	
High	Dec 30	0.170	Oct 13	0.212	Dec 1	0.152
2nd High	Oct 24	0.163	Oct 11	0.169	Dec 23	0.151
3rd High	Aug 29	0.152	Nov 2	0.154	Dec 21	0.147
4th High	Jul 16	0.148	Oct 23	0.151	Nov 27	0.135
*Days > State Standard		0		0		0
Annual Average		0.039		0.039		0.040
**Year Coverage		98		100		100

← Go Backward a Year | Go Forward a Year →

Make a New Request

* The number of days at least one measurement was greater than the level of the state hourly standard (0.25 parts per million). The number of days above the standard is not necessarily the number of violations of the standard for the year.

** Year Coverage is an indicator of how extensive monitoring was during the time of year when high pollutant concentrations are expected. Year coverage ranges from 0 to 100. For example, a Year Coverage of 75 indicates that monitoring occurred 75% of the time when high pollutant concentrations are expected. For the current year, Year Coverage will be 0 at the beginning of the year and will increase as the data for the year become available.

View this page for another pollutant:

Hourly O_3
8-Hour O_3
PM 10
Fine PM
CO
NO_2
SO_2
H2S

Start Over:

Data Statistics Home

Highest 4 Daily Maximum 24-Hour Sulfur Dioxide Averages

and Number of Days Above the 24-Hour Standards

at Los Angeles-North Main Street

parts per million

	1998		1999		2000	
High	Jul 27	0.006	Jul 7	0.010	Nov 4	0.007
2nd High	Jul 13	0.005	Mar 29	0.008	Nov 2	0.007
3rd High	Dec 8	0.005	Jan 7	0.007	Nov 7	0.005
4th High	Aug 10	0.005	Oct 7	0.006	Nov 5	0.005
*Days > State Standard		0		0		0
*Days > Nat'l Standard		0		0		0
Annual Average		0.001		0.003		0.001
**Year Coverage		97		82		82

← Go Backward a Year | Go Forward a Year →

Make a New Request

* The number of days at least one non-overlapping 24-hour average was greater than the level of the state 24-hour standard (0.04 parts per million) or the national 24-hour standard (0.14 parts per million). The number of days above the standard is not necessarily the number of violations of the standard for the year.

** Year Coverage is an indicator of how extensive monitoring was during the time of year when high pollutant concentrations are expected. Year coverage ranges from 0 to 100. For example, a Year Coverage of 75 indicates that monitoring occurred 75% of the time when high pollutant concentrations are expected. For the current year, Year Coverage will be 0 at the beginning of the year and will increase as the data for the year become available.

TERRY A. HAYES ASSOCIATES
CONSTRUCTION EMISSIONS MODEL

DATE	March 18, 2002
PROJECT NAME	LACC Master Plan EIR
DEMOLITION PHASE	**(DURING PHASE 4)**
DURATION OF DEMOLITION PHASE (Work Days)	60
SF OF BUILDINGS TO BE DEMOLISHED	66,113
AVERAGE FLOOR HEIGHT OF BUILDINGS TO BE DEMOLISHED	15
SF OF PAVEMENT AREA TO BE REMOVED	72,724
THICKNESS OF PAVEMENT TO BE REMOVED	0.25
HOURS IN WORK DAY FOR THIS PHASE	8
HAUL TRUCK ROUND TRIP LENGTH	10
WORKER ROUND TRIP LENGTH	16
GRADING AND/OR EXCAVATION PHASE	
DURATION OF GRADING/EXCAVATION PHASE (Work Days)	330
SITE AREA (ACRES)	7
HOURS IN WORK DAY FOR THIS PHASE	8
HAUL TRUCK ROUND TRIP LENGTH	10
WORKER ROUND TRIP LENGTH	16
DEPTH OF GRADING (Feet)	0.5
DEPTH OF EXCAVATION (Feet)	15.0
SURFACE AREA OF EXCAVATION IN SF	134,750
FOUNDATION PHASE	
DURATION OF FOUNDATION PHASE (Work Days)	120
SIZE OF FOUNDATION SLAB IN SF	450,500
SLAB THICKNESS IN SF	1
HOURS IN WORK DAY FOR THIS PHASE	8
CEMENT MIXER ROUND TRIP LENGTH	10
WORKER ROUND TRIP LENGTH	16
TRUCK CHARACTERISTICS	
HAUL TRUCK CAPACITY IN CUBIC YARDS	14.00
TRUCK TRAVEL PERCENTAGE ON LOCAL STREET	10%
TRUCK TRAVEL PERCENTAGE ON MAJOR STREET	20%
TRUCK TRAVEL PERCENTAGE ON FREEWAY	70%
WORKER AUTO CHARACTERISTICS	
PERCENT WORKER AUTO TRAVEL ON LOCAL STREET	10%
PERCENT WORKER AUTO TRAVEL ON MAJOR STREET	30%
PERCENT WORKER AUTO TRAVEL ON FREEWAY	60%
SITE CONDITIONS	
PREDOMINANT WIND SPEED in MPH	4.7
NATIVE SOIL MOISTURE CONTENT	3%
SOIL MOISTURE CONTENT (MITIGATED)	12%

TERRY A. HAYES ASSOCIATES
CONSTRUCTION EMISSIONS MODEL

EMFAC7F.1 RATES AS OF 1/25/94 (grams per mile)					
Vehicle Type	**CO**	**ROG**	**NO_2**	**SO_2**	**PM_{10}**
Haul Truck	7.6	1.92	10.06	0.30	1.3
Worker Vehicle	10.41	0.89	0.74	0.05	0.01
Assumptions:					
Construction Year	2002				
Season	Winter				
Temperature	65°F				
Speed	35 mph				
Cold Starts:					
Haul Truck	10%				
Worker Vehicle	100%				
Vehicle Mix:					
Haul Truck	100% Heavy Diesel				
Worker Vehicle	80% Light Duty Auto, 20% Light Duty Truck				

EQUIPMENT EMISSION FACTORS (pounds per hour)					
Equipment Type	**CO**	**ROG**	**NO_2**	**SO_2**	**PM^{10}**
Crane/Dozer	0.675	0.15	1.7	0.143	0.14
Source: Table A9-8-A, SCAQMD CEQA Handbook					

PAVED ROAD PM10 EMISSIONS (per VMT)		
	PM^{10} / VMT	
Road Type	**Worker Vehicle**	**Haul Truck**
Local Street	0.018000	0.213958
Major Street/Highway	0.006400	0.149096
Freeway	0.000650	0.062171
Composite Factor**	**0.004110**	**0.094734**
Source: Tables A9-9-B-1 and **A9-9-C**, SCAQMD CEQA Handbook		
****Note:** Weighted average based on travel characteristics		

HAUL TRUCK ON UNPAVED SURFACE EMISSIONS
FORMULA:
E = V x F
WHERE:
E = Emissions
V = Vehicle Miles of Travel
F = Emissions Factor (2.1)(G/12)(H/30)((J/3)^0.7)((I/4)^0.5)((365-K)/365)
VARIABLES
G = Surface silt loading in percent
H = Mean vehicle speed in miles per hour
I = Mean number of wheels on vehicles
J = Mean vehicle weight in tons
K = Mean number of days per year with at least 0.01 inches of precipitation
EMISSIONS FACTOR = 5.55 pounds per vehicle miles traveled
Source: Table A9-9-D, SCAQMD CEQA Handbook

TERRY A. HAYES ASSOCIATES
CONSTRUCTION EMISSIONS MODEL

DAILY CONSTRUCTION EMISSIONS (POUNDS/DAY)					
LACC Master Plan EIR					
CONSTRUCTION PHASE	CO	ROG	NO_2	SO_2	PM^{10} (with Rule 403)
DEMOLITION	17	3	30	2	21
GRADING/EXCAVATION	18	3	31	2	50
FOUNDATION	25	4	31	2	19
MAXIMUM	25	4	31	2	50
SCAQMD THRESHOLD	550	75	100	150	150
EXCEED THRESHOLD?	NO	NO	NO	NO	NO
SOURCE: TERRY A. HAYES ASSOCIATES.					

TERRY A. HAYES ASSOCIATES
CONSTRUCTION EMISSIONS MODEL

DEMOLITION PHASE EMISSIONS (in pounds per day)

Activity Emissions	Daily Unit Volume	PM^{10} Factor **	PM^{10}	(Rule 403) PM^{10}
Building Wrecking	16,528 ft^3	0.00042 per ft^3	6.94	3.47
Pavement Breaking	303 ft^3	0.00042 per ft^3	0.13	0.06
Truck Loading	167 tons	0.02205 per ton	3.68	1.84
Trucks on Unpaved Surface	1.13 miles	5.55141 per vmt	6.27	3.13
** **Source:** Table A9-9, SCAQMD CEQA Handbook				

Equipment Emissions	Source Population	Activity Hours	CO	ROG	NOX	SOX	PM^{10}
Dozer/Crane	2	8	10.80	2.40	27.20	2.29	2.24

Mobile Emissions	Daily VMT	CO	ROG	NOX	SOX	PM^{10}
Haul Trucks	106	1.78	0.45	2.35	0.07	10.35
Worker Vehicles	198	4.55	0.39	0.32	0.02	0.82

TOTAL DAILY EMISSIONS (without Rule 403)	CO	ROG	NOX	SOX	PM^{10}
Daily Area Source Emissions	10.80	2.40	27.20	2.29	19.26
Daily Mobile Emissions	6.32	0.84	2.67	0.09	11.17
TOTAL	**17.12**	**3.24**	**29.87**	**2.38**	**30.43**

TOTAL DAILY EMISSIONS (with Rule 403)	CO	ROG	NOX	SOX	PM^{10}
Daily Area Source Emissions	10.80	2.40	27.20	2.29	9.63
Daily Mobile Emissions	6.32	0.84	2.67	0.09	11.17
TOTAL	**17.12**	**3.24**	**29.87**	**2.38**	**20.80**

UNDERLING DEMOLITION PHASE CALCULATIONS

Bldg Vol CF	991,695
Bldg Vol CY	36,729
Pavement CF	18,181
Pavement CY	673
Total Debris CF	216,520
Total Debris CY	8,019
Numer of Haul Load @ 14.00 CY/load	636
Loads Per Hour	1
Number of Haul Loads per Day	11
CF/Day Demolished	16,831
CY/Day Demolished	623
Tons of Debris Loaded per Day	167
Number of Dozers to Load @ 6 loads/hr/dozer	1
Numer of Diesel Equipment @ 900 CY/Piece	2
Total Man Hours Required	6,545
Total Work Crew Size	14
HDV Off Site VMT	106
HDV VMT on Unpaved Site (miles)	1.13
Number of Work Crew Vehicles @ 1.1 AVR	12
Work Crew Vehicle VMT - Local (miles)	198

TERRY A. HAYES ASSOCIATES
CONSTRUCTION EMISSIONS MODEL

GRADING/EXCAVATION PHASE EMISSIONS (in pounds per day)

Activity Emissions (without Rule 403)	Silt Content	Moisture Content	Activity Hours	Wind Speed	Pounds per Day	PM^{10}
Site Grading	15	3%	8	n/a	n/a	99.04
Earth Excavation	n/a	3%	n/a	4.68	453,704	83.39
Note: Calculation formulas are located in **Tables A9-9-F and 9-9-G** of the SCAQMD CEQA Handbook						

Activity Emissions (with Rule 403)	Silt Content	Moisture Content	Activity Hours	Wind Speed	Pounds per Day	PM^{10}
Site Grading	15	12%	8.0	n/a	n/a	14.22
Earth Excavation	n/a	12%	n/a	4.68	453,704	11.97
Note: Calculation formulas are located in **Tables A9-9-F and 9-9-G** of the SCAQMD CEQA Handbook						

Activity Emissions	Daily VMT	Emissions Factor	PM^{10}	PM^{10} (with Rule 403)
Haul Truck on Unpaved Surface	1.72	5.55	9.57	4.79

Equipment Emissions	Source Population	Daily Hours	CO	ROG	NOX	SOX	PM^{10}
Dozer/Shovel	2	8	10.80	2.40	27.20	2.29	2.24

Mobile Emissions	Daily VMT	CO	ROG	NOX	SOX	PM^{10}
Haul Trucks	162	2.71	0.69	3.59	0.11	15.81
Worker Vehicles	204	4.67	0.40	0.33	0.02	0.84

TOTAL DAILY EMISSIONS (without Rule 403)	CO	ROG	NOX	SOX	PM^{10}
Daily Area Source Emissions	10.80	2.40	27.20	2.29	194.24
Daily Mobile Emissions	7.38	1.08	3.92	0.13	16.66
TOTAL	**18.18**	**3.48**	**31.12**	**2.42**	**210.89**

TOTAL DAILY EMISSIONS (with Rule 403)	CO	ROG	NOX	SOX	PM^{10}
Daily Area Source Emissions	10.80	2.40	27.20	2.29	33.22
Daily Mobile Emissions	7.38	1.08	3.92	0.13	16.66
TOTAL	**18.18**	**3.48**	**31.12**	**2.42**	**49.88**

TERRY A. HAYES ASSOCIATES
CONSTRUCTION EMISSIONS MODEL

UNDERLING GRADING/EXCAVATION PHASE CALCULATIONS	
Total Earth Export CY	74,861
Total Haul Truck Trips @ 14.00 CY	5,347
Total Earth Export Weight (in tons)	74,861
Daily Earth Export CY	227
Daily Haul Truck Trips @ 14.00 CY	16
Daily Earth Export Weight (in tons)	227
Haul Truck VMT on Unpaved Surface	1.72
HDV Off Site VMT	162
Total Work Crew Size	14
Number of Work Crew Vehicles @ 1.1 AVR	13
Work Crew Vehicle VMT - Local (miles)	204
EQUIPMENT NEEDED FOR GRADING	
Site Area in Acres	7.25
Grading Average Depth	0.50
Cubic Yards Graded	5,848
CY Graded/Day	17.72
D7 Dozer Output in CY/Day	216.00
Dozers Needed	1.00
EQUIPMENT NEEDED FOR EXCAVATION	
CY Exported	74,861
CY Exported/Day	227
Power Shovel Output in CY /Day	800
Power Shovels Needed	1.00
TOTAL EQUIPMENT NEEDED	2.00

TERRY A. HAYES ASSOCIATES
CONSTRUCTION EMISSIONS MODEL

FOUNDATION PHASE EMISSIONS (in pounds per day)

Equipment	Source Population	Daily Hours	CO	ROG	NOX	SOX	PM^{10}
Idling Cement Trucks	1.93	8	10.43	2.32	26.26	2.21	2.16

Mobile	Daily VMT	CO	ROG	NOX	SOX	PM^{10}
Cement Trucks	154.49	2.59	0.65	3.42	0.10	15.08
Worker Vehicles	511.93	11.74	1.00	0.83	0.06	2.12

TOTAL DAILY EMISSIONS	CO	ROG	NOX	SOX	PM^{10}
Daily Area Source Emissions	10.43	2.32	26.26	2.21	2.16
Daily Mobile Emissions	14.32	1.66	4.26	0.16	17.19
TOTAL	**24.75**	**3.97**	**30.52**	**2.37**	**19.36**

UNDERLING FOUNDATION PHASE CALCULATIONS

CF of Cement Required	450,500
CY of Cement Required	16,685
No. of Cement Haul Loads @ 9CY/Load	1,854
Labor Hours Required	33,788
Total Worker Requirement	35
Number of Work Crew Vehicles @ 1.1 AVR	32
Number of Cement Loads per Day	15.45
Cement Loads Per Hour	1.93
CF/Day Poured	3,754.17
CY/Day Poured	139.04
HDV Off Site VMT	154.49
Work Crew Vehicle VMT	511.93

SCENARIO TITLE: MVEI7G Emission Factors Scenario

PREDICTED CALIFORNIA VEHICLE EMISSIONS
CARBON MONOXIDE PLANNING INVENTORY

RUN DATE: 06/18/01

CALENDAR YEAR: 2001 __ Model Years 1967 to 2001 inclusive

LOS ANGELES COUNTY

EMISSION UNIT: TONS PER DAY

MVEI7G ver 1.0c/DAILY EMISSIONS

SOUTH COAST Air Basin

ENHANCED I & M PROGRAM IN EFFECT

ALL ON_ROAD EMISSIONS

	LIGHT DUTY AUTOMOBILES				LIGHT DUTY TRUCKS < 6,000 lbs				MEDIUM DUTY TRUCKS(1) 6,001 to 14,000 lbs					HEAVY DUTY TRUCKS > 14,001 lbs							
	GAS			LDA	GAS			LDT	GAS			MDT	GAS			HDT	URBAN DIESEL	MOTOR_	ALL
	NON_CAT	CAT	DIESEL	TOTAL	NON_CAT	CAT	DIESEL	TOTAL	NON_CAT	CAT	DIESEL	TOTAL	NON_CAT	CAT	DIESEL	TOTAL	BUSES	CYCLES	VEHICLES
NO. OF IN USE VEHS	98607	3799826	20098	3918531	5864	1375354	8793	1390011	14383	247317	40374	302074	3764	6117	59229	69110	2384	75599	5757709
DAILY VMT (X 1000)	1500	116720	338	118558	75	42970	132	43177	347	10758	1573	12678	103	466	6120	6689	330	785	182217
NO. OF DAILY STARTS	458513	23014178	114093	23586784	34395	9007364	54148	9095907	69724	2082089	0	2151813	20125	90719	0	110844	0	66699	35012047
REACTIVE ORGANIC GAS EMISSIONS																			
RUNNING EXHAUST	11.72	25.51	0.12	37.36	0.27	11.59	0.05	11.90	0.72	3.71	0.65	5.08	0.31	0.34	7.07	7.72	0.65	1.57	64.28
START EXHAUST	5.21	53.77	0.05	59.03	0.29	25.31	0.04	25.64	0.05	4.37	0.00	4.41	0.00	0.00	0.00	0.00	0.00	0.38	89.47
SUBTOTAL EXHAUST	16.93	79.28	0.17	96.39	0.56	36.89	0.08	37.54	0.77	8.08	0.65	9.49	0.31	0.34	7.07	7.72	0.65	1.96	153.75
DIURNAL EVAPORATION	0.80	5.27	0.00	6.07	0.04	1.79	0.00	1.83	0.04	0.26	0.00	0.30	0.01	0.01	0.00	0.02	0.00	0.05	8.28
HOT SOAK EVAPORATION	3.38	13.75	0.00	17.14	0.20	5.19	0.00	5.39	0.12	1.03	0.00	1.14	0.04	0.07	0.00	0.11	0.00	0.04	23.82
RUNNING LOSSES	0.94	14.32	0.00	15.25	0.04	3.84	0.00	3.88	0.14	0.75	0.00	0.89	0.04	0.03	0.00	0.07	0.00	0.00	20.09
RESTING LOSSES	0.21	5.96	0.00	6.17	0.03	2.05	0.00	2.08	0.00	0.20	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	8.46
SUBTOTAL EVAPORATION	5.33	39.30	0.00	44.63	0.30	12.88	0.00	13.18	0.30	2.24	0.00	2.54	0.09	0.10	0.00	0.19	0.00	0.09	60.64
TOTAL ROG EMISSION	22.26	118.59	0.17	141.02	0.86	49.78	0.08	50.72	1.07	10.32	0.65	12.03	0.40	0.45	7.07	7.92	0.65	2.05	214.40
CARBON MONOXIDE EMISSIONS																			
RUNNING EXHAUST	81.67	487.00	0.48	569.15	4.47	205.20	0.18	209.85	15.99	54.01	7.62	77.62	7.21	5.82	50.52	63.55	0.64	7.11	927.92
START EXHAUST	24.59	641.01	0.71	666.31	1.59	313.97	0.30	315.87	0.21	53.04	0.00	53.26	0.00	0.00	0.00	0.00	0.00	1.89	1037.33
TOTAL CO EMISSION	106.26	1128.02	1.18	1235.46	6.06	519.17	0.49	525.72	16.20	107.06	7.62	130.88	7.21	5.82	50.52	63.55	0.64	9.00	1965.25
OXIDES OF NITROGEN EMISSIONS																			
RUNNING EXHAUST	5.46	77.71	0.58	83.75	0.24	45.36	0.21	45.81	2.58	22.63	8.26	33.47	1.19	3.24	66.27	70.70	5.94	0.96	240.62
START EXHAUST	0.49	29.45	0.03	29.97	0.03	17.69	0.05	17.78	0.01	3.57	0.00	3.57	0.00	0.00	0.00	0.00	0.00	0.05	51.37
TOTAL NOX EMISSION	5.95	107.17	0.60	113.72	0.28	63.05	0.26	63.58	2.58	26.20	8.26	37.04	1.19	3.24	66.27	70.70	5.94	1.01	291.99
CARBON DIOXIDE EMISSIONS x100																			
RUNNING EXHAUST	9.68	377.95	N/A	387.64	0.46	164.47	N/A	164.93	0.07	34.90	N/A	34.97	N/A	N/A	N/A	N/A	N/A	N/A	587.54
START EXHAUST	1.02	27.39	N/A	28.40	0.07	14.17	N/A	14.24	0.01	3.39	N/A	3.41	N/A	N/A	N/A	N/A	N/A	N/A	46.05
TOTAL CO2 EMISSION	10.70	405.34	N/A	416.04	0.53	178.64	N/A	179.17	0.09	38.30	N/A	38.38	N/A	N/A	N/A	N/A	N/A	N/A	633.59
PARTICULATE MATTER EMISSIONS LESS THAN 10 MICRONS																			
EXHAUST	0.04	0.57	0.12	0.73	0.00	0.21	0.06	0.27	0.02	0.24	0.53	0.79	0.01	0.03	3.57	3.61	0.04	0.04	5.48
TIRE_WEAR	0.01	1.03	0.00	1.04	0.00	0.38	0.00	0.38	0.00	0.11	0.02	0.14	0.00	0.01	0.19	0.19	0.01	0.00	1.77
BRAKE_WEAR	0.02	1.61	0.00	1.64	0.00	0.59	0.00	0.60	0.00	0.15	0.02	0.18	0.00	0.01	0.08	0.09	0.00	0.01	2.52
TOTAL PM10 EMISSION	0.08	3.21	0.13	3.41	0.00	1.19	0.06	1.25	0.03	0.50	0.57	1.10	0.01	0.04	3.84	3.89	0.06	0.05	9.77
LEAD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SULFUR OXIDES_ as SO2	0.03	1.09	0.04	1.16	0.00	0.48	0.02	0.50	0.02	0.26	0.89	1.17	0.00	0.02	3.48	3.50	0.19	0.00	6.53
FUEL CONSUMED IN 1000 GALLONS																			
GASOLINE	132.63	4366.29		4498.92	6.60	1927.78		1934.38	60.49	1045.58		1106.07	18.12	81.70		99.82		15.70	7654.89
DIESEL			11.32	11.32			5.07	5.07			252.23	252.23			983.20	983.20	54.25		1306.07

(1) _ MEDIUM DUTY TRUCKS INCLUDES LIGHT HEAVY DUTY TRUCK EMISSIONS

SCENARIO TITLE: MVEI7G Emission Factors Scenario

CALENDAR YEAR: 2011 __ Model Years 1977 to 2011 inclusive

MVEI7G ver 1.0c/DAILY EMISSIONS

PREDICTED CALIFORNIA VEHICLE EMISSIONS
CARBON MONOXIDE PLANNING INVENTORY

LOS ANGELES COUNTY

SOUTH COAST Air Basin

RUN DATE: 06/18/01

EMISSION UNIT: TONS PER DAY

ENHANCED I & M PROGRAM IN EFFECT

ALL ON_ROAD EMISSIONS

	LIGHT DUTY AUTOMOBILES				LIGHT DUTY TRUCKS < 6,000 lbs				MEDIUM DUTY TRUCKS(1) 6,001 to 14,000 lbs				HEAVY DUTY TRUCKS > 14,001 lbs						
	GAS				GAS				GAS				GAS				URBAN		
	NON_CAT	CAT	DIESEL	LDA TOTAL	NON_CAT	CAT	DIESEL	LDT TOTAL	NON_CAT	CAT	DIESEL	MDT TOTAL	NON_CAT	CAT	DIESEL	HDT TOTAL	DIESEL BUSES	MOTOR_ CYCLES	ALL VEHICLES
NO. OF IN USE VEHS	1285	4205388	5156	4211829	0	1493449	603	1494052	1147	292272	48326	341745	538	9792	60001	70331	2487	75599	6196043
DAILY VMT (X 1000)	19	128984	70	129073	0	51471	9	51480	19	13856	1956	15831	10	519	7024	7553	345	885	205167
NO. OF DAILY STARTS	5350	25085969	24451	25115770	0	10603538	3770	10607308	4364	2786557	0	2790921	2067	108715	0	110782	0	73556	38698337
REACTIVE ORGANIC GAS EMISSIONS																			
RUNNING EXHAUST	0.06	8.26	0.03	8.35	0.00	3.21	0.00	3.21	0.02	1.43	0.23	1.68	0.02	0.25	6.28	6.55	0.68	1.91	22.38
START EXHAUST	0.04	17.00	0.01	17.05	0.00	8.74	0.00	8.74	0.00	1.50	0.00	1.50	0.00	0.00	0.00	0.00	0.00	0.42	27.72
SUBTOTAL EXHAUST	0.10	25.27	0.04	25.41	0.00	11.94	0.01	11.95	0.02	2.93	0.23	3.18	0.02	0.25	6.28	6.55	0.68	2.34	50.10
DIURNAL EVAPORATION	0.01	2.98	0.00	2.99	0.00	0.94	0.00	0.94	0.00	0.19	0.00	0.19	0.00	0.01	0.00	0.01	0.00	0.05	4.18
HOT SOAK EVAPORATION	0.04	6.83	0.00	6.87	0.00	2.39	0.00	2.39	0.00	0.88	0.00	0.88	0.00	0.07	0.00	0.08	0.00	0.05	10.26
RUNNING LOSSES	0.01	8.28	0.00	8.29	0.00	2.69	0.00	2.69	0.01	0.39	0.00	0.40	0.00	0.02	0.00	0.02	0.00	0.00	11.40
RESTING LOSSES	0.01	2.14	0.00	2.15	0.00	0.63	0.00	0.63	0.00	0.06	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00	2.84
SUBTOTAL EVAPORATION	0.07	20.23	0.00	20.30	0.00	6.65	0.00	6.65	0.01	1.52	0.00	1.53	0.01	0.10	0.00	0.11	0.00	0.10	28.68
TOTAL ROG EMISSION	0.17	45.50	0.04	45.70	0.00	18.59	0.01	18.60	0.04	4.44	0.23	4.71	0.03	0.35	6.28	6.66	0.68	2.43	78.78
CARBON MONOXIDE EMISSIONS																			
RUNNING EXHAUST	1.25	329.32	0.12	330.69	0.00	148.24	0.01	148.25	0.25	57.23	9.82	67.30	0.20	7.96	59.00	67.15	0.65	8.82	622.86
START EXHAUST	0.30	244.00	0.19	244.49	0.00	129.01	0.02	129.04	0.00	22.88	0.00	22.88	0.00	0.00	0.00	0.00	0.00	2.09	398.49
TOTAL CO EMISSION	1.55	573.32	0.31	575.18	0.00	277.25	0.04	277.29	0.25	80.11	9.82	90.18	0.20	7.96	59.00	67.15	0.65	10.90	1021.35
OXIDES OF NITROGEN EMISSIONS																			
RUNNING EXHAUST	0.06	41.57	0.13	41.75	0.00	26.64	0.01	26.65	0.14	15.22	6.42	21.78	0.11	2.19	59.40	61.71	5.20	1.03	158.12
START EXHAUST	0.01	20.78	0.00	20.79	0.00	14.32	0.00	14.32	0.00	3.47	0.00	3.47	0.00	0.00	0.00	0.00	0.00	0.05	38.63
TOTAL NOX EMISSION	0.06	62.35	0.14	62.55	0.00	40.95	0.02	40.97	0.14	18.69	6.42	25.25	0.11	2.19	59.40	61.71	5.20	1.08	196.76
CARBON DIOXIDE EMISSIONS x100																			
RUNNING EXHAUST	0.12	392.70	N/A	392.82	0.00	200.24	N/A	200.24	0.00	49.42	N/A	49.42	N/A	N/A	N/A	N/A	N/A	N/A	642.48
START EXHAUST	0.01	20.78	N/A	20.79	0.00	16.18	N/A	16.18	0.00	4.53	N/A	4.53	N/A	N/A	N/A	N/A	N/A	N/A	41.50
TOTAL CO2 EMISSION	0.13	413.48	N/A	413.61	0.00	216.42	N/A	216.42	0.00	53.95	N/A	53.95	N/A	N/A	N/A	N/A	N/A	N/A	683.98
PARTICULATE MATTER EMISSIONS LESS THAN 10 MICRONS																			
EXHAUST	0.00	0.55	0.03	0.58	0.00	0.22	0.00	0.22	0.00	0.28	0.43	0.71	0.00	0.03	2.13	2.16	0.02	0.04	3.72
TIRE_WEAR	0.00	1.14	0.00	1.14	0.00	0.45	0.00	0.45	0.00	0.14	0.03	0.17	0.00	0.01	0.21	0.22	0.01	0.00	1.99
BRAKE_WEAR	0.00	1.78	0.00	1.78	0.00	0.71	0.00	0.71	0.00	0.19	0.03	0.22	0.00	0.01	0.10	0.10	0.00	0.01	2.83
TOTAL PM10 EMISSION	0.00	3.47	0.03	3.50	0.00	1.38	0.00	1.39	0.00	0.61	0.49	1.09	0.00	0.04	2.44	2.48	0.03	0.06	8.54
LEAD	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
SULFUR OXIDES_ as SO2	0.00	1.08	0.01	1.09	0.00	0.57	0.00	0.57	0.00	0.32	1.05	1.36	0.00	0.02	3.75	3.77	0.18	0.00	6.98
FUEL CONSUMED IN 1000 GALLONS																			
GASOLINE	1.65	4338.40		4340.05	0.00	2266.08		2266.08	3.36	1262.66		1266.02	1.73	91.23		92.96		17.70	7982.83
DIESEL			2.40	2.40			0.35	0.35			295.87	295.87			1059.37	1059.37	52.29		1410.28

(1) _ MEDIUM DUTY TRUCKS INCLUDES LIGHT HEAVY DUTY TRUCK EMISSIONS

Year 2011 Los Angeles County (South Coast Air Basin) Burden Emissions Factor Calculations

Daily VMT	205,167,000	(from the CARB MVEI7G model)
Average Trip Length	5.00	(LACC Service Area)

	Tons/Year[1]	Grams/Mile[2]
CO	1,021.35	4.52
ROG	78.78	0.35
NOX	196.76	0.87
SOX	6.98	0.03
PM10	8.54	0.04

[1] From the CARB MVEI7G model

[2] Calculated by converting tons/day to grams/day, then dividing by daily VMT

Daily Operational Emissions

LACC Master Plan (Proposed Project)				
CO	ROG	NOX	SOX	PM10
228.10	17.59	43.94	1.56	1.91

Related Project 1 (Mini-Mall)				
CO	ROG	NOX	SOX	PM10
152.23	11.74	29.33	1.04	1.27

Related Project 2 (Children's Hospital)				
CO	ROG	NOX	SOX	PM10
56.80	4.38	10.94	0.39	0.47

Related Project 3 (Mini-Shopping Center)				
CO	ROG	NOX	SOX	PM10
14.83	1.14	2.86	0.10	0.12

Related Project 4 (Office/Retail Devp)				
CO	ROG	NOX	SOX	PM10
19.51	1.51	3.76	0.13	0.16

Related Project 5 (Westlake Recovery Redevelopment)				
CO	ROG	NOX	SOX	PM10
1,769.53	136.49	340.89	12.09	14.80

Related Project 6 (Food-4-Less)				
CO	ROG	NOX	SOX	PM10
154.82	11.94	29.83	1.06	1.29

Related Project 7 (Western Plaza)				
CO	ROG	NOX	SOX	PM10
24.04	1.85	4.63	0.16	0.20

Related Project 8 (Wilshire Galleria)				
CO	ROG	NOX	SOX	PM10
16.93	1.31	3.26	0.12	0.14

Related Project 9 (Apartment Building)				
CO	ROG	NOX	SOX	PM10
29.72	2.29	5.73	0.20	0.25

Related Project 10 (Hollywood Promenade)				
CO	ROG	NOX	SOX	PM10
273.70	21.11	52.73	1.87	2.29

Related Project 11 (Shopping Center)				
CO	ROG	NOX	SOX	PM10
43.46	3.35	8.37	0.30	0.36

Related Project 12 (Food Market)				
CO	ROG	NOX	SOX	PM10
30.12	2.32	5.80	0.21	0.25

Related Project 13 (Scientology Apartment)				
CO	ROG	NOX	SOX	PM10
14.83	1.14	2.86	0.10	0.12

Daily Operational Emissions

Related Project 14 (Laundry Mart Mini-Shopping Center)				
CO	ROG	NOX	SOX	PM10
75.92	5.86	14.63	0.52	0.63

Related Project 15 (Burger King)				
CO	ROG	NOX	SOX	PM10
69.49	5.36	13.39	0.47	0.58

Related Project 16 (Carls Jr. Restaurant)				
CO	ROG	NOX	SOX	PM10
52.47	4.05	10.11	0.36	0.44

Related Project 17 (LaundryMart/Burger King)				
CO	ROG	NOX	SOX	PM10
71.54	5.52	13.78	0.49	0.60

Related Project 18 (Restaurant)				
CO	ROG	NOX	SOX	PM10
26.78	2.07	5.16	0.18	0.22

Related Project 19 (Hotel)				
CO	ROG	NOX	SOX	PM10
22.75	1.75	4.38	0.16	0.19

Related Project 20 (McDonald's Restaurant)				
CO	ROG	NOX	SOX	PM10
53.02	4.09	10.21	0.36	0.44

Related Project 21 (LA International Church Dream Center)				
CO	ROG	NOX	SOX	PM10
-	-	-	-	-

Emissions Factor:	4.52	0.35	0.87	0.03	0.04

Assumptions:	Daily Trips	VMT
LACC Master Plan	4,582	22,910
Related Project 1	3,058	15,290
Related Project 2	1,141	5,705
Related Project 3	2,640	13,200
Related Project 4	392	1,960
Related Project 5	35,546	177,730
Related Project 6	3,110	15,550
Related Project 7	483	2,415
Related Project 8	340	1,700
Related Project 9	597	2,985
Related Project 10	5,498	27,490
Related Project 11	873	4,365
Related Project 12	605	3,025
Related Project 13	298	1,490
Related Project 14	1,525	7,625
Related Project 15	1,396	6,980
Related Project 16	1,054	5,270
Related Project 17	1,437	7,185
Related Project 18	538	2,690
Related Project 19	457	2,285
Related Project 20	1,065	5,325
Related Project 21	-	-
Average Trip Length:	5.00	
Grams/Pound:	453.59	

```
**
**************************************
** ISCST3 Input Produced by:
** ISC-AERMOD View Ver. 3.01
** Lakes Environmental Software Inc.
** Date: 3/19/2002
** File: C:\LACC_pkg\LACC_pkg.INP
**************************************
**
**
**************************************
** ISC Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE LACC Master Plan
   TITLETWO Underground parking facility - 1,050 spaces
   MODELOPT DFAULT CONC  URBAN
   AVERTIME 1
   POLLUTID CO
   TERRHGTS FLAT
   FLAGPOLE 5.40
   RUNORNOT RUN
CO FINISHED
**
**************************************
** ISC Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
   LOCATION PARKING VOLUME 30.000 30.000
   LOCATION PARKING2 VOLUME 30.000 30.000
** Source Parameters **
   SRCPARAM PARKING 0.47134857645245 0.300 13.953 0.140
   SRCPARAM PARKING2 0.47134857645245 0.300 13.953 0.140
** Source Group **
   SRCGROUP ALL
SO FINISHED
**
**************************************
** ISC Receptor Pathway
**************************************
**
**
RE STARTING
   DISCCART 36.60 66.60 5.4
RE FINISHED
**
**************************************
** ISC Meteorology Pathway
**************************************
**
**
ME STARTING
   INPUTFIL H:\Wind\SCAB\DLA.ASC
   ANEMHGHT 10 METERS
   SURFDATA 52075 1981 Downtown_LA
   UAIRDATA 91919 1981
ME FINISHED
**
**************************************
** ISC Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE FIRST
   RECTABLE 1 FIRST
   PLOTFILE 1 ALL 1ST C:\LACC_pkg\ISC\01H1GALL.PLT
OU FINISHED

**********************************
*** SETUP Finishes Successfully ***
**********************************

 *** ISCST3 - VERSION 99155 ***     *** LACC Master Plan                                                    ***
03/19/02
                                   *** Underground parking facility - 1,050 spaces                         ***
10:25:55
**MODELOPTs:
PAGE   1
CONC                         URBAN  FLAT   FLGPOL DFAULT

                                     ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - -

**Intermediate Terrain Processing is Selected

**Model Is Setup For Calculation of Average CONCentration Values.

  --  SCAVENGING/DEPOSITION LOGIC --
**Model Uses NO DRY DEPLETION.  DDPLETE =  F
**Model Uses NO WET DEPLETION.  WDPLETE =  F
**NO WET SCAVENGING Data Provided.
**NO GAS DRY DEPOSITION Data Provided.
**Model Does NOT Use GRIDDED TERRAIN Data for Depletion Calculations
```

**Model Uses URBAN Dispersion.
**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**NOTE: The Following Flags May Appear Following CONC Values: c for Calm Hours
m for Missing Hours
b for Both Calm and Missing Hours

**Misc. Inputs: Anem. Hgt. (m) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0
Emission Units = GRAMS/SEC ; Emission Rate Unit Factor = 0.10000E+07
Output Units = MICROGRAMS/M**3

**Approximate Storage Requirements of Model = 1.2 MB of RAM.

**Input Runstream File: C:\LACC_pkg\LACC_pkg.INP
**Output Print File: C:\LACC_pkg\LACC_pkg.OUT

*** ISCST3 - VERSION 99155 *** *** LACC Master Plan ***
03/19/02 *** Underground parking facility - 1,050 spaces ***
10:25:55
**MODELOPTs:
PAGE 2
CONC URBAN FLAT FLGPOL DFAULT

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	ELEV. (METERS)	HEIGHT (METERS)	SY (METERS)	SZ (METERS)	SCALAR VARY BY
PARKING	0	0.47135E+00	30.0	30.0	0.0	0.30	13.95	0.14	
PARKING2	0	0.47135E+00	30.0	30.0	0.0	0.30	13.95	0.14	

*** ISCST3 - VERSION 99155 *** *** LACC Master Plan ***
03/19/02 *** Underground parking facility - 1,050 spaces ***
10:25:55
**MODELOPTs:
PAGE 3
CONC URBAN FLAT FLGPOL DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

ALL PARKING , PARKING2,

*** ISCST3 - VERSION 99155 *** *** LACC Master Plan ***
03/19/02 *** Underground parking facility - 1,050 spaces ***
10:25:55
**MODELOPTs:
PAGE 4
CONC URBAN FLAT FLGPOL DFAULT

*** DISCRETE CARTESIAN RECEPTORS ***
(X-COORD, Y-COORD, ZELEV, ZFLAG)
(METERS)

(36.6, 66.6, 0.0, 5.4);

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** WIND PROFILE EXPONENTS ***

STABILITY CATEGORY	WIND SPEED CATEGORY 1	2	3	4	5	6
A	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
B	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
C	.20000E+00	.20000E+00	.20000E+00	.20000E+00	.20000E+00	.20000E+00
D	.25000E+00	.25000E+00	.25000E+00	.25000E+00	.25000E+00	.25000E+00
E	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00
F	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00

*** VERTICAL POTENTIAL TEMPERATURE GRADIENTS ***
(DEGREES KELVIN PER METER)

STABILITY CATEGORY	WIND SPEED CATEGORY 1	2	3	4	5	6
A	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
B	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
C	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
E	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01
F	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

FILE: H:\Wind\SCAB\DLA.ASC
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 52075 UPPER AIR STATION NO.: 91919
NAME: DOWNTOWN_LA NAME: UNKNOWN
YEAR: 1981 YEAR: 1981

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL	URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
81	01	01	01	224.8	1.79	285.9	6	387.1	152.0	0.0000	0.0	0.0000	0	0.00
81	01	01	02	192.4	2.68	286.5	6	397.2	152.0	0.0000	0.0	0.0000	0	0.00
81	01	01	03	197.5	2.68	285.9	5	407.3	152.0	0.0000	0.0	0.0000	0	0.00
81	01	01	04	211.0	2.24	285.9	4	417.4	417.4	0.0000	0.0	0.0000	0	0.00
81	01	01	05	219.0	2.68	285.4	4	427.4	427.4	0.0000	0.0	0.0000	0	0.00
81	01	01	06	229.5	2.68	283.7	5	437.5	152.0	0.0000	0.0	0.0000	0	0.00
81	01	01	07	207.0	3.13	283.7	5	447.5	152.0	0.0000	0.0	0.0000	0	0.00
81	01	01	08	224.6	3.13	284.3	4	70.1	201.5	0.0000	0.0	0.0000	0	0.00
81	01	01	09	209.0	3.58	287.0	3	144.7	254.3	0.0000	0.0	0.0000	0	0.00
81	01	01	10	211.6	2.68	291.5	3	219.4	307.0	0.0000	0.0	0.0000	0	0.00
81	01	01	11	224.1	1.34	294.8	2	294.0	359.8	0.0000	0.0	0.0000	0	0.00
81	01	01	12	35.6	1.79	290.9	3	368.7	412.5	0.0000	0.0	0.0000	0	0.00
81	01	01	13	87.2	3.58	289.8	3	443.3	465.3	0.0000	0.0	0.0000	0	0.00
81	01	01	14	56.7	3.13	290.4	3	518.0	518.0	0.0000	0.0	0.0000	0	0.00
81	01	01	15	67.3	2.68	290.4	3	518.0	518.0	0.0000	0.0	0.0000	0	0.00
81	01	01	16	98.2	4.02	289.3	4	518.0	518.0	0.0000	0.0	0.0000	0	0.00
81	01	01	17	87.6	3.58	288.1	5	518.0	511.1	0.0000	0.0	0.0000	0	0.00
81	01	01	18	97.6	1.34	287.6	6	518.0	468.5	0.0000	0.0	0.0000	0	0.00
81	01	01	19	110.5	1.00	287.0	7	518.0	425.9	0.0000	0.0	0.0000	0	0.00
81	01	01	20	168.2	1.34	287.0	7	518.0	383.4	0.0000	0.0	0.0000	0	0.00
81	01	01	21	223.6	1.00	287.6	7	518.0	340.8	0.0000	0.0	0.0000	0	0.00
81	01	01	22	272.0	1.00	287.0	7	518.0	298.2	0.0000	0.0	0.0000	0	0.00

```
81 01 01 23  225.7   1.00  286.5   7     518.0   255.6    0.0000        0.0  0.0000   0    0.00
81 01 01 24  202.2   1.34  286.5   6     518.0   213.0    0.0000        0.0  0.0000   0    0.00


*** NOTES:  STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
            FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

 *** ISCST3 - VERSION 99155 ***    *** LACC Master Plan                                                 ***
03/19/02
                                   *** Underground parking facility - 1,050 spaces                      ***

10:25:55
**MODELOPTs:
PAGE   7
CONC                          URBAN  FLAT   FLGPOL DFAULT

                                *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                    INCLUDING SOURCE(S):      PARKING , PARKING2,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                      ** CONC OF CO       IN MICROGRAMS/M**3                              **

     X-COORD (M)  Y-COORD (M)         CONC      (YYMMDDHH)              X-COORD (M)  Y-COORD (M)         CONC
(YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - -
          36.60        66.60     1713.64319  (81060806)

 *** ISCST3 - VERSION 99155 ***    *** LACC Master Plan                                                 ***
03/19/02
                                   *** Underground parking facility - 1,050 spaces                      ***

10:25:55
**MODELOPTs:
PAGE   8
CONC                          URBAN  FLAT   FLGPOL DFAULT

                                          *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***


                                      ** CONC OF CO       IN MICROGRAMS/M**3                              **

                                               DATE
NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)             RECEPTOR  (XR, YR, ZELEV, ZFLAG)     OF TYPE
GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - -

ALL      HIGH  1ST HIGH VALUE IS    1713.64319  ON 81060806: AT (      36.60,       66.60,       0.00,       5.40)  DC
NA


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
                      BD = BOUNDARY

 *** ISCST3 - VERSION 99155 ***    *** LACC Master Plan                                                 ***
03/19/02
                                   *** Underground parking facility - 1,050 spaces                      ***

10:25:55
**MODELOPTs:
PAGE   9
CONC                          URBAN  FLAT   FLGPOL DFAULT

*** Message Summary : ISCST3 Model Execution ***

 --------- Summary of Total Messages --------

A Total of           0 Fatal Error Message(s)
A Total of           1 Warning Message(s)
A Total of         692 Informational Message(s)

A Total of         692 Calm Hours Identified


   ******** FATAL ERROR MESSAGES ********
              ***  NONE  ***


   ********  WARNING MESSAGES   ********
MX W420   520 METQA :Wind Speed Out-of-Range.   KURDAT=                 81012216

   *************************************
   *** ISCST3 Finishes Successfully ***
   *************************************
```

```
**
****************************************
** ISCST3 Input Produced by:
** ISC-AERMOD View Ver. 3.01
** Lakes Environmental Software Inc.
** Date: 3/19/2002
** File: C:\LACC_pkg\pkg400sp.INP
****************************************
**
**
****************************************
** ISC Control Pathway
****************************************
**
**
CO STARTING
   TITLEONE LACC Master Plan
   TITLETWO Underground parking facility - 400 spaces at Tennis Court
   MODELOPT DFAULT CONC  URBAN
   AVERTIME 1
   POLLUTID CO
   TERRHGTS FLAT
   FLAGPOLE 5.40
   RUNORNOT RUN
CO FINISHED
**
****************************************
** ISC Source Pathway
****************************************
**
**
SO STARTING
** Source Location **
   LOCATION PARKING VOLUME 15.000 15.000
   LOCATION PARKING2 VOLUME 15.000 15.000
** Source Parameters **
   SRCPARAM PARKING 0.110827679004154 0.300 6.977 0.140
   SRCPARAM PARKING2 0.110827679004154 0.300 6.977 0.140
** Source Group **
   SRCGROUP ALL
SO FINISHED
**
****************************************
** ISC Receptor Pathway
****************************************
**
**
RE STARTING
   DISCCART 15.00 51.60 5.4
RE FINISHED
**
****************************************
** ISC Meteorology Pathway
****************************************
**
**
ME STARTING
   INPUTFIL H:\Wind\SCAB\DLA.ASC
   ANEMHGHT 10 METERS
   SURFDATA 52075 1981 Downtown_LA
   UAIRDATA 91919 1981
ME FINISHED
**
****************************************
** ISC Output Pathway
****************************************
**
**
OU STARTING
   RECTABLE ALLAVE FIRST
   RECTABLE 1 FIRST
   PLOTFILE 1 ALL 1ST C:\LACC_pkg\ISC\01H1GALL.PLT
OU FINISHED

***********************************
*** SETUP Finishes Successfully ***
***********************************

 *** ISCST3 - VERSION 99155 ***    *** LACC Master Plan                                              ***
03/19/02
                                   *** Underground parking facility - 400 spaces at Tennis Court    ***
10:37:02
**MODELOPTs:
PAGE   1
CONC                        URBAN  FLAT   FLGPOL DFAULT

                                              ***     MODEL SETUP OPTIONS SUMMARY       ***
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - -

**Intermediate Terrain Processing is Selected

**Model Is Setup For Calculation of Average CONCentration Values.

  --  SCAVENGING/DEPOSITION LOGIC --
**Model Uses NO DRY DEPLETION.  DDPLETE =  F
**Model Uses NO WET DEPLETION.  WDPLETE =  F
**NO WET SCAVENGING Data Provided.
**NO GAS DRY DEPOSITION Data Provided.
**Model Does NOT Use GRIDDED TERRAIN Data for Depletion Calculations
```

```
**Model Uses URBAN Dispersion.

**Model Uses Regulatory DEFAULT Options:
          1. Final Plume Rise.
          2. Stack-tip Downwash.
          3. Buoyancy-induced Dispersion.
          4. Use Calms Processing Routine.
          5. Not Use Missing Data Processing Routine.
          6. Default Wind Profile Exponents.
          7. Default Vertical Potential Temperature Gradients.
          8. "Upper Bound" Values for Supersquat Buildings.
          9. No Exponential Decay for URBAN/Non-SO2

**Model Assumes Receptors on FLAT Terrain.

**Model Accepts FLAGPOLE Receptor Heights.

**Model Calculates  1 Short Term Average(s) of:   1-HR

**This Run Includes:     2 Source(s);      1 Source Group(s); and       1 Receptor(s)

**The Model Assumes A Pollutant Type of:  CO

**Model Set To Continue RUNning After the Setup Testing.

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)

**NOTE:  The Following Flags May Appear Following CONC Values:  c for Calm Hours
                                                                m for Missing Hours
                                                                b for Both Calm and Missing Hours

**Misc. Inputs:  Anem. Hgt. (m) =    10.00 ;    Decay Coef. =    0.000     ;    Rot. Angle =     0.0
                 Emission Units = GRAMS/SEC                                 ;  Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

**Approximate Storage Requirements of Model =     1.2 MB of RAM.

**Input Runstream File:          C:\LACC_pkg\pkg400sp.INP
**Output Print File:             C:\LACC_pkg\pkg400sp.OUT

 *** ISCST3 - VERSION 99155 ***     *** LACC Master Plan                                                          ***
03/19/02                            *** Underground parking facility - 400 spaces at Tennis Court                 ***

10:37:02
**MODELOPTs:
PAGE   2
CONC                        URBAN  FLAT   FLGPOL DFAULT


                                                *** VOLUME SOURCE DATA ***

            NUMBER EMISSION RATE                          BASE    RELEASE    INIT.    INIT.   EMISSION RATE
   SOURCE    PART.  (GRAMS/SEC)      X         Y         ELEV.   HEIGHT      SY       SZ      SCALAR VARY
    ID       CATS.                 (METERS)  (METERS)  (METERS) (METERS)  (METERS) (METERS)        BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
-

  PARKING       0   0.11083E+00      15.0      15.0      0.0      0.30      6.98      0.14
  PARKING2      0   0.11083E+00      15.0      15.0      0.0      0.30      6.98      0.14

 *** ISCST3 - VERSION 99155 ***     *** LACC Master Plan                                                          ***
03/19/02                            *** Underground parking facility - 400 spaces at Tennis Court                 ***

10:37:02
**MODELOPTs:
PAGE   3
CONC                        URBAN  FLAT   FLGPOL DFAULT


                                          *** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID                                                SOURCE IDs


 ALL       PARKING , PARKING2,

*** ISCST3 - VERSION 99155 ***     *** LACC Master Plan                                                          ***
03/19/02                            *** Underground parking facility - 400 spaces at Tennis Court                 ***

10:37:02
**MODELOPTs:
PAGE   4
CONC                        URBAN  FLAT   FLGPOL DFAULT


                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                          (X-COORD, Y-COORD, ZELEV, ZFLAG)
                                                   (METERS)

    (     15.0,      51.6,       0.0,       5.4);
```

*** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
(1=YES; 0=NO)

```
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1  1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** WIND PROFILE EXPONENTS ***

STABILITY CATEGORY	WIND SPEED CATEGORY 1	2	3	4	5	6
A	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
B	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
C	.20000E+00	.20000E+00	.20000E+00	.20000E+00	.20000E+00	.20000E+00
D	.25000E+00	.25000E+00	.25000E+00	.25000E+00	.25000E+00	.25000E+00
E	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00
F	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00	.30000E+00

*** VERTICAL POTENTIAL TEMPERATURE GRADIENTS ***
(DEGREES KELVIN PER METER)

STABILITY CATEGORY	WIND SPEED CATEGORY 1	2	3	4	5	6
A	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
B	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
C	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
D	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00	.00000E+00
E	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01	.20000E-01
F	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01	.35000E-01

*** THE FIRST 24 HOURS OF METEOROLOGICAL DATA ***

FILE: H:\Wind\SCAB\DLA.ASC
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 52075 UPPER AIR STATION NO.: 91919
NAME: DOWNTOWN_LA NAME: UNKNOWN
YEAR: 1981 YEAR: 1981

YR MN DY HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL	URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
81 01 01 01	224.8	1.79	285.9	6	387.1	152.0	0.0000	0.0	0.0000	0	0.00
81 01 01 02	192.4	2.68	286.5	6	397.2	152.0	0.0000	0.0	0.0000	0	0.00
81 01 01 03	197.5	2.68	285.9	5	407.3	152.0	0.0000	0.0	0.0000	0	0.00
81 01 01 04	211.0	2.24	285.9	4	417.4	417.4	0.0000	0.0	0.0000	0	0.00
81 01 01 05	219.0	2.68	285.4	4	427.4	427.4	0.0000	0.0	0.0000	0	0.00
81 01 01 06	229.5	2.68	283.7	5	437.5	152.0	0.0000	0.0	0.0000	0	0.00
81 01 01 07	207.0	3.13	283.7	5	447.5	152.0	0.0000	0.0	0.0000	0	0.00
81 01 01 08	224.6	3.13	284.3	4	70.1	201.5	0.0000	0.0	0.0000	0	0.00
81 01 01 09	209.0	3.58	287.0	3	144.7	254.3	0.0000	0.0	0.0000	0	0.00
81 01 01 10	211.6	2.68	291.5	3	219.4	307.0	0.0000	0.0	0.0000	0	0.00
81 01 01 11	224.1	1.34	294.8	2	294.0	359.8	0.0000	0.0	0.0000	0	0.00
81 01 01 12	35.6	1.79	290.9	3	368.7	412.5	0.0000	0.0	0.0000	0	0.00
81 01 01 13	87.2	3.58	289.8	3	443.3	465.3	0.0000	0.0	0.0000	0	0.00
81 01 01 14	56.7	3.13	290.4	3	518.0	518.0	0.0000	0.0	0.0000	0	0.00
81 01 01 15	67.3	2.68	290.4	3	518.0	518.0	0.0000	0.0	0.0000	0	0.00
81 01 01 16	98.2	4.02	289.3	4	518.0	518.0	0.0000	0.0	0.0000	0	0.00
81 01 01 17	87.6	3.58	288.1	5	518.0	511.1	0.0000	0.0	0.0000	0	0.00
81 01 01 18	97.6	1.34	287.6	6	518.0	468.5	0.0000	0.0	0.0000	0	0.00
81 01 01 19	110.5	1.00	287.0	7	518.0	425.9	0.0000	0.0	0.0000	0	0.00
81 01 01 20	168.2	1.34	287.0	7	518.0	383.4	0.0000	0.0	0.0000	0	0.00
81 01 01 21	223.6	1.00	287.6	7	518.0	340.8	0.0000	0.0	0.0000	0	0.00
81 01 01 22	272.0	1.00	287.0	7	518.0	298.2	0.0000	0.0	0.0000	0	0.00

```
81 01 01 23  225.7   1.00  286.5   7     518.0   255.6    0.0000       0.0  0.0000   0   0.00
81 01 01 24  202.2   1.34  286.5   6     518.0   213.0    0.0000       0.0  0.0000   0   0.00


*** NOTES:   STABILITY CLASS 1=A, 2=B, 3=C, 4=D, 5=E AND 6=F.
             FLOW VECTOR IS DIRECTION TOWARD WHICH WIND IS BLOWING.

 *** ISCST3 - VERSION 99155 ***    *** LACC Master Plan                                                ***
03/19/02
                                   *** Underground parking facility - 400 spaces at Tennis Court       ***

10:37:02
**MODELOPTs:
PAGE   7
CONC                     URBAN  FLAT   FLGPOL DFAULT

                            *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION   VALUES FOR SOURCE GROUP:  ALL      ***
                                INCLUDING SOURCE(S):      PARKING , PARKING2,

                                                *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                      ** CONC OF CO        IN MICROGRAMS/M**3                             **

    X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)               X-COORD (M)  Y-COORD (M)        CONC
(YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - -
         15.00        51.60       623.85602  (81053005)
□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□□

 *** ISCST3 - VERSION 99155 ***    *** LACC Master Plan                                                ***
03/19/02
                                   *** Underground parking facility - 400 spaces at Tennis Court       ***

10:37:02
**MODELOPTs:
PAGE   8
CONC                     URBAN  FLAT   FLGPOL DFAULT

                                                   *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***


                                      ** CONC OF CO        IN MICROGRAMS/M**3                             **

                                                        DATE
NETWORK
GROUP ID                            AVERAGE CONC     (YYMMDDHH)            RECEPTOR  (XR, YR, ZELEV, ZFLAG)    OF TYPE
GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - -

ALL      HIGH  1ST HIGH VALUE IS     623.85602  ON 81053005: AT (       15.00,        51.60,        0.00,       5.40)  DC
NA

 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
                      BD = BOUNDARY

 *** ISCST3 - VERSION 99155 ***    *** LACC Master Plan                                                ***
03/19/02
                                   *** Underground parking facility - 400 spaces at Tennis Court       ***

10:37:02
**MODELOPTs:
PAGE   9
CONC                     URBAN  FLAT   FLGPOL DFAULT

*** Message Summary : ISCST3 Model Execution ***

 --------- Summary of Total Messages --------

A Total of           0 Fatal Error Message(s)
A Total of           1 Warning Message(s)
A Total of         692 Informational Message(s)

A Total of         692 Calm Hours Identified


   ******** FATAL ERROR MESSAGES ********
            ***  NONE  ***


   ********   WARNING MESSAGES   ********
MX W420   520 METQA :Wind Speed Out-of-Range.   KURDAT=                 81012216

   ************************************
   *** ISCST3 Finishes Successfully ***
   ************************************
```

EMFAC7F1.1 RATES AS OF 1/25/94
TIME RATE ADJUSTMENT BAGS 1 & 3 LACC MASTER PLAN

YEAR: 2001	DEWPOINT: 10	% COLD STARTS	50.0	% LDA	70.5	% LDT	25.0	% MDT	3.0
INSPECTION & MAINTENANCE: YES		% HOT STARTS	10.0	% UBD	0.5	% HDG	0.0	% HDD	0.5
SEASON: WINTER		% HOT STAB	40.0			% MCY	0.5		

TABLE 1: ESTIMATED TRAVEL FRACTIONS

	LIGHT DUTY AUTOS			LIGHT DUTY TRUCKS			MED DUTY TRUCKS	URBAN BUS	HEAVY DUTY TRUCKS			MCY
	NCAT	CAT	DIESEL	NCAT	CAT	DIESEL	NCAT	CAT	DIESEL	NCAT	CAT	DIESEL	ALL
% VMT	0.93	98.86	0.21	0.13	99.65	0.22	0.62	99.38	100.00	18.14	81.86	100.00	100.00
% TRIP	0.93	98.86	0.21	0.13	99.65	0.22	0.62	99.38	100.00	18.14	81.86	100.00	100.00
% VEH	1.94	97.66	0.40	0.30	99.25	0.45	1.70	98.30	100.00	28.53	71.47	100.00	100.00

1ENV028F1.1 CALTRANS DIVISION OF RUN DATES: ENV028F1.1
3/19/2002
NEW TECHNOLOGY, MATERIALS AND RESEARCH EMFAC7F1.1
3/19/2002

EMFAC7F1.1 RATES AS OF 1/25/94
TIME RATE ADJUSTMENT BAGS 1 & 3 LACC MASTER PLAN

YEAR: 2001 DEWPOINT: 10 % COLD STARTS 50.0 % LDA 70.5 % LDT 25.0 % MDT 3.0
INSPECTION & MAINTENANCE: YES % HOT STARTS 10.0 % UBD 0.5 % HDG 0.0 % HDD 0.5
SEASON: WINTER % HOT STAB 40.0 % MCY 0.5

TABLE 2: COMPOSITE EMISSION FACTORS

POLLUTANT NAME: CARBON MONOXIDE IN GRAMS PER MILE

SPEED	TEMPERATURE IN DEGREES FAHRENHEIT						
MPH	65	70	75	80	85	90	95
IDLE*	3.75	3.19	2.74	2.42	2.27	2.29	2.53
3	75.06	63.87	54.71	48.45	45.31	45.83	50.52
5	47.07	40.36	34.87	31.16	29.34	29.74	32.66
10	24.25	20.89	18.16	16.31	15.42	15.64	17.13
15	16.30	14.06	12.24	11.01	10.42	10.57	11.57
20	12.33	10.66	9.29	8.37	7.93	8.05	8.81
25	9.97	8.63	7.53	6.80	6.45	6.55	7.17
30	8.38	7.26	6.35	5.75	5.46	5.55	6.06
35	7.24	6.28	5.51	4.99	4.74	4.82	5.26
40	6.41	5.57	4.89	4.43	4.22	4.29	4.68
45	5.82	5.07	4.47	4.07	3.88	3.95	4.30
50	5.48	4.81	4.27	3.91	3.75	3.82	4.16
55	5.48	4.88	4.39	4.08	3.95	4.03	4.36
60	6.36	5.79	5.35	5.10	5.03	5.18	5.56
65	9.88	9.34	8.94	8.82	8.92	9.25	9.87

*IDLE EMISSIONS IN GRAMS/MIN, DERIVED FROM 3 MPH RATES

EMFAC7F1.1 RATES AS OF 1/25/94

TIME RATE ADJUSTMENT BAGS 1 & 3 LACC MASTER PLAN

YEAR: 2011	DEWPOINT: 10	% COLD STARTS	50.0	% LDA	70.5	% LDT	25.0	% MDT	3.0
INSPECTION & MAINTENANCE: YES		% HOT STARTS	10.0	% UBD	0.5	% HDG	0.0	% HDD	0.5
SEASON: WINTER		% HOT STAB	40.0			% MCY	0.5		

TABLE 1: ESTIMATED TRAVEL FRACTIONS

	LIGHT DUTY AUTOS			LIGHT DUTY TRUCKS			MED DUTY TRUCKS		URBAN BUS	HEAVY DUTY TRUCKS			MCY
	NCAT	CAT	DIESEL	NCAT	CAT	DIESEL	NCAT	CAT	DIESEL	NCAT	CAT	DIESEL	ALL
% VMT	0.02	99.94	0.04	0.00	99.99	0.01	0.00	100.00	100.00	11.00	89.00	100.00	100.00
% TRIP	0.02	99.94	0.04	0.00	99.99	0.01	0.00	100.00	100.00	11.00	89.00	100.00	100.00
% VEH	0.03	99.88	0.09	0.00	99.97	0.03	0.00	100.00	100.00	11.00	89.00	100.00	100.00

1ENV028F1.1
3/19/2002

CALTRANS DIVISION OF
NEW TECHNOLOGY, MATERIALS AND RESEARCH

RUN DATES: ENV028F1.1
EMFAC7F1.1

3/19/2002

EMFAC7F1.1 RATES AS OF 1/25/94

TIME RATE ADJUSTMENT BAGS 1 & 3 LACC MASTER PLAN

YEAR: 2011 DEWPOINT: 10 % COLD STARTS 50.0 % LDA 70.5 % LDT 25.0 % MDT 3.0
INSPECTION & MAINTENANCE: YES % HOT STARTS 10.0 % UBD 0.5 % HDG 0.0 % HDD 0.5
SEASON: WINTER % HOT STAB 40.0 % MCY 0.5

TABLE 2: COMPOSITE EMISSION FACTORS

POLLUTANT NAME: CARBON MONOXIDE IN GRAMS PER MILE

SPEED MPH	TEMPERATURE IN DEGREES FAHRENHEIT						
	65	70	75	80	85	90	95
IDLE*	1.76	1.55	1.39	1.28	1.23	1.26	1.38
3	35.14	31.01	27.72	25.53	24.62	25.23	27.52
5	22.68	20.21	18.25	16.96	16.46	16.87	18.31
10	12.03	10.80	9.82	9.19	8.95	9.18	9.92
15	8.13	7.30	6.65	6.23	6.08	6.23	6.73
20	6.14	5.52	5.04	4.72	4.61	4.72	5.10
25	4.96	4.46	4.08	3.82	3.73	3.83	4.13
30	4.18	3.77	3.44	3.24	3.16	3.24	3.50
35	3.63	3.28	3.00	2.83	2.76	2.84	3.06
40	3.25	2.94	2.70	2.55	2.49	2.56	2.75
45	3.00	2.73	2.51	2.38	2.34	2.40	2.57
50	2.90	2.65	2.46	2.34	2.31	2.37	2.54
55	3.00	2.78	2.61	2.51	2.48	2.55	2.72
60	3.50	3.30	3.16	3.08	3.08	3.17	3.35
65	5.14	4.96	4.85	4.81	4.86	5.01	5.27

*IDLE EMISSIONS IN GRAMS/MIN, DERIVED FROM 3 MPH RATES

CO HOTSPOT SUMMARY

Intersection	Existing		2011 No Project		2011 Project	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
Sunset Blvd & Vermont Ave	13.8	9.7	7.4	5.2	7.4	5.2
Santa Monica Blvd & Western Ave	14.2	9.9	7.8	5.5	7.8	5.5
Santa Monica Blvd & Normandie Ave	13.0	9.1	6.8	4.8	6.8	4.8
Santa Monica Blvd & Virgil Ave	13.8	9.7	7.3	5.1	7.4	5.2
101 On-Ramp & Normandie Ave	9.6	6.7	5.4	3.8	5.4	3.8
Melrose Ave & Normandie Ave	13.8	9.7	7.4	5.2	7.5	5.3
Melrose Ave & Virgil Ave	12.5	8.7	6.8	4.8	6.8	4.8
Beverly Blvd & Vermont Ave	15.5	10.8	8.5	6.0	8.6	6.0

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\versunex.DAT

RUN BEGIN ON 03/20/02 AT 08:57

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Vermont & Sunset Existing

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 7.7 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	0.0	524.0	500.0	500.	360.	AG	1303.	12.3	0.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1349.	12.3	0.0	44.0		
3. nbq	524.0	452.0	524.0	402.3	50.	180.	AG	1127.	100.0	0.0	48.0	0.45	2.5
4. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	1137.	12.3	0.0	68.0		
5. sbd	476.0	500.0	476.0	0.0	500.	180.	AG	1210.	12.3	0.0	44.0		
6. sbq	476.0	548.0	476.0	591.5	43.	360.	AG	1127.	100.0	0.0	48.0	0.39	2.2
7. eba	0.0	476.0	500.0	476.0	500.	90.	AG	1309.	12.3	0.0	68.0		
8. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1066.	12.3	0.0	44.0		
9. ebq	452.0	476.0	400.2	476.0	52.	270.	AG	1167.	100.0	0.0	48.0	0.47	2.6
10. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	1075.	12.3	0.0	68.0		
11. wbd	500.0	524.0	0.0	524.0	500.	270.	AG	1199.	12.3	0.0	44.0		
12. wbq	548.0	524.0	590.5	524.0	42.	90.	AG	1167.	100.0	0.0	48.0	0.39	2.2

1 PAGE 2

JOB: LACC Master Plan RUN: Vermont & Sunset Existing

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. nbq	60	28	3.0	1303	1600	225.00	3	3
6. sbq	60	28	3.0	1137	1600	225.00	3	3
9. ebq	60	29	3.0	1309	1600	225.00	3	3
12. wbq	60	29	3.0	1075	1600	225.00	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	432.0	568.0	5.4
2. ne	568.0	568.0	5.4
3. sw	432.0	432.0	5.4
4. se	568.0	432.0	5.4

1 PAGE 3

JOB: LACC Master Plan RUN: Vermont & Sunset Existing

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
0.	8.0	8.0	12.3	11.0
10.	8.8	7.7	13.6	9.9
20.	9.0	7.7	13.0	8.9
30.	8.9	7.7	11.3	8.5
40.	8.9	7.7	10.4	8.4
50.	9.4	7.7	10.5	8.4
60.	9.9	7.7	10.7	8.6
70.	10.9	7.7	10.3	8.7
80.	11.4	7.7	10.9	8.6
90.	12.1	8.0	10.8	7.9
100.	13.3	8.7	10.3	7.7
110.	12.8	8.8	9.3	7.7
120.	11.3	8.8	8.7	7.7
130.	10.1	8.8	8.6	7.7
140.	10.6	9.2	8.6	7.7
150.	10.8	9.9	8.8	7.7
160.	10.5	10.9	8.9	7.7
170.	11.1	11.5	8.8	7.7
180.	11.0	12.3	7.9	8.1

190.	*	10.4	13.8	7.7	8.8
200.	*	9.5	13.2	7.7	9.0
210.	*	8.8	11.2	7.7	9.0
220.	*	8.6	10.3	7.7	9.4
230.	*	8.6	10.6	7.7	9.8
240.	*	8.8	10.9	7.7	10.7
250.	*	8.9	10.5	7.7	11.3
260.	*	8.7	11.1	7.7	11.4
270.	*	7.9	10.8	8.1	12.3
280.	*	7.7	10.0	8.9	13.7
290.	*	7.7	9.0	9.0	13.2
300.	*	7.7	8.6	9.1	11.2
310.	*	7.7	8.5	9.6	10.2
320.	*	7.7	8.7	10.1	10.4
330.	*	7.7	8.8	10.9	10.7
340.	*	7.7	8.9	11.5	10.6
350.	*	7.7	8.7	11.5	11.1
360.	*	8.0	8.0	12.3	11.0
MAX	*	13.3	13.8	13.6	13.7
DEGR.	*	100	190	10	280

THE HIGHEST CONCENTRATION IS 13.79 PPM AT 190 DEGREES FROM REC2 .

1

JOB: LACC Master Plan RUN: Vermont & Sunset Existing

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 100	REC2 190	REC3 10	REC4 280
1	*	0.0	0.9	0.0	0.4
2	*	0.3	0.0	0.4	0.0
3	*	0.0	1.1	0.0	2.9
4	*	0.4	0.0	0.8	0.0
5	*	0.0	0.4	0.0	0.3
6	*	2.9	0.0	1.0	0.0
7	*	0.0	0.0	0.4	0.9
8	*	0.3	0.3	0.0	0.0
9	*	0.0	0.0	3.0	1.2
10	*	0.7	0.4	0.0	0.0
11	*	0.0	0.0	0.3	0.3
12	*	1.0	3.0	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:57

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\versunnp.DAT

RUN BEGIN ON 03/20/02 AT 08:57

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Vermont & Sunset No Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	0.0	524.0	500.0	500.	360.	AG	1423.	6.1	0.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1482.	6.1	0.0	44.0		
3. nbq	524.0	452.0	524.0	395.7	56.	180.	AG	548.	100.0	0.0	48.0	0.51	2.9
4. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	1279.	6.1	0.0	68.0		
5. sbd	476.0	500.0	476.0	0.0	500.	180.	AG	1329.	6.1	0.0	44.0		
6. sbq	476.0	548.0	476.0	598.6	51.	360.	AG	548.	100.0	0.0	48.0	0.46	2.6
7. eba	0.0	476.0	500.0	476.0	500.	90.	AG	1483.	6.1	0.0	68.0		
8. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1221.	6.1	0.0	44.0		
9. ebq	452.0	476.0	395.4	476.0	57.	270.	AG	529.	100.0	0.0	48.0	0.51	2.9
10. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	1222.	6.1	0.0	68.0		
11. wbd	500.0	524.0	0.0	524.0	500.	270.	AG	1375.	6.1	0.0	44.0		
12. wbq	548.0	524.0	594.7	524.0	47.	90.	AG	529.	100.0	0.0	48.0	0.42	2.4

1

JOB: LACC Master Plan RUN: Vermont & Sunset No Project

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. nbq	60	29	3.0	1423	1600	105.60	3	3
6. sbq	60	29	3.0	1279	1600	105.60	3	3
9. ebq	60	28	3.0	1483	1600	105.60	3	3
12. wbq	60	28	3.0	1222	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	432.0	568.0	5.4
2. ne	568.0	568.0	5.4
3. sw	432.0	432.0	5.4
4. se	568.0	432.0	5.4

1

JOB: LACC Master Plan RUN: Vermont & Sunset No Project

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
0.	4.5	4.5	6.5	5.9
10.	4.9	4.3	7.2	5.4
20.	5.0	4.3	7.1	5.0
30.	4.9	4.3	6.0	4.8
40.	5.2	4.3	5.7	4.7
50.	5.5	4.3	5.8	4.8
60.	5.8	4.3	5.8	4.8
70.	6.1	4.3	5.9	4.9
80.	6.2	4.3	6.1	4.8
90.	6.5	4.5	5.9	4.4
100.	7.2	4.8	5.7	4.3
110.	6.9	4.9	5.4	4.3
120.	6.1	4.9	4.9	4.3
130.	5.6	5.0	4.8	4.3
140.	5.9	5.2	4.8	4.3
150.	6.0	5.5	4.9	4.3
160.	5.8	6.0	5.0	4.3
170.	6.1	6.0	4.8	4.3
180.	5.9	6.4	4.4	4.5

190.	*	5.7	7.3	4.3	4.9
200.	*	5.3	7.2	4.3	5.0
210.	*	5.0	6.0	4.3	5.1
220.	*	4.8	5.7	4.3	5.3
230.	*	4.8	5.9	4.3	5.7
240.	*	4.9	6.0	4.3	6.1
250.	*	5.0	5.8	4.3	6.2
260.	*	4.9	6.2	4.3	6.2
270.	*	4.4	5.9	4.5	6.6
280.	*	4.3	5.6	4.9	7.4
290.	*	4.3	5.2	5.1	7.1
300.	*	4.3	4.9	5.1	6.1
310.	*	4.3	4.8	5.3	5.7
320.	*	4.3	4.8	5.7	5.8
330.	*	4.3	4.9	6.1	5.8
340.	*	4.3	4.9	6.1	5.9
350.	*	4.3	4.9	6.1	6.0
360.	*	4.5	4.5	6.5	5.9
MAX	*	7.2	7.3	7.2	7.4
DEGR.	*	100	190	10	280

THE HIGHEST CONCENTRATION IS 7.44 PPM AT 280 DEGREES FROM REC4 .

1

JOB: LACC Master Plan RUN: Vermont & Sunset No Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
	*	REC1	REC2	REC3	REC4
LINK #	*	100	190	10	280
1	*	0.0	0.5	0.0	0.2
2	*	0.2	0.0	0.2	0.0
3	*	0.0	0.6	0.0	1.4
4	*	0.2	0.0	0.4	0.0
5	*	0.0	0.2	0.0	0.2
6	*	1.4	0.0	0.5	0.0
7	*	0.0	0.0	0.2	0.5
8	*	0.2	0.1	0.0	0.0
9	*	0.0	0.0	1.4	0.6
10	*	0.4	0.2	0.0	0.0
11	*	0.0	0.0	0.2	0.2
12	*	0.5	1.4	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:57

1

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                CAL3QHC (93157)
                IBM-PC VERSION (2.02)
                (C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
                SERIAL NUMBER  9920 SOLD TO TERRY A. HAYES ASSOCIATES

                RUN NAME: C:\CAL3QHC\versunp.DAT

                RUN BEGIN ON 03/20/02 AT 08:57

                CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992
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JOB: LACC Master Plan RUN: Vermont & Sunset Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	0.0	524.0	500.0	500.	360.	AG	1444.	6.1	0.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1498.	6.1	0.0	44.0		
3. nbq	524.0	452.0	524.0	396.7	55.	180.	AG	529.	100.0	0.0	48.0	0.50	2.8
4. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	1314.	6.1	0.0	68.0		
5. sbd	476.0	500.0	476.0	0.0	500.	180.	AG	1374.	6.1	0.0	44.0		
6. sbq	476.0	548.0	476.0	598.2	50.	360.	AG	529.	100.0	0.0	48.0	0.46	2.6
7. eba	0.0	476.0	500.0	476.0	500.	90.	AG	1493.	6.1	0.0	68.0		
8. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1221.	6.1	0.0	44.0		
9. ebq	452.0	476.0	392.9	476.0	59.	270.	AG	548.	100.0	0.0	48.0	0.54	3.0
10. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	1222.	6.1	0.0	68.0		
11. wbd	500.0	524.0	0.0	524.0	500.	270.	AG	1380.	6.1	0.0	44.0		
12. wbq	548.0	524.0	596.4	524.0	48.	90.	AG	548.	100.0	0.0	48.0	0.44	2.5

1 PAGE 2

JOB: LACC Master Plan RUN: Vermont & Sunset Project

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. nbq	60	28	3.0	1444	1600	105.60	3	3
6. sbq	60	28	3.0	1314	1600	105.60	3	3
9. ebq	60	29	3.0	1493	1600	105.60	3	3
12. wbq	60	29	3.0	1222	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	432.0	568.0	5.4
2. ne	568.0	568.0	5.4
3. sw	432.0	432.0	5.4
4. se	568.0	432.0	5.4

1 PAGE 3

JOB: LACC Master Plan RUN: Vermont & Sunset Project

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
0.	4.5	4.5	6.6	5.9
10.	4.9	4.3	7.3	5.5
20.	5.0	4.3	7.2	5.1
30.	4.9	4.3	6.2	4.8
40.	5.1	4.3	5.7	4.7
50.	5.4	4.3	5.9	4.8
60.	5.7	4.3	5.9	4.8
70.	6.1	4.3	5.9	4.9
80.	6.1	4.3	6.0	4.8
90.	6.4	4.5	5.9	4.4
100.	7.2	4.8	5.7	4.3
110.	7.0	4.9	5.3	4.3
120.	6.1	4.9	5.0	4.3
130.	5.6	5.1	4.8	4.3
140.	5.9	5.3	4.8	4.3
150.	6.1	5.6	4.9	4.3
160.	5.8	6.1	5.0	4.3
170.	6.2	6.1	4.9	4.3
180.	5.9	6.5	4.4	4.5

190.	*	5.7	7.3	4.3	4.9
200.	*	5.4	7.1	4.3	5.1
210.	*	5.1	6.1	4.3	5.1
220.	*	4.8	5.7	4.3	5.3
230.	*	4.8	5.9	4.3	5.6
240.	*	4.9	6.1	4.3	6.0
250.	*	5.0	5.9	4.3	6.1
260.	*	4.9	6.1	4.3	6.1
270.	*	4.4	5.9	4.5	6.6
280.	*	4.3	5.6	4.9	7.4
290.	*	4.3	5.1	5.2	7.2
300.	*	4.3	4.9	5.2	6.0
310.	*	4.3	4.8	5.4	5.7
320.	*	4.3	4.8	5.8	5.8
330.	*	4.3	4.9	6.2	5.8
340.	*	4.3	5.0	6.3	6.0
350.	*	4.3	4.9	6.2	6.1
360.	*	4.5	4.5	6.6	5.9
MAX	*	7.2	7.3	7.3	7.4
DEGR.	*	100	190	10	280

THE HIGHEST CONCENTRATION IS 7.44 PPM AT 280 DEGREES FROM REC4 .

1

JOB: LACC Master Plan RUN: Vermont & Sunset Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 100	REC2 190	REC3 10	REC4 280
1	*	0.0	0.5	0.0	0.2
2	*	0.2	0.0	0.2	0.0
3	*	0.0	0.6	0.0	1.4
4	*	0.2	0.0	0.5	0.0
5	*	0.0	0.2	0.0	0.2
6	*	1.4	0.0	0.5	0.0
7	*	0.0	0.0	0.2	0.5
8	*	0.2	0.1	0.0	0.0
9	*	0.0	0.0	1.4	0.6
10	*	0.4	0.2	0.0	0.0
11	*	0.0	0.0	0.2	0.2
12	*	0.5	1.4	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:57

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\wessmex.DAT

RUN BEGIN ON 03/20/02 AT 08:55

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Western & Santa Monica Existing

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 7.7 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	0.0	524.0	500.0	500.	360.	AG	1357.	12.3	0.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1292.	12.3	0.0	44.0		
3. nbq	524.0	452.0	524.0	398.3	54.	180.	AG	1167.	100.0	0.0	48.0	0.49	2.7
4. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1210.	12.3	0.0	56.0		
5. sbd	482.0	500.0	482.0	0.0	500.	180.	AG	1316.	12.3	0.0	44.0		
6. sbq	482.0	536.0	482.0	599.9	64.	360.	AG	875.	100.0	0.0	36.0	0.58	3.2
7. eba	0.0	476.0	500.0	476.0	500.	90.	AG	1458.	12.3	0.0	68.0		
8. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1472.	12.3	0.0	44.0		
9. ebq	464.0	476.0	408.3	476.0	56.	270.	AG	1127.	100.0	0.0	48.0	0.51	2.8
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1170.	12.3	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1115.	12.3	0.0	44.0		
12. wbq	548.0	518.0	607.7	518.0	60.	90.	AG	845.	100.0	0.0	36.0	0.54	3.0

1

JOB: LACC Master Plan RUN: Western & Santa Monica Existing

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. nbq	60	29	3.0	1357	1600	225.00	3	3
6. sbq	60	29	3.0	1210	1600	225.00	3	3
9. ebq	60	28	3.0	1458	1600	225.00	3	3
12. wbq	60	28	3.0	1170	1600	225.00	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	444.0	556.0	5.4
2. ne	568.0	556.0	5.4
3. sw	444.0	432.0	5.4
4. se	568.0	432.0	5.4

1

JOB: LACC Master Plan RUN: Western & Santa Monica Existing

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
0.	8.1	8.0	12.5	10.6
10.	9.1	7.7	14.2	10.1
20.	9.2	7.7	13.4	9.8
30.	9.7	7.7	11.2	9.0
40.	10.3	7.7	10.3	8.7
50.	11.0	7.7	10.7	8.7
60.	11.1	7.7	11.0	8.8
70.	10.9	7.7	11.1	9.1
80.	10.7	7.7	11.7	8.9
90.	11.6	8.1	11.5	8.0
100.	13.3	9.0	10.8	7.7
110.	12.9	9.2	10.2	7.7
120.	11.2	9.5	9.2	7.7
130.	10.3	10.0	8.7	7.7
140.	11.0	10.7	8.8	7.7
150.	11.4	10.9	8.9	7.7
160.	11.3	10.8	9.1	7.7
170.	11.8	10.8	9.0	7.7
180.	11.4	11.6	8.2	8.1

190.	*	10.8	13.4	7.7	9.0
200.	*	10.2	13.5	7.7	9.1
210.	*	9.2	11.7	7.7	9.3
220.	*	8.7	10.3	7.7	9.7
230.	*	8.7	11.0	7.7	10.3
240.	*	8.9	11.3	7.7	11.1
250.	*	9.0	10.9	7.7	11.6
260.	*	8.9	11.1	7.7	11.6
270.	*	8.1	10.5	8.1	12.5
280.	*	7.7	10.1	9.1	14.1
290.	*	7.7	9.9	9.2	13.7
300.	*	7.7	9.2	9.4	11.8
310.	*	7.7	8.6	9.7	10.5
320.	*	7.7	8.6	10.5	10.7
330.	*	7.7	8.7	11.2	11.0
340.	*	7.7	9.0	11.6	10.7
350.	*	7.7	8.8	11.5	11.0
360.	*	8.1	8.0	12.5	10.6
MAX	*	13.3	13.5	14.2	14.1
DEGR.	*	100	200	10	280

THE HIGHEST CONCENTRATION IS 14.19 PPM AT 10 DEGREES FROM REC3 .

1

JOB: LACC Master Plan RUN: Western & Santa Monica Existing

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 100	REC2 200	REC3 10	REC4 280
1	*	0.0	0.7	0.0	0.5
2	*	0.3	0.1	0.5	0.0
3	*	0.0	1.8	0.0	3.0
4	*	0.4	0.0	0.9	0.0
5	*	0.0	0.5	0.1	0.3
6	*	2.3	0.0	1.3	0.0
7	*	0.0	0.0	0.5	1.0
8	*	0.5	0.4	0.0	0.0
9	*	0.0	0.0	2.9	1.2
10	*	0.9	0.4	0.0	0.0
11	*	0.0	0.0	0.3	0.4
12	*	1.2	1.9	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:55

1 CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\wessmnp.DAT

RUN BEGIN ON 03/20/02 AT 08:55

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Western & Santa Monica No Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	0.0	524.0	500.0	500.	360.	AG	1570.	6.1	0.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1597.	6.1	0.0	44.0		
3. nbq	524.0	452.0	524.0	392.0	60.	180.	AG	529.	100.0	0.0	48.0	0.55	3.0
4. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1519.	6.1	0.0	56.0		
5. sbd	482.0	500.0	482.0	0.0	500.	180.	AG	1531.	6.1	0.0	44.0		
6. sbq	482.0	536.0	482.0	613.5	77.	360.	AG	397.	100.0	0.0	36.0	0.70	3.9
7. eba	0.0	476.0	500.0	476.0	500.	90.	AG	1682.	6.1	0.0	68.0		
8. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1612.	6.1	0.0	44.0		
9. ebq	464.0	476.0	397.4	476.0	67.	270.	AG	548.	100.0	0.0	48.0	0.61	3.4
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1286.	6.1	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1317.	6.1	0.0	44.0		
12. wbq	548.0	518.0	615.9	518.0	68.	90.	AG	411.	100.0	0.0	36.0	0.62	3.4

1 PAGE 2

JOB: LACC Master Plan RUN: Western & Santa Monica No Project

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. nbq	60	28	3.0	1570	1600	105.60	3	3
6. sbq	60	28	3.0	1519	1600	105.60	3	3
9. ebq	60	29	3.0	1682	1600	105.60	3	3
12. wbq	60	29	3.0	1286	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	444.0	556.0	5.4
2. ne	568.0	556.0	5.4
3. sw	444.0	432.0	5.4
4. se	568.0	432.0	5.4

1 PAGE 3

JOB: LACC Master Plan RUN: Western & Santa Monica No Project

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
0.	4.6	4.5	6.8	5.8
10.	5.1	4.3	7.8	5.6
20.	5.3	4.3	7.2	5.5
30.	5.7	4.3	6.3	5.2
40.	6.1	4.3	5.8	4.9
50.	6.1	4.3	5.8	4.8
60.	6.0	4.3	6.1	4.9
70.	5.9	4.3	6.1	5.1
80.	5.9	4.3	6.5	5.0
90.	6.3	4.5	6.1	4.5
100.	7.4	5.0	5.9	4.3
110.	7.1	5.1	5.7	4.3
120.	6.3	5.5	5.2	4.3
130.	5.6	5.8	4.9	4.3
140.	6.0	6.0	4.9	4.3
150.	6.3	5.9	5.0	4.3
160.	6.3	5.8	5.1	4.3
170.	6.5	5.8	5.0	4.3
180.	6.2	6.2	4.5	4.5

190.	*	5.8	7.2	4.3	5.1
200.	*	5.8	7.2	4.3	5.2
210.	*	5.6	6.2	4.3	5.3
220.	*	5.1	5.8	4.3	5.5
230.	*	4.9	6.2	4.3	5.8
240.	*	4.9	6.4	4.3	6.2
250.	*	5.1	6.3	4.3	6.2
260.	*	5.1	6.3	4.3	6.2
270.	*	4.5	5.8	4.5	6.6
280.	*	4.3	5.6	5.1	7.7
290.	*	4.3	5.6	5.3	7.6
300.	*	4.3	5.4	5.4	6.4
310.	*	4.3	5.0	5.8	5.9
320.	*	4.3	4.8	6.1	5.9
330.	*	4.3	5.0	6.3	6.2
340.	*	4.3	5.1	6.3	6.2
350.	*	4.3	5.0	6.2	6.2
360.	*	4.6	4.5	6.8	5.8
MAX	*	7.4	7.2	7.8	7.7
DEGR.	*	100	190	10	280

THE HIGHEST CONCENTRATION IS 7.84 PPM AT 10 DEGREES FROM REC3 .

1

JOB: LACC Master Plan RUN: Western & Santa Monica No Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 100	REC2 190	REC3 10	REC4 280
1	*	0.0	0.6	0.0	0.3
2	*	0.2	0.0	0.3	0.0
3	*	0.0	0.6	0.0	1.4
4	*	0.3	0.0	0.6	0.0
5	*	0.0	0.2	0.0	0.2
6	*	1.1	0.0	0.7	0.0
7	*	0.0	0.0	0.3	0.6
8	*	0.3	0.2	0.0	0.0
9	*	0.0	0.0	1.4	0.7
10	*	0.5	0.2	0.0	0.0
11	*	0.0	0.0	0.2	0.2
12	*	0.7	1.1	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:55

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\wessmp.DAT

RUN BEGIN ON 03/20/02 AT 08:55

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Western & Santa Monica Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	0.0	524.0	500.0	500.	360.	AG	1570.	6.1	0.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1600.	6.1	0.0	44.0		
3. nbq	524.0	452.0	524.0	392.0	60.	180.	AG	529.	100.0	0.0	48.0	0.55	3.0
4. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1527.	6.1	0.0	56.0		
5. sbd	482.0	500.0	482.0	0.0	500.	180.	AG	1531.	6.1	0.0	44.0		
6. sbq	482.0	536.0	482.0	613.9	78.	360.	AG	397.	100.0	0.0	36.0	0.71	4.0
7. eba	0.0	476.0	500.0	476.0	500.	90.	AG	1710.	6.1	0.0	68.0		
8. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1648.	6.1	0.0	44.0		
9. ebq	464.0	476.0	396.3	476.0	68.	270.	AG	548.	100.0	0.0	48.0	0.62	3.4
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1302.	6.1	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1330.	6.1	0.0	44.0		
12. wbq	548.0	518.0	616.8	518.0	69.	90.	AG	411.	100.0	0.0	36.0	0.63	3.5

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PAGE 2

JOB: LACC Master Plan RUN: Western & Santa Monica Project

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. nbq	60	28	3.0	1570	1600	105.60	3	3
6. sbq	60	28	3.0	1527	1600	105.60	3	3
9. ebq	60	29	3.0	1710	1600	105.60	3	3
12. wbq	60	29	3.0	1302	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	444.0	556.0	5.4
2. ne	568.0	556.0	5.4
3. sw	444.0	432.0	5.4
4. se	568.0	432.0	5.4

1

PAGE 3

JOB: LACC Master Plan RUN: Western & Santa Monica Project

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
0.	4.6	4.5	6.8	5.8
10.	5.1	4.3	7.8	5.6
20.	5.3	4.3	7.3	5.5
30.	5.7	4.3	6.3	5.2
40.	6.1	4.3	5.8	4.9
50.	6.1	4.3	5.8	4.8
60.	6.0	4.3	6.1	4.9
70.	5.9	4.3	6.1	5.1
80.	5.9	4.3	6.5	5.0
90.	6.3	4.5	6.1	4.5
100.	7.4	5.0	5.9	4.3
110.	7.2	5.2	5.7	4.3
120.	6.3	5.5	5.2	4.3
130.	5.6	5.8	4.9	4.3
140.	6.1	6.0	4.9	4.3
150.	6.3	5.9	5.0	4.3
160.	6.3	5.8	5.1	4.3
170.	6.5	5.8	5.0	4.3
180.	6.2	6.2	4.5	4.5

190.	*	5.8	7.2	4.3	5.1
200.	*	5.8	7.2	4.3	5.2
210.	*	5.6	6.2	4.3	5.3
220.	*	5.2	5.8	4.3	5.5
230.	*	4.9	6.2	4.3	5.8
240.	*	5.0	6.4	4.3	6.2
250.	*	5.1	6.3	4.3	6.2
260.	*	5.1	6.3	4.3	6.2
270.	*	4.5	5.8	4.6	6.6
280.	*	4.3	5.6	5.1	7.7
290.	*	4.3	5.6	5.4	7.6
300.	*	4.3	5.4	5.5	6.4
310.	*	4.3	5.0	5.8	5.9
320.	*	4.3	4.8	6.1	5.9
330.	*	4.3	5.0	6.3	6.2
340.	*	4.3	5.1	6.3	6.2
350.	*	4.3	5.0	6.2	6.2
360.	*	4.6	4.5	6.8	5.8
MAX	*	7.4	7.2	7.8	7.7
DEGR.	*	100	190	10	280

THE HIGHEST CONCENTRATION IS 7.84 PPM AT 10 DEGREES FROM REC3 .

1

JOB: LACC Master Plan RUN: Western & Santa Monica Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 100	REC2 190	REC3 10	REC4 280
1	*	0.0	0.6	0.0	0.3
2	*	0.2	0.0	0.3	0.0
3	*	0.0	0.6	0.0	1.4
4	*	0.3	0.0	0.6	0.0
5	*	0.0	0.2	0.0	0.2
6	*	1.1	0.0	0.7	0.0
7	*	0.0	0.0	0.3	0.6
8	*	0.3	0.2	0.0	0.0
9	*	0.0	0.0	1.4	0.7
10	*	0.5	0.2	0.0	0.0
11	*	0.0	0.0	0.2	0.2
12	*	0.7	1.1	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:55

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
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SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\norsmex.DAT

RUN BEGIN ON 03/20/02 AT 08:52

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Normandie & Santa Monica Existing

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 7.7 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	0.0	512.0	500.0	500.	360.	AG	636.	12.3	0.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	620.	12.3	0.0	32.0		
3. nbq	512.0	464.0	512.0	389.7	74.	180.	AG	785.	100.0	0.0	24.0	0.75	3.8
4. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	520.	12.3	0.0	32.0		
5. sbd	494.0	500.0	494.0	0.0	500.	180.	AG	674.	12.3	0.0	32.0		
6. sbq	494.0	536.0	494.0	1695.4	1159.	360.	AG	392.	100.0	0.0	12.0	1.22	58.9
7. eba	0.0	482.0	500.0	482.0	500.	90.	AG	1446.	12.3	0.0	56.0		
8. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1343.	12.3	0.0	44.0		
9. ebq	488.0	482.0	440.6	482.0	47.	270.	AG	543.	100.0	0.0	36.0	0.49	2.4
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	979.	12.3	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	944.	12.3	0.0	44.0		
12. wbq	524.0	518.0	556.1	518.0	32.	90.	AG	543.	100.0	0.0	36.0	0.33	1.6

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PAGE 2

JOB: LACC Master Plan RUN: Normandie & Santa Monica Existing

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. nbq	60	39	3.0	636	1600	225.00	3	3
6. sbq	60	39	3.0	520	1600	225.00	3	3
9. ebq	60	18	3.0	1446	1600	225.00	3	3
12. wbq	60	18	3.0	979	1600	225.00	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	468.0	556.0	5.4
2. ne	544.0	556.0	5.4
3. sw	468.0	444.0	5.4
4. se	544.0	444.0	5.4

1

PAGE 3

JOB: LACC Master Plan RUN: Normandie & Santa Monica Existing

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
0.	10.0	9.0	12.4	11.0
10.	11.2	7.7	13.0	9.0
20.	10.2	7.7	11.0	8.6
30.	9.8	7.7	10.2	8.5
40.	9.5	7.7	10.1	8.6
50.	9.2	7.7	9.9	8.6
60.	9.1	7.7	10.2	8.8
70.	9.1	7.7	11.0	9.0
80.	9.1	7.7	11.3	9.0
90.	9.6	8.1	10.7	8.2
100.	10.6	8.9	10.0	7.7
110.	11.0	9.0	10.2	7.7
120.	10.8	8.7	10.2	7.7
130.	9.9	8.6	10.1	7.7
140.	9.2	8.6	9.6	7.7
150.	10.0	8.7	8.9	7.7
160.	11.1	9.0	8.6	7.7
170.	11.2	9.5	8.7	7.7
180.	10.2	10.8	8.1	8.1

190.	*	9.4	12.3	7.7	8.6
200.	*	9.0	11.8	7.7	9.1
210.	*	8.7	10.3	7.7	10.0
220.	*	8.5	10.1	7.7	10.6
230.	*	8.6	10.0	7.7	10.6
240.	*	8.8	9.8	7.7	10.6
250.	*	9.0	9.9	7.7	10.3
260.	*	8.9	10.1	7.7	10.2
270.	*	8.1	9.2	8.2	10.9
280.	*	7.7	8.9	9.2	12.2
290.	*	7.7	8.8	9.1	12.4
300.	*	7.7	8.9	9.0	11.7
310.	*	7.7	9.0	9.0	10.3
320.	*	7.7	9.2	9.3	9.6
330.	*	7.7	9.3	9.8	9.7
340.	*	7.7	9.8	10.0	10.6
350.	*	7.8	10.3	10.0	12.1
360.	*	10.0	9.0	12.4	11.0
MAX	*	11.2	12.3	13.0	12.4
DEGR.	*	10	190	10	290

THE HIGHEST CONCENTRATION IS 12.99 PPM AT 10 DEGREES FROM REC3 .

1

JOB: LACC Master Plan RUN: Normandie & Santa Monica Existing

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
		REC1	REC2	REC3	REC4
LINK #	*	10	190	10	290
1	*	0.0	0.5	0.0	0.2
2	*	0.4	0.0	0.4	0.0
3	*	0.0	1.6	0.0	2.0
4	*	0.5	0.0	0.4	0.0
5	*	0.0	0.4	0.1	0.2
6	*	2.6	0.0	2.2	0.0
7	*	0.0	0.0	0.5	0.8
8	*	0.0	0.3	0.0	0.1
9	*	0.0	0.0	1.5	1.0
10	*	0.0	0.3	0.0	0.0
11	*	0.0	0.0	0.2	0.4
12	*	0.0	1.5	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:52

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\normmp.DAT

RUN BEGIN ON 03/20/02 AT 08:52

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Normandie & Santa Monica No Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	0.0	512.0	500.0	500.	360.	AG	694.	6.1	0.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	676.	6.1	0.0	32.0		
3. nbq	512.0	464.0	512.0	374.1	90.	180.	AG	368.	100.0	0.0	24.0	0.81	4.6
4. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	566.	6.1	0.0	32.0		
5. sbd	494.0	500.0	494.0	0.0	500.	180.	AG	735.	6.1	0.0	32.0		
6. sbq	494.0	536.0	494.0	2168.8	1633.	360.	AG	184.	100.0	0.0	12.0	1.33	82.9
7. eba	0.0	482.0	500.0	482.0	500.	90.	AG	1585.	6.1	0.0	56.0		
8. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1472.	6.1	0.0	44.0		
9. ebq	488.0	482.0	436.0	482.0	52.	270.	AG	255.	100.0	0.0	36.0	0.54	2.6
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1077.	6.1	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1039.	6.1	0.0	44.0		
12. wbq	524.0	518.0	559.4	518.0	35.	90.	AG	255.	100.0	0.0	36.0	0.36	1.8

1

JOB: LACC Master Plan RUN: Normandie & Santa Monica No Project

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. nbq	60	39	3.0	694	1600	105.60	3	3
6. sbq	60	39	3.0	566	1600	105.60	3	3
9. ebq	60	18	3.0	1585	1600	105.60	3	3
12. wbq	60	18	3.0	1077	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	468.0	556.0	5.4
2. ne	544.0	556.0	5.4
3. sw	468.0	444.0	5.4
4. se	544.0	444.0	5.4

1

JOB: LACC Master Plan RUN: Normandie & Santa Monica No Project

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
0.	5.5	5.0	6.7	6.0
10.	6.0	4.3	6.8	4.9
20.	5.6	4.3	6.1	4.9
30.	5.4	4.3	5.6	4.8
40.	5.1	4.3	5.6	4.8
50.	5.0	4.3	5.6	4.8
60.	5.0	4.3	5.6	4.9
70.	5.0	4.3	5.9	5.0
80.	5.0	4.3	6.1	5.0
90.	5.3	4.5	5.7	4.5
100.	5.8	4.9	5.4	4.3
110.	6.0	5.0	5.4	4.3
120.	5.8	4.9	5.5	4.3
130.	5.4	4.8	5.5	4.3
140.	5.2	4.8	5.5	4.3
150.	5.5	4.9	5.2	4.3
160.	6.3	5.1	4.9	4.3
170.	6.1	5.3	4.8	4.3
180.	5.6	5.9	4.6	4.4

190.	*	5.2	6.8	4.3	4.9
200.	*	5.1	6.4	4.3	5.4
210.	*	4.8	5.6	4.3	5.8
220.	*	4.7	5.5	4.3	5.8
230.	*	4.8	5.5	4.3	5.7
240.	*	4.9	5.4	4.3	5.6
250.	*	5.0	5.5	4.3	5.5
260.	*	5.0	5.5	4.3	5.5
270.	*	4.5	5.1	4.6	5.8
280.	*	4.3	4.9	5.1	6.5
290.	*	4.3	4.8	5.1	6.5
300.	*	4.3	4.9	5.0	6.3
310.	*	4.3	4.9	5.1	5.6
320.	*	4.3	5.0	5.2	5.2
330.	*	4.3	5.1	5.3	5.3
340.	*	4.3	5.2	5.4	5.9
350.	*	4.4	5.6	5.5	6.4
360.	*	5.5	5.0	6.7	6.0
MAX	*	6.3	6.8	6.8	6.5
DEGR.	*	160	190	10	280

THE HIGHEST CONCENTRATION IS 6.84 PPM AT 190 DEGREES FROM REC2 .

1

JOB: LACC Master Plan RUN: Normandie & Santa Monica No Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
	*	REC1	REC2	REC3	REC4
LINK #	*	160	190	10	280
1	*	0.2	0.3	0.0	0.1
2	*	0.0	0.0	0.2	0.0
3	*	0.9	0.9	0.0	1.0
4	*	0.1	0.0	0.2	0.0
5	*	0.2	0.2	0.0	0.1
6	*	0.0	0.0	1.0	0.0
7	*	0.1	0.0	0.3	0.6
8	*	0.1	0.2	0.0	0.0
9	*	0.2	0.0	0.7	0.2
10	*	0.0	0.2	0.0	0.0
11	*	0.2	0.0	0.1	0.2
12	*	0.0	0.7	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:52

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\norsmp.DAT

RUN BEGIN ON 03/20/02 AT 08:52

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Normandie & Santa Monica Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	0.0	512.0	500.0	500.	360.	AG	694.	6.1	0.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	679.	6.1	0.0	32.0		
3. nbq	512.0	464.0	512.0	374.1	90.	180.	AG	368.	100.0	0.0	24.0	0.81	4.6
4. sba	494.0	1000.0	494.0	500.0	500.	180.	AG	572.	6.1	0.0	32.0		
5. sbd	494.0	500.0	494.0	0.0	500.	180.	AG	736.	6.1	0.0	32.0		
6. sbq	494.0	536.0	494.0	2230.6	1695.	360.	AG	184.	100.0	0.0	12.0	1.34	86.1
7. eba	0.0	482.0	500.0	482.0	500.	90.	AG	1620.	6.1	0.0	56.0		
8. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1512.	6.1	0.0	44.0		
9. ebq	488.0	482.0	434.9	482.0	53.	270.	AG	255.	100.0	0.0	36.0	0.55	2.7
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1097.	6.1	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1056.	6.1	0.0	44.0		
12. wbq	524.0	518.0	559.9	518.0	36.	90.	AG	255.	100.0	0.0	36.0	0.37	1.8

1

JOB: LACC Master Plan RUN: Normandie & Santa Monica Project

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. nbq	60	39	3.0	694	1600	105.60	3	3
6. sbq	60	39	3.0	572	1600	105.60	3	3
9. ebq	60	18	3.0	1620	1600	105.60	3	3
12. wbq	60	18	3.0	1097	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	468.0	556.0	5.4
2. ne	544.0	556.0	5.4
3. sw	468.0	444.0	5.4
4. se	544.0	444.0	5.4

1

JOB: LACC Master Plan RUN: Normandie & Santa Monica Project

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
0.	5.5	5.0	6.7	6.0
10.	6.1	4.3	6.8	5.0
20.	5.6	4.3	6.1	4.9
30.	5.4	4.3	5.6	4.8
40.	5.1	4.3	5.6	4.8
50.	5.0	4.3	5.6	4.8
60.	5.0	4.3	5.6	4.9
70.	5.0	4.3	6.0	5.0
80.	5.0	4.3	6.1	5.1
90.	5.3	4.5	5.7	4.5
100.	5.8	4.9	5.4	4.3
110.	6.0	5.0	5.4	4.3
120.	5.8	4.9	5.5	4.3
130.	5.4	4.9	5.5	4.3
140.	5.2	4.8	5.5	4.3
150.	5.6	4.9	5.2	4.3
160.	6.3	5.1	4.9	4.3
170.	6.1	5.4	4.8	4.3
180.	5.6	5.9	4.6	4.4

190.	*	5.2	6.8	4.3	4.9
200.	*	5.1	6.4	4.3	5.4
210.	*	4.8	5.6	4.3	5.8
220.	*	4.7	5.5	4.3	5.8
230.	*	4.8	5.6	4.3	5.7
240.	*	4.9	5.4	4.3	5.6
250.	*	5.0	5.5	4.3	5.5
260.	*	5.0	5.5	4.3	5.5
270.	*	4.5	5.1	4.6	5.8
280.	*	4.3	4.9	5.2	6.5
290.	*	4.3	4.8	5.1	6.6
300.	*	4.3	4.9	5.0	6.3
310.	*	4.3	4.9	5.2	5.7
320.	*	4.3	5.0	5.2	5.2
330.	*	4.3	5.1	5.4	5.3
340.	*	4.3	5.2	5.4	5.9
350.	*	4.4	5.6	5.5	6.5
360.	*	5.5	5.0	6.7	6.0
MAX	*	6.3	6.8	6.8	6.6
DEGR.	*	160	190	10	290

THE HIGHEST CONCENTRATION IS 6.84 PPM AT 190 DEGREES FROM REC2 .

1

JOB: LACC Master Plan RUN: Normandie & Santa Monica Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
		REC1	REC2	REC3	REC4
LINK #	*	160	190	10	290
1	*	0.2	0.3	0.0	0.1
2	*	0.0	0.0	0.2	0.0
3	*	0.9	0.9	0.0	0.9
4	*	0.1	0.0	0.2	0.0
5	*	0.2	0.2	0.0	0.1
6	*	0.0	0.0	1.0	0.0
7	*	0.1	0.0	0.3	0.5
8	*	0.1	0.2	0.0	0.0
9	*	0.2	0.0	0.7	0.5
10	*	0.0	0.2	0.0	0.0
11	*	0.2	0.0	0.1	0.2
12	*	0.0	0.7	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:52

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\VIRSMEX.DAT

RUN BEGIN ON 03/20/02 AT 08:49

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Virgil & Santa Monica Existing

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 7.7 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	0.0	518.0	500.0	500.	360.	AG	864.	12.3	0.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	757.	12.3	0.0	44.0		
3. nbq	518.0	452.0	518.0	403.2	49.	180.	AG	935.	100.0	0.0	36.0	0.45	2.5
4. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	1263.	12.3	0.0	68.0		
5. sbd	476.0	500.0	476.0	0.0	500.	180.	AG	1712.	12.3	0.0	44.0		
6. sbq	476.0	548.0	476.0	601.4	53.	360.	AG	1247.	100.0	0.0	48.0	0.49	2.7
7. eba	0.0	476.0	500.0	476.0	500.	90.	AG	1034.	12.3	0.0	68.0		
8. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	943.	12.3	0.0	44.0		
9. ebq	452.0	476.0	415.3	476.0	37.	270.	AG	1046.	100.0	0.0	48.0	0.33	1.9
10. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	1433.	12.3	0.0	68.0		
11. wbd	500.0	524.0	0.0	524.0	500.	270.	AG	1182.	12.3	0.0	44.0		
12. wbq	536.0	524.0	586.9	524.0	51.	90.	AG	1046.	100.0	0.0	48.0	0.46	2.6

1

JOB: LACC Master Plan RUN: Virgil & Santa Monica Existing

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. nbq	60	31	3.0	864	1600	225.00	3	3
6. sbq	60	31	3.0	1263	1600	225.00	3	3
9. ebq	60	26	3.0	1034	1600	225.00	3	3
12. wbq	60	26	3.0	1433	1600	225.00	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	432.0	568.0	5.4
2. ne	556.0	568.0	5.4
3. sw	432.0	432.0	5.4
4. se	556.0	432.0	5.4

1

JOB: LACC Master Plan RUN: Virgil & Santa Monica Existing

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
0.	8.1	8.0	12.0	10.7
10.	8.8	7.7	13.4	10.2
20.	8.8	7.7	13.0	9.3
30.	9.1	7.7	11.2	8.6
40.	9.5	7.7	10.3	8.5
50.	10.2	7.7	10.9	8.5
60.	11.1	7.7	10.7	8.7
70.	11.7	7.7	10.5	8.9
80.	11.6	7.7	10.8	8.6
90.	12.4	8.1	10.6	7.9
100.	13.8	9.0	10.0	7.7
110.	13.3	9.1	9.3	7.7
120.	11.4	9.1	8.7	7.7
130.	10.1	9.3	8.6	7.7
140.	10.2	9.8	8.7	7.7
150.	10.6	10.5	8.8	7.7
160.	10.8	11.1	9.0	7.7
170.	11.3	11.2	9.0	7.7
180.	10.7	11.9	8.0	8.0

190.	*	9.5	13.4	7.7	8.8
200.	*	8.6	12.7	7.7	9.0
210.	*	8.4	10.8	7.7	9.0
220.	*	8.5	10.3	7.7	9.3
230.	*	8.5	10.5	7.7	10.0
240.	*	8.7	10.3	7.7	10.6
250.	*	8.8	10.3	7.7	11.1
260.	*	8.6	11.3	7.7	10.9
270.	*	7.9	11.1	8.0	11.5
280.	*	7.7	10.8	8.7	12.6
290.	*	7.7	10.0	8.8	12.8
300.	*	7.7	9.0	8.6	11.2
310.	*	7.7	8.5	8.7	10.0
320.	*	7.7	8.4	8.7	10.3
330.	*	7.7	8.6	9.2	10.9
340.	*	7.7	8.7	9.9	10.8
350.	*	7.7	8.6	10.8	11.0
360.	*	8.1	8.0	12.0	10.7
MAX	*	13.8	13.4	13.4	12.8
DEGR.	*	100	190	10	290

THE HIGHEST CONCENTRATION IS 13.79 PPM AT 100 DEGREES FROM REC1 .

1

JOB: LACC Master Plan RUN: Virgil & Santa Monica Existing

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 100	REC2 190	REC3 10	REC4 290
1	*	0.0	0.6	0.0	0.3
2	*	0.2	0.0	0.2	0.0
3	*	0.0	1.1	0.0	2.1
4	*	0.4	0.0	0.9	0.0
5	*	0.0	0.6	0.0	0.5
6	*	3.2	0.0	1.3	0.0
7	*	0.0	0.0	0.3	0.5
8	*	0.3	0.2	0.0	0.0
9	*	0.0	0.0	2.7	1.2
10	*	1.0	0.5	0.0	0.0
11	*	0.0	0.0	0.3	0.5
12	*	1.0	2.7	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:49

1 CAL3QHC (93157)
IBM-PC VERSION (2.02)
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SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\virsmnp.DAT

RUN BEGIN ON 03/20/02 AT 08:49

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Virgil & Santa Monica No Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	0.0	518.0	500.0	500.	360.	AG	949.	6.1	0.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	830.	6.1	0.0	44.0		
3. nbq	518.0	452.0	518.0	398.4	54.	180.	AG	439.	100.0	0.0	36.0	0.49	2.7
4. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	1383.	6.1	0.0	68.0		
5. sbd	476.0	500.0	476.0	0.0	500.	180.	AG	1870.	6.1	0.0	44.0		
6. sbq	476.0	548.0	476.0	606.5	58.	360.	AG	585.	100.0	0.0	48.0	0.54	3.0
7. eba	0.0	476.0	500.0	476.0	500.	90.	AG	1129.	6.1	0.0	68.0		
8. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1043.	6.1	0.0	44.0		
9. ebq	452.0	476.0	411.9	476.0	40.	270.	AG	491.	100.0	0.0	48.0	0.36	2.0
10. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	1572.	6.1	0.0	68.0		
11. wbd	500.0	524.0	0.0	524.0	500.	270.	AG	1290.	6.1	0.0	44.0		
12. wbq	536.0	524.0	591.9	524.0	56.	90.	AG	491.	100.0	0.0	48.0	0.51	2.8

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JOB: LACC Master Plan RUN: Virgil & Santa Monica No Project

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. nbq	60	31	3.0	949	1600	105.60	3	3
6. sbq	60	31	3.0	1383	1600	105.60	3	3
9. ebq	60	26	3.0	1129	1600	105.60	3	3
12. wbq	60	26	3.0	1572	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	432.0	568.0	5.4
2. ne	556.0	568.0	5.4
3. sw	432.0	432.0	5.4
4. se	556.0	432.0	5.4

1 PAGE 3

JOB: LACC Master Plan RUN: Virgil & Santa Monica No Project

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
0.	4.5	4.4	6.3	5.8
10.	4.9	4.3	7.3	5.6
20.	5.1	4.3	7.0	5.3
30.	5.1	4.3	5.9	4.9
40.	5.4	4.3	5.6	4.7
50.	5.8	4.3	6.1	4.7
60.	6.1	4.3	5.9	4.9
70.	6.2	4.3	5.8	4.9
80.	6.2	4.3	6.0	4.8
90.	6.6	4.5	5.6	4.4
100.	7.3	5.0	5.5	4.3
110.	7.2	5.0	5.2	4.3
120.	6.1	5.1	4.8	4.3
130.	5.5	5.3	4.8	4.3
140.	5.5	5.5	4.9	4.3
150.	5.8	5.9	5.0	4.3
160.	5.8	6.0	5.0	4.3
170.	6.1	6.0	5.0	4.3
180.	5.8	6.4	4.5	4.5

190.	*	5.2	7.3	4.3	4.9
200.	*	4.8	6.8	4.3	5.0
210.	*	4.7	5.9	4.3	5.1
220.	*	4.8	5.6	4.3	5.3
230.	*	4.8	5.8	4.3	5.6
240.	*	4.8	5.8	4.3	5.9
250.	*	4.9	5.6	4.3	6.0
260.	*	4.8	6.2	4.3	5.9
270.	*	4.4	6.0	4.5	6.2
280.	*	4.3	5.8	4.8	6.9
290.	*	4.3	5.6	4.9	6.9
300.	*	4.3	5.1	4.8	6.1
310.	*	4.3	4.8	4.8	5.4
320.	*	4.3	4.7	4.9	5.6
330.	*	4.3	4.8	5.2	6.0
340.	*	4.3	4.9	5.6	6.0
350.	*	4.3	4.8	6.0	6.1
360.	*	4.5	4.4	6.3	5.8
MAX	*	7.3	7.3	7.3	6.9
DEGR.	*	100	190	10	280

THE HIGHEST CONCENTRATION IS 7.34 PPM AT 100 DEGREES FROM REC1 .

1

JOB: LACC Master Plan RUN: Virgil & Santa Monica No Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 100	REC2 190	REC3 10	REC4 280
1	*	0.0	0.4	0.0	0.2
2	*	0.1	0.0	0.1	0.0
3	*	0.0	0.6	0.0	1.2
4	*	0.2	0.0	0.5	0.0
5	*	0.0	0.3	0.0	0.2
6	*	1.5	0.0	0.7	0.0
7	*	0.0	0.0	0.2	0.4
8	*	0.2	0.1	0.0	0.0
9	*	0.0	0.0	1.3	0.4
10	*	0.5	0.3	0.0	0.0
11	*	0.0	0.0	0.2	0.2
12	*	0.5	1.3	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:49

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\virsmp.DAT

RUN BEGIN ON 03/20/02 AT 08:49

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Virgil & Santa Monica Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	0.0	518.0	500.0	500.	360.	AG	951.	6.1	0.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	832.	6.1	0.0	44.0		
3. nbq	518.0	452.0	518.0	398.3	54.	180.	AG	439.	100.0	0.0	36.0	0.50	2.7
4. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	1398.	6.1	0.0	68.0		
5. sbd	476.0	500.0	476.0	0.0	500.	180.	AG	1889.	6.1	0.0	44.0		
6. sbq	476.0	548.0	476.0	607.2	59.	360.	AG	585.	100.0	0.0	48.0	0.55	3.0
7. eba	0.0	476.0	500.0	476.0	500.	90.	AG	1139.	6.1	0.0	68.0		
8. ebd	500.0	476.0	1000.0	476.0	500.	90.	AG	1046.	6.1	0.0	44.0		
9. ebq	452.0	476.0	411.6	476.0	40.	270.	AG	491.	100.0	0.0	48.0	0.37	2.1
10. wba	1000.0	524.0	500.0	524.0	500.	270.	AG	1606.	6.1	0.0	68.0		
11. wbd	500.0	524.0	0.0	524.0	500.	270.	AG	1327.	6.1	0.0	44.0		
12. wbq	536.0	524.0	593.0	524.0	57.	90.	AG	491.	100.0	0.0	48.0	0.52	2.9

1

JOB: LACC Master Plan RUN: Virgil & Santa Monica Project

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. nbq	60	31	3.0	951	1600	105.60	3	3
6. sbq	60	31	3.0	1398	1600	105.60	3	3
9. ebq	60	26	3.0	1139	1600	105.60	3	3
12. wbq	60	26	3.0	1606	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	432.0	568.0	5.4
2. ne	556.0	568.0	5.4
3. sw	432.0	432.0	5.4
4. se	556.0	432.0	5.4

1

JOB: LACC Master Plan RUN: Virgil & Santa Monica Project

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
0.	4.5	4.4	6.3	5.9
10.	4.9	4.3	7.3	5.6
20.	5.1	4.3	7.0	5.3
30.	5.1	4.3	6.0	4.9
40.	5.4	4.3	5.6	4.7
50.	5.8	4.3	6.1	4.7
60.	6.2	4.3	5.9	4.9
70.	6.2	4.3	5.8	4.9
80.	6.2	4.3	6.1	4.8
90.	6.6	4.5	5.6	4.4
100.	7.4	5.0	5.5	4.3
110.	7.2	5.0	5.2	4.3
120.	6.1	5.1	4.8	4.3
130.	5.5	5.4	4.8	4.3
140.	5.6	5.6	4.9	4.3
150.	5.8	5.9	5.0	4.3
160.	5.8	6.0	5.1	4.3
170.	6.1	6.0	5.0	4.3
180.	5.8	6.4	4.5	4.5

190.	*	5.2	7.3	4.3	4.9
200.	*	4.8	6.8	4.3	5.0
210.	*	4.7	5.9	4.3	5.1
220.	*	4.8	5.6	4.3	5.3
230.	*	4.8	5.8	4.3	5.7
240.	*	4.8	5.8	4.3	5.9
250.	*	4.9	5.7	4.3	6.0
260.	*	4.8	6.3	4.3	5.9
270.	*	4.4	6.0	4.5	6.2
280.	*	4.3	5.8	4.8	6.9
290.	*	4.3	5.6	4.9	7.0
300.	*	4.3	5.2	4.8	6.1
310.	*	4.3	4.8	4.9	5.4
320.	*	4.3	4.7	4.9	5.6
330.	*	4.3	4.8	5.2	6.0
340.	*	4.3	4.9	5.6	6.0
350.	*	4.3	4.8	6.0	6.1
360.	*	4.5	4.4	6.3	5.9
MAX	*	7.4	7.3	7.3	7.0
DEGR.	*	100	190	10	290

THE HIGHEST CONCENTRATION IS 7.44 PPM AT 100 DEGREES FROM REC1 .

1

JOB: LACC Master Plan RUN: Virgil & Santa Monica Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
		REC1	REC2	REC3	REC4
LINK #	*	100	190	10	290
1	*	0.0	0.4	0.0	0.2
2	*	0.1	0.0	0.1	0.0
3	*	0.0	0.6	0.0	1.0
4	*	0.2	0.0	0.5	0.0
5	*	0.0	0.3	0.0	0.3
6	*	1.5	0.0	0.7	0.0
7	*	0.0	0.0	0.2	0.3
8	*	0.2	0.1	0.0	0.0
9	*	0.0	0.0	1.3	0.6
10	*	0.6	0.3	0.0	0.0
11	*	0.0	0.0	0.2	0.3
12	*	0.5	1.3	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:49

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
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SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\NOR101EX.DAT

RUN BEGIN ON 03/19/02 AT 23:45

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp Existing

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 7.7 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	0.0	512.0	500.0	500.	360.	AG	766.	12.3	0.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	316.	12.3	0.0	32.0		
3. nbq	512.0	500.0	512.0	489.5	10.	180.	AG	101.	100.0	0.0	24.0	0.29	0.5
4. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	792.	12.3	0.0	44.0		
5. sbd	488.0	500.0	488.0	0.0	500.	180.	AG	668.	12.3	0.0	32.0		
6. sbq	488.0	512.0	488.0	522.8	11.	360.	AG	101.	100.0	0.0	24.0	0.30	0.6
7. ebd	500.0	500.0	1000.0	500.0	500.	90.	AG	30.	12.3	0.0	32.0		
8. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	47.	12.3	0.0	32.0		
9. wbd	500.0	506.0	0.0	506.0	500.	270.	AG	591.	12.3	0.0	32.0		
10. wbq	524.0	506.0	539.5	506.0	16.	90.	AG	523.	100.0	0.0	12.0	0.59	0.8

1

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp Existing

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. nbq	60	5	3.0	766	1600	225.00	3	3
6. sbq	60	5	3.0	792	1600	225.00	3	3
10. wbq	60	52	3.0	47	1600	225.00	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	456.0	532.0	5.4
2. ne	544.0	532.0	5.4
3. sw	456.0	480.0	5.4
4. se	544.0	480.0	5.4

1

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp Existing

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
0.	8.0	7.9	8.3	8.1
10.	8.5	7.7	8.8	7.7
20.	8.5	7.7	8.6	7.7
30.	8.3	7.7	8.5	7.7
40.	8.2	7.7	8.5	7.7
50.	8.1	7.7	8.5	7.7
60.	8.1	7.7	8.5	7.7
70.	8.1	7.7	8.6	7.7
80.	8.1	7.7	8.4	7.7
90.	8.1	7.7	8.1	7.7
100.	8.4	7.7	8.1	7.7
110.	8.8	7.7	8.1	7.7
120.	8.7	7.7	8.3	7.7
130.	8.7	7.7	8.3	7.7
140.	8.7	7.7	8.3	7.7
150.	8.6	7.7	8.4	7.7
160.	8.8	7.7	8.5	7.7
170.	8.8	7.7	8.6	7.7
180.	8.3	8.4	8.0	8.1
190.	7.9	9.4	7.7	8.7
200.	7.9	9.6	7.7	8.6
210.	7.9	9.5	7.7	8.4

220.	*	8.0	8.9	7.7	8.3
230.	*	8.0	8.6	7.7	8.2
240.	*	8.1	8.2	7.7	8.2
250.	*	8.1	8.4	7.7	8.2
260.	*	8.2	8.6	7.7	8.2
270.	*	8.0	8.3	8.0	8.5
280.	*	7.7	8.0	8.2	8.8
290.	*	7.7	8.0	8.1	8.6
300.	*	7.7	8.1	8.1	8.6
310.	*	7.7	8.1	8.0	8.6
320.	*	7.7	8.1	8.0	8.8
330.	*	7.7	8.2	7.9	9.3
340.	*	7.7	8.3	7.9	9.4
350.	*	7.7	8.3	7.9	9.1
360.	*	8.0	7.9	8.3	8.1
MAX	*	8.8	9.6	8.8	9.4
DEGR.	*	110	200	10	340

THE HIGHEST CONCENTRATION IS 9.59 PPM AT 200 DEGREES FROM REC2 .

1

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp Existing

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 110	REC2 200	REC3 10	REC4 340
1	*	0.0	0.5	0.0	0.0
2	*	0.1	0.0	0.2	0.2
3	*	0.0	0.0	0.0	0.0
4	*	0.3	0.0	0.7	0.4
5	*	0.0	0.3	0.0	0.0
6	*	0.2	0.0	0.0	0.0
7	*	0.0	0.0	0.0	0.0
8	*	0.0	0.0	0.0	0.0
9	*	0.1	0.0	0.2	0.0
10	*	0.4	1.1	0.0	1.1

RUN ENDED ON 03/19/02 AT 23:45

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
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SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\NOR101NP.DAT

RUN BEGIN ON 03/19/02 AT 23:45

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp No Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	0.0	512.0	500.0	500.	360.	AG	835.	6.1	0.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	344.	6.1	0.0	32.0		
3. nbq	512.0	500.0	512.0	488.6	11.	180.	AG	47.	100.0	0.0	24.0	0.31	0.6
4. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	864.	6.1	0.0	44.0		
5. sbd	488.0	500.0	488.0	0.0	500.	180.	AG	728.	6.1	0.0	32.0		
6. sbq	488.0	512.0	488.0	523.8	12.	360.	AG	47.	100.0	0.0	24.0	0.32	0.6
7. ebd	500.0	500.0	1000.0	500.0	500.	90.	AG	33.	6.1	0.0	32.0		
8. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	50.	6.1	0.0	32.0		
9. wbd	500.0	506.0	0.0	506.0	500.	270.	AG	644.	6.1	0.0	32.0		
10. wbq	524.0	506.0	541.4	506.0	17.	90.	AG	245.	100.0	0.0	12.0	0.63	0.9

1

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp No Project

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. nbq	60	5	3.0	835	1600	105.60	3	3
6. sbq	60	5	3.0	864	1600	105.60	3	3
10. wbq	60	52	3.0	50	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	456.0	532.0	5.4
2. ne	544.0	532.0	5.4
3. sw	456.0	480.0	5.4
4. se	544.0	480.0	5.4

1

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp No Project

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
0.	4.5	4.5	4.6	4.7
10.	4.8	4.3	4.9	4.3
20.	4.7	4.3	4.8	4.3
30.	4.7	4.3	4.7	4.3
40.	4.6	4.3	4.8	4.3
50.	4.6	4.3	4.5	4.3
60.	4.6	4.3	4.7	4.3
70.	4.6	4.3	4.8	4.3
80.	4.5	4.3	4.6	4.3
90.	4.5	4.3	4.5	4.3
100.	4.6	4.3	4.5	4.3
110.	4.9	4.3	4.5	4.3
120.	4.9	4.3	4.5	4.3
130.	4.6	4.3	4.6	4.3
140.	4.7	4.3	4.7	4.3
150.	4.9	4.3	4.7	4.3
160.	4.8	4.3	4.7	4.3
170.	4.9	4.3	4.8	4.3
180.	4.6	4.7	4.5	4.5
190.	4.4	5.3	4.3	4.9
200.	4.4	5.4	4.3	4.8
210.	4.4	5.1	4.3	4.6

220.	*	4.4	4.9	4.3	4.6
230.	*	4.5	4.7	4.3	4.6
240.	*	4.5	4.7	4.3	4.6
250.	*	4.5	4.7	4.3	4.6
260.	*	4.6	4.8	4.3	4.6
270.	*	4.5	4.7	4.5	4.8
280.	*	4.3	4.5	4.6	4.9
290.	*	4.3	4.5	4.5	4.9
300.	*	4.3	4.5	4.5	4.7
310.	*	4.3	4.5	4.5	4.6
320.	*	4.3	4.6	4.4	4.9
330.	*	4.3	4.6	4.4	5.1
340.	*	4.3	4.6	4.4	5.2
350.	*	4.3	4.6	4.4	5.0
360.	*	4.5	4.5	4.6	4.7
MAX	*	4.9	5.4	4.9	5.2
DEGR.	*	110	200	10	340

THE HIGHEST CONCENTRATION IS 5.44 PPM AT 200 DEGREES FROM REC2 .

1

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp No Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
		REC1	REC2	REC3	REC4
LINK #	*	110	200	10	340
1	*	0.0	0.3	0.0	0.0
2	*	0.0	0.0	0.1	0.1
3	*	0.0	0.0	0.0	0.0
4	*	0.2	0.0	0.4	0.2
5	*	0.0	0.2	0.0	0.0
6	*	0.1	0.0	0.0	0.0
7	*	0.0	0.0	0.0	0.0
8	*	0.0	0.0	0.0	0.0
9	*	0.1	0.0	0.1	0.0
10	*	0.2	0.6	0.0	0.6

RUN ENDED ON 03/19/02 AT 23:45

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\NOR101P.DAT

RUN BEGIN ON 03/19/02 AT 23:45

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	512.0	0.0	512.0	500.0	500.	360.	AG	835.	6.1	0.0	44.0		
2. nbd	512.0	500.0	512.0	1000.0	500.	360.	AG	344.	6.1	0.0	32.0		
3. nbq	512.0	500.0	512.0	488.6	11.	180.	AG	47.	100.0	0.0	24.0	0.31	0.6
4. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	865.	6.1	0.0	44.0		
5. sbd	488.0	500.0	488.0	0.0	500.	180.	AG	729.	6.1	0.0	32.0		
6. sbq	488.0	512.0	488.0	523.8	12.	360.	AG	47.	100.0	0.0	24.0	0.32	0.6
7. ebd	500.0	500.0	1000.0	500.0	500.	90.	AG	33.	6.1	0.0	32.0		
8. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	50.	6.1	0.0	32.0		
9. wbd	500.0	506.0	0.0	506.0	500.	270.	AG	644.	6.1	0.0	32.0		
10. wbq	524.0	506.0	541.4	506.0	17.	90.	AG	245.	100.0	0.0	12.0	0.63	0.9

1

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp Project

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. nbq	60	5	3.0	835	1600	105.60	3	3
6. sbq	60	5	3.0	865	1600	105.60	3	3
10. wbq	60	52	3.0	50	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	456.0	532.0	5.4
2. ne	544.0	532.0	5.4
3. sw	456.0	480.0	5.4
4. se	544.0	480.0	5.4

1

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp Project

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
0.	4.5	4.5	4.6	4.7
10.	4.8	4.3	4.9	4.3
20.	4.7	4.3	4.8	4.3
30.	4.7	4.3	4.7	4.3
40.	4.6	4.3	4.8	4.3
50.	4.6	4.3	4.5	4.3
60.	4.6	4.3	4.7	4.3
70.	4.6	4.3	4.8	4.3
80.	4.5	4.3	4.6	4.3
90.	4.5	4.3	4.5	4.3
100.	4.6	4.3	4.5	4.3
110.	4.9	4.3	4.5	4.3
120.	4.9	4.3	4.5	4.3
130.	4.6	4.3	4.6	4.3
140.	4.7	4.3	4.7	4.3
150.	4.9	4.3	4.7	4.3
160.	4.8	4.3	4.7	4.3
170.	4.9	4.3	4.8	4.3
180.	4.6	4.7	4.5	4.5
190.	4.4	5.3	4.3	4.9
200.	4.4	5.4	4.3	4.8
210.	4.4	5.1	4.3	4.6

220.	*	4.4	4.9	4.3	4.6
230.	*	4.5	4.7	4.3	4.6
240.	*	4.5	4.7	4.3	4.6
250.	*	4.5	4.7	4.3	4.6
260.	*	4.6	4.8	4.3	4.6
270.	*	4.5	4.7	4.5	4.8
280.	*	4.3	4.5	4.6	4.9
290.	*	4.3	4.5	4.5	4.9
300.	*	4.3	4.5	4.5	4.7
310.	*	4.3	4.5	4.5	4.6
320.	*	4.3	4.6	4.4	4.9
330.	*	4.3	4.6	4.4	5.1
340.	*	4.3	4.6	4.4	5.2
350.	*	4.3	4.6	4.4	5.0
360.	*	4.5	4.5	4.6	4.7
MAX	*	4.9	5.4	4.9	5.2
DEGR.	*	110	200	10	340

THE HIGHEST CONCENTRATION IS 5.44 PPM AT 200 DEGREES FROM REC2 .

1

JOB: LACC Master Plan RUN: Normandie & 101 On-Ramp Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 110	REC2 200	REC3 10	REC4 340
1	*	0.0	0.3	0.0	0.0
2	*	0.0	0.0	0.1	0.1
3	*	0.0	0.0	0.0	0.0
4	*	0.2	0.0	0.4	0.2
5	*	0.0	0.2	0.0	0.0
6	*	0.1	0.0	0.0	0.0
7	*	0.0	0.0	0.0	0.0
8	*	0.0	0.0	0.0	0.0
9	*	0.1	0.0	0.1	0.0
10	*	0.2	0.6	0.0	0.6

RUN ENDED ON 03/19/02 AT 23:45

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\NORMELEX.DAT

RUN BEGIN ON 03/20/02 AT 08:46

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Normandie & Melrose Existing

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 7.7 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	0.0	506.0	500.0	500.	360.	AG	982.	12.3	0.0	32.0		
2. nbd	506.0	500.0	506.0	1000.0	500.	360.	AG	1182.	12.3	0.0	32.0		
3. nbq	506.0	464.0	506.0	-4905.0	5369.	180.	AG	372.	100.0	0.0	12.0	2.05	272.7
4. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	609.	12.3	0.0	44.0		
5. sbd	488.0	500.0	488.0	0.0	500.	180.	AG	752.	12.3	0.0	44.0		
6. sbq	488.0	536.0	488.0	597.5	62.	360.	AG	744.	100.0	0.0	24.0	0.63	3.1
7. eba	0.0	482.0	500.0	482.0	500.	90.	AG	1710.	12.3	0.0	56.0		
8. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1573.	12.3	0.0	44.0		
9. ebq	476.0	482.0	413.7	482.0	62.	270.	AG	604.	100.0	0.0	36.0	0.61	3.2
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1265.	12.3	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1059.	12.3	0.0	44.0		
12. wbq	512.0	518.0	558.1	518.0	46.	90.	AG	604.	100.0	0.0	36.0	0.45	2.3

1

JOB: LACC Master Plan RUN: Normandie & Melrose Existing

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. nbq	60	37	3.0	982	1600	225.00	3	3
6. sbq	60	37	3.0	609	1600	225.00	3	3
9. ebq	60	20	3.0	1710	1600	225.00	3	3
12. wbq	60	20	3.0	1265	1600	225.00	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	456.0	556.0	5.4
2. ne	532.0	556.0	5.4
3. sw	456.0	444.0	5.4
4. se	532.0	444.0	5.4

1

JOB: LACC Master Plan RUN: Normandie & Melrose Existing

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
0.	8.1	8.4	11.1	10.7
10.	8.8	7.7	12.8	9.7
20.	8.9	7.7	12.3	9.2
30.	9.3	7.7	11.1	8.9
40.	10.0	7.7	10.8	8.8
50.	10.6	7.7	10.6	8.8
60.	10.6	7.7	10.2	9.0
70.	10.4	7.7	10.4	9.3
80.	10.2	7.7	10.8	9.3
90.	10.8	8.3	9.7	8.3
100.	12.2	9.2	9.0	7.7
110.	12.8	9.3	9.0	7.7
120.	12.1	9.1	9.1	7.7
130.	10.7	9.1	9.1	7.7
140.	9.7	9.3	9.4	7.7
150.	10.1	9.8	9.6	7.7
160.	11.2	10.1	10.0	7.7
170.	12.7	10.3	10.7	7.9
180.	12.3	13.8	10.0	11.2

190.	*	9.9	13.7	7.8	11.7
200.	*	9.8	11.8	7.7	10.6
210.	*	9.3	11.0	7.7	10.1
220.	*	8.8	10.9	7.7	9.7
230.	*	8.8	10.9	7.7	9.5
240.	*	9.0	11.1	7.7	9.4
250.	*	9.2	11.3	7.7	9.4
260.	*	9.1	11.5	7.7	9.3
270.	*	8.1	10.7	8.4	10.1
280.	*	7.7	10.1	9.4	11.7
290.	*	7.7	10.2	9.5	12.4
300.	*	7.7	10.2	9.6	11.8
310.	*	7.7	9.7	10.0	10.4
320.	*	7.7	9.2	10.3	10.0
330.	*	7.7	8.8	10.5	10.4
340.	*	7.7	9.0	10.3	11.4
350.	*	7.7	9.2	10.2	11.6
360.	*	8.1	8.4	11.1	10.7
MAX	*	12.8	13.8	12.8	12.4
DEGR.	*	110	180	10	290

THE HIGHEST CONCENTRATION IS 13.79 PPM AT 180 DEGREES FROM REC2 .

1

JOB: LACC Master Plan RUN: Normandie & Melrose Existing

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
	*	REC1	REC2	REC3	REC4
LINK #	*	110	180	10	290
1	*	0.0	0.5	0.0	0.4
2	*	0.4	0.0	0.7	0.0
3	*	0.0	2.8	0.0	1.0
4	*	0.2	0.0	0.5	0.0
5	*	0.0	0.2	0.1	0.2
6	*	1.9	0.0	1.3	0.0
7	*	0.0	0.0	0.6	1.1
8	*	0.7	0.4	0.0	0.0
9	*	0.0	0.0	1.6	1.5
10	*	0.7	0.5	0.0	0.0
11	*	0.1	0.0	0.3	0.5
12	*	1.1	1.7	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:46

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\NORMELNP.DAT

RUN BEGIN ON 03/20/02 AT 08:46

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Normandie & Melrose No Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	0.0	506.0	500.0	500.	360.	AG	1070.	6.1	0.0	32.0		
2. nbd	506.0	500.0	506.0	1000.0	500.	360.	AG	1288.	6.1	0.0	32.0		
3. nbq	506.0	464.0	506.0	-5808.6	6273.	180.	AG	175.	100.0	0.0	12.0	2.23	318.6
4. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	663.	6.1	0.0	44.0		
5. sbd	488.0	500.0	488.0	0.0	500.	180.	AG	819.	6.1	0.0	44.0		
6. sbq	488.0	536.0	488.0	604.1	68.	360.	AG	349.	100.0	0.0	24.0	0.69	3.5
7. eba	0.0	482.0	500.0	482.0	500.	90.	AG	1874.	6.1	0.0	56.0		
8. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1725.	6.1	0.0	44.0		
9. ebq	476.0	482.0	407.8	482.0	68.	270.	AG	283.	100.0	0.0	36.0	0.67	3.5
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1390.	6.1	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1165.	6.1	0.0	44.0		
12. wbq	512.0	518.0	562.7	518.0	51.	90.	AG	283.	100.0	0.0	36.0	0.50	2.6

1

JOB: LACC Master Plan RUN: Normandie & Melrose No Project

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. nbq	60	37	3.0	1070	1600	105.60	3	3
6. sbq	60	37	3.0	663	1600	105.60	3	3
9. ebq	60	20	3.0	1874	1600	105.60	3	3
12. wbq	60	20	3.0	1390	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	456.0	556.0	5.4
2. ne	532.0	556.0	5.4
3. sw	456.0	444.0	5.4
4. se	532.0	444.0	5.4

1

JOB: LACC Master Plan RUN: Normandie & Melrose No Project

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
0.	4.5	4.7	6.0	5.8
10.	4.9	4.3	6.9	5.4
20.	5.0	4.3	6.5	5.2
30.	5.3	4.3	5.8	4.9
40.	5.6	4.3	5.9	4.9
50.	5.7	4.3	5.9	4.9
60.	5.7	4.3	5.8	5.1
70.	5.6	4.3	5.7	5.2
80.	5.5	4.3	5.9	5.1
90.	6.0	4.6	5.4	4.6
100.	6.6	5.2	4.9	4.3
110.	6.9	5.2	4.9	4.3
120.	6.4	5.1	5.1	4.3
130.	5.8	5.1	5.1	4.3
140.	5.4	5.3	5.1	4.3
150.	5.4	5.5	5.2	4.3
160.	6.0	5.5	5.5	4.3
170.	6.6	5.6	5.8	4.4
180.	6.6	7.3	5.5	6.0

190.	*	5.3	7.4	4.3	6.3
200.	*	5.4	6.3	4.3	5.7
210.	*	5.2	5.8	4.3	5.5
220.	*	4.9	5.9	4.3	5.4
230.	*	4.9	6.1	4.3	5.2
240.	*	5.0	6.2	4.3	5.2
250.	*	5.1	6.1	4.3	5.1
260.	*	5.0	6.3	4.3	5.0
270.	*	4.6	5.7	4.6	5.4
280.	*	4.3	5.4	5.3	6.4
290.	*	4.3	5.5	5.4	6.6
300.	*	4.3	5.6	5.3	6.4
310.	*	4.3	5.5	5.5	5.7
320.	*	4.3	5.1	5.7	5.6
330.	*	4.3	5.0	5.8	5.8
340.	*	4.3	5.0	5.6	6.4
350.	*	4.3	5.1	5.6	6.4
360.	*	4.5	4.7	6.0	5.8
MAX	*	6.9	7.4	6.9	6.6
DEGR.	*	110	190	10	290

THE HIGHEST CONCENTRATION IS 7.44 PPM AT 190 DEGREES FROM REC2 .

1

JOB: LACC Master Plan RUN: Normandie & Melrose No Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 110	REC2 190	REC3 10	REC4 290
1	*	0.0	0.5	0.0	0.2
2	*	0.2	0.1	0.4	0.0
3	*	0.0	1.0	0.0	0.4
4	*	0.1	0.0	0.3	0.0
5	*	0.0	0.3	0.0	0.1
6	*	0.9	0.0	0.7	0.0
7	*	0.0	0.0	0.3	0.6
8	*	0.4	0.2	0.0	0.0
9	*	0.0	0.0	0.8	0.7
10	*	0.4	0.2	0.0	0.0
11	*	0.0	0.0	0.1	0.3
12	*	0.6	0.8	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:46

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\NORMELP.DAT

RUN BEGIN ON 03/20/02 AT 08:46

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Normandie & Melrose Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	506.0	0.0	506.0	500.0	500.	360.	AG	1103.	6.1	0.0	32.0		
2. nbd	506.0	500.0	506.0	1000.0	500.	360.	AG	1289.	6.1	0.0	32.0		
3. nbq	506.0	464.0	506.0	-6147.4	6611.	180.	AG	175.	100.0	0.0	12.0	2.30	335.9
4. sba	488.0	1000.0	488.0	500.0	500.	180.	AG	664.	6.1	0.0	44.0		
5. sbd	488.0	500.0	488.0	0.0	500.	180.	AG	834.	6.1	0.0	44.0		
6. sbq	488.0	536.0	488.0	604.5	68.	360.	AG	349.	100.0	0.0	24.0	0.69	3.5
7. eba	0.0	482.0	500.0	482.0	500.	90.	AG	1914.	6.1	0.0	56.0		
8. ebd	500.0	482.0	1000.0	482.0	500.	90.	AG	1799.	6.1	0.0	44.0		
9. ebq	476.0	482.0	406.2	482.0	70.	270.	AG	283.	100.0	0.0	36.0	0.68	3.5
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1423.	6.1	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1182.	6.1	0.0	44.0		
12. wbq	512.0	518.0	563.9	518.0	52.	90.	AG	283.	100.0	0.0	36.0	0.51	2.6

1

JOB: LACC Master Plan RUN: Normandie & Melrose Project

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. nbq	60	37	3.0	1103	1600	105.60	3	3
6. sbq	60	37	3.0	664	1600	105.60	3	3
9. ebq	60	20	3.0	1914	1600	105.60	3	3
12. wbq	60	20	3.0	1423	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	456.0	556.0	5.4
2. ne	532.0	556.0	5.4
3. sw	456.0	444.0	5.4
4. se	532.0	444.0	5.4

1

JOB: LACC Master Plan RUN: Normandie & Melrose Project

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
0.	4.5	4.7	6.0	5.8
10.	4.9	4.3	7.0	5.4
20.	5.0	4.3	6.5	5.2
30.	5.3	4.3	5.8	4.9
40.	5.6	4.3	5.9	4.9
50.	5.7	4.3	5.9	4.9
60.	5.7	4.3	5.8	5.1
70.	5.6	4.3	5.8	5.2
80.	5.5	4.3	5.9	5.3
90.	6.0	4.6	5.4	4.6
100.	6.7	5.2	4.9	4.3
110.	6.9	5.2	5.0	4.3
120.	6.5	5.1	5.1	4.3
130.	5.8	5.2	5.1	4.3
140.	5.4	5.4	5.1	4.3
150.	5.4	5.6	5.2	4.3
160.	6.0	5.7	5.5	4.3
170.	6.7	5.6	5.9	4.4
180.	6.6	7.3	5.5	6.1

190.	*	5.4	7.5	4.3	6.3
200.	*	5.4	6.5	4.3	5.7
210.	*	5.2	5.8	4.3	5.5
220.	*	5.0	6.0	4.3	5.4
230.	*	4.9	6.1	4.3	5.3
240.	*	5.0	6.2	4.3	5.2
250.	*	5.1	6.1	4.3	5.1
260.	*	5.0	6.3	4.3	5.0
270.	*	4.6	5.7	4.6	5.4
280.	*	4.3	5.4	5.3	6.4
290.	*	4.3	5.5	5.4	6.7
300.	*	4.3	5.6	5.4	6.4
310.	*	4.3	5.5	5.6	5.8
320.	*	4.3	5.1	5.8	5.6
330.	*	4.3	5.0	5.8	5.8
340.	*	4.3	5.0	5.6	6.4
350.	*	4.3	5.1	5.6	6.4
360.	*	4.5	4.7	6.0	5.8
MAX	*	6.9	7.5	7.0	6.7
DEGR.	*	110	190	10	290

THE HIGHEST CONCENTRATION IS 7.54 PPM AT 190 DEGREES FROM REC2 .

1

JOB: LACC Master Plan RUN: Normandie & Melrose Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
		REC1	REC2	REC3	REC4
LINK #	*	110	190	10	290
1	*	0.0	0.5	0.0	0.2
2	*	0.2	0.1	0.4	0.0
3	*	0.0	1.0	0.0	0.4
4	*	0.1	0.0	0.3	0.0
5	*	0.0	0.3	0.0	0.1
6	*	0.9	0.0	0.7	0.0
7	*	0.0	0.0	0.3	0.6
8	*	0.4	0.2	0.0	0.0
9	*	0.0	0.0	0.8	0.8
10	*	0.4	0.3	0.0	0.0
11	*	0.0	0.0	0.2	0.3
12	*	0.6	0.8	0.0	0.0

RUN ENDED ON 03/20/02 AT 08:46

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\VIRMELEX.DAT

RUN BEGIN ON 03/19/02 AT 23:52

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Virgil & Melrose Existing

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 7.7 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	0.0	518.0	500.0	500.	360.	AG	793.	12.3	0.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	805.	12.3	0.0	56.0		
3. nbq	518.0	476.0	518.0	454.4	22.	180.	AG	453.	100.0	0.0	36.0	0.25	1.1
4. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1529.	12.3	0.0	56.0		
5. sbd	482.0	500.0	482.0	0.0	500.	180.	AG	1467.	12.3	0.0	56.0		
6. sbq	482.0	512.0	482.0	553.8	42.	360.	AG	453.	100.0	0.0	36.0	0.48	2.1
7. eba	0.0	488.0	500.0	488.0	500.	90.	AG	555.	12.3	0.0	44.0		
8. ebd	500.0	488.0	1000.0	488.0	500.	90.	AG	324.	12.3	0.0	44.0		
9. ebq	464.0	488.0	386.3	488.0	78.	270.	AG	845.	100.0	0.0	24.0	0.80	3.9
10. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	294.	12.3	0.0	32.0		
11. wbd	500.0	506.0	0.0	506.0	500.	270.	AG	575.	12.3	0.0	32.0		
12. wbq	536.0	506.0	626.8	506.0	91.	90.	AG	422.	100.0	0.0	12.0	0.85	4.6

1

JOB: LACC Master Plan RUN: Virgil & Melrose Existing

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. nbq	60	15	3.0	793	1600	225.00	3	3
6. sbq	60	15	3.0	1529	1600	225.00	3	3
9. ebq	60	42	3.0	555	1600	225.00	3	3
12. wbq	60	42	3.0	294	1600	225.00	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	444.0	532.0	5.4
2. ne	556.0	532.0	5.4
3. sw	444.0	456.0	5.4
4. se	556.0	456.0	5.4

1

JOB: LACC Master Plan RUN: Virgil & Melrose Existing

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
0.	8.3	8.1	11.1	9.1
10.	9.2	7.7	12.3	8.7
20.	9.2	7.7	12.5	8.7
30.	8.9	7.7	11.6	8.8
40.	8.8	7.7	10.2	8.8
50.	8.9	7.7	9.5	8.8
60.	9.2	7.7	9.3	8.3
70.	9.5	7.7	10.1	8.1
80.	9.6	7.7	9.8	8.2
90.	10.3	7.9	9.2	7.8
100.	11.3	8.4	8.5	7.7
110.	10.4	9.0	8.4	7.7
120.	10.0	9.5	8.5	7.7
130.	9.7	9.2	8.5	7.7
140.	9.7	9.1	8.7	7.7
150.	9.9	9.0	8.8	7.7
160.	11.0	9.0	9.1	7.7
170.	11.5	9.0	9.2	7.7
180.	10.8	9.4	8.2	8.1

190.	*	10.1	10.3	7.7	8.8
200.	*	10.2	10.7	7.7	9.0
210.	*	10.2	10.3	7.7	8.7
220.	*	10.3	9.6	7.7	8.6
230.	*	9.8	9.1	7.7	8.4
240.	*	9.0	9.7	7.7	8.4
250.	*	8.5	11.4	7.7	8.5
260.	*	8.6	11.0	7.7	8.7
270.	*	8.1	9.9	8.0	10.0
280.	*	7.7	9.1	8.6	12.1
290.	*	7.7	8.7	9.2	11.8
300.	*	7.7	8.6	10.1	10.0
310.	*	7.7	8.5	10.8	9.7
320.	*	7.7	8.6	10.7	9.6
330.	*	7.7	8.7	10.7	9.4
340.	*	7.7	9.0	10.5	9.7
350.	*	7.7	8.9	10.4	9.9
360.	*	8.3	8.1	11.1	9.1
MAX	*	11.5	11.4	12.5	12.1
DEGR.	*	170	250	20	280

THE HIGHEST CONCENTRATION IS 12.49 PPM AT 20 DEGREES FROM REC3 .

1

JOB: LACC Master Plan RUN: Virgil & Melrose Existing

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 170	REC2 250	REC3 20	REC4 280
1	*	0.3	0.0	0.0	0.3
2	*	0.0	0.3	0.4	0.0
3	*	0.0	0.0	0.0	1.1
4	*	0.0	0.3	0.9	0.0
5	*	1.2	0.2	0.2	0.4
6	*	0.0	0.3	0.8	0.0
7	*	0.2	0.3	0.2	0.5
8	*	0.0	0.0	0.0	0.0
9	*	1.9	1.9	2.1	1.8
10	*	0.0	0.1	0.0	0.0
11	*	0.2	0.3	0.2	0.3
12	*	0.0	0.0	0.0	0.0

RUN ENDED ON 03/19/02 AT 23:52

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
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SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\VIRMELNP.DAT

RUN BEGIN ON 03/19/02 AT 23:52

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Virgil & Melrose No Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG TYPE (DEG)	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	0.0	518.0	500.0	500.	360. AG	878.	6.1	0.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360. AG	877.	6.1	0.0	56.0		
3. nbq	518.0	476.0	518.0	450.5	26.	180. AG	227.	100.0	0.0	36.0	0.28	1.3
4. sba	482.0	1000.0	482.0	500.0	500.	180. AG	1667.	6.1	0.0	56.0		
5. sbd	482.0	500.0	482.0	0.0	500.	180. AG	1612.	6.1	0.0	56.0		
6. sbq	482.0	512.0	482.0	560.6	49.	360. AG	227.	100.0	0.0	36.0	0.53	2.5
7. eba	0.0	488.0	500.0	488.0	500.	90. AG	631.	6.1	0.0	44.0		
8. ebd	500.0	488.0	1000.0	488.0	500.	90. AG	366.	6.1	0.0	44.0		
9. ebq	464.0	488.0	371.2	488.0	93.	270. AG	387.	100.0	0.0	24.0	0.84	4.7
10. wba	1000.0	506.0	500.0	506.0	500.	270. AG	334.	6.1	0.0	32.0		
11. wbd	500.0	506.0	0.0	506.0	500.	270. AG	655.	6.1	0.0	32.0		
12. wbq	536.0	506.0	647.5	506.0	111.	90. AG	194.	100.0	0.0	12.0	0.90	5.7

1 PAGE 2

JOB: LACC Master Plan RUN: Virgil & Melrose No Project

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. nbq	60	16	3.0	878	1600	105.60	3	3
6. sbq	60	16	3.0	1667	1600	105.60	3	3
9. ebq	60	41	3.0	631	1600	105.60	3	3
12. wbq	60	41	3.0	334	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	444.0	532.0	5.4
2. ne	556.0	532.0	5.4
3. sw	444.0	456.0	5.4
4. se	556.0	456.0	5.4

1 PAGE 3

JOB: LACC Master Plan RUN: Virgil & Melrose No Project

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
0.	4.6	4.5	5.9	5.1
10.	5.2	4.3	6.6	4.8
20.	5.1	4.3	6.7	4.9
30.	5.0	4.3	6.4	4.9
40.	5.0	4.3	5.5	4.9
50.	5.0	4.3	5.2	4.9
60.	5.2	4.3	5.2	4.8
70.	5.3	4.3	5.6	4.6
80.	5.3	4.3	5.4	4.6
90.	5.7	4.4	5.1	4.4
100.	6.1	4.8	4.8	4.3
110.	5.8	5.1	4.7	4.3
120.	5.3	5.2	4.7	4.3
130.	5.4	5.1	4.7	4.3
140.	5.2	5.1	4.8	4.3
150.	5.4	5.0	4.9	4.3
160.	6.0	5.0	5.1	4.3
170.	6.3	5.0	5.0	4.3
180.	5.7	5.3	4.6	4.5

190.	*	5.4	5.8	4.3	5.0
200.	*	5.5	5.9	4.3	5.0
210.	*	5.5	5.8	4.3	4.8
220.	*	5.5	5.4	4.3	4.8
230.	*	5.6	5.1	4.3	4.7
240.	*	5.3	5.4	4.3	4.7
250.	*	4.8	6.2	4.3	4.8
260.	*	4.8	6.1	4.3	5.0
270.	*	4.6	5.6	4.4	5.6
280.	*	4.3	5.1	4.9	6.8
290.	*	4.3	5.0	5.4	6.4
300.	*	4.3	4.9	5.8	5.6
310.	*	4.3	4.7	5.9	5.4
320.	*	4.3	4.8	5.7	5.3
330.	*	4.3	4.8	5.7	5.4
340.	*	4.3	5.0	5.6	5.4
350.	*	4.3	5.0	5.5	5.3
360.	*	4.6	4.5	5.9	5.1
MAX	*	6.3	6.2	6.7	6.8
DEGR.	*	170	250	20	280

THE HIGHEST CONCENTRATION IS 6.84 PPM AT 280 DEGREES FROM REC4 .

1

JOB: LACC Master Plan RUN: Virgil & Melrose No Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
		REC1	REC2	REC3	REC4
LINK #	*	170	250	20	280
1	*	0.2	0.0	0.0	0.2
2	*	0.0	0.2	0.2	0.0
3	*	0.0	0.0	0.0	0.6
4	*	0.0	0.2	0.5	0.0
5	*	0.7	0.1	0.1	0.2
6	*	0.0	0.1	0.4	0.0
7	*	0.1	0.2	0.1	0.3
8	*	0.0	0.0	0.0	0.0
9	*	0.9	0.9	1.0	1.0
10	*	0.0	0.0	0.0	0.0
11	*	0.1	0.2	0.1	0.2
12	*	0.0	0.0	0.0	0.0

RUN ENDED ON 03/19/02 AT 23:52

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\VIRMELP.DAT

RUN BEGIN ON 03/19/02 AT 23:52

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Virgil & Melrose Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	518.0	0.0	518.0	500.0	500.	360.	AG	897.	6.1	0.0	56.0		
2. nbd	518.0	500.0	518.0	1000.0	500.	360.	AG	804.	6.1	0.0	56.0		
3. nbq	518.0	476.0	518.0	449.9	26.	180.	AG	227.	100.0	0.0	36.0	0.29	1.3
4. sba	482.0	1000.0	482.0	500.0	500.	180.	AG	1670.	6.1	0.0	56.0		
5. sbd	482.0	500.0	482.0	0.0	500.	180.	AG	1614.	6.1	0.0	56.0		
6. sbq	482.0	512.0	482.0	560.7	49.	360.	AG	227.	100.0	0.0	36.0	0.54	2.5
7. eba	0.0	488.0	500.0	488.0	500.	90.	AG	632.	6.1	0.0	44.0		
8. ebd	500.0	488.0	1000.0	488.0	500.	90.	AG	367.	6.1	0.0	44.0		
9. ebq	464.0	488.0	370.4	488.0	94.	270.	AG	387.	100.0	0.0	24.0	0.85	4.8
10. wba	1000.0	506.0	500.0	506.0	500.	270.	AG	345.	6.1	0.0	32.0		
11. wbd	500.0	506.0	0.0	506.0	500.	270.	AG	679.	6.1	0.0	32.0		
12. wbq	536.0	506.0	661.6	506.0	126.	90.	AG	194.	100.0	0.0	12.0	0.92	6.4

1

JOB: LACC Master Plan RUN: Virgil & Melrose Project

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. nbq	60	16	3.0	897	1600	105.60	3	3
6. sbq	60	16	3.0	1670	1600	105.60	3	3
9. ebq	60	41	3.0	632	1600	105.60	3	3
12. wbq	60	41	3.0	345	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	444.0	532.0	5.4
2. ne	556.0	532.0	5.4
3. sw	444.0	456.0	5.4
4. se	556.0	456.0	5.4

1

JOB: LACC Master Plan RUN: Virgil & Melrose Project

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
0.	4.6	4.5	5.9	5.2
10.	5.2	4.3	6.6	4.9
20.	5.1	4.3	6.7	4.9
30.	5.0	4.3	6.4	4.9
40.	5.0	4.3	5.5	4.9
50.	5.0	4.3	5.2	5.0
60.	5.2	4.3	5.2	4.9
70.	5.3	4.3	5.6	4.6
80.	5.3	4.3	5.5	4.6
90.	5.7	4.4	5.1	4.4
100.	6.1	4.9	4.8	4.3
110.	5.8	5.2	4.7	4.3
120.	5.4	5.2	4.7	4.3
130.	5.4	5.1	4.7	4.3
140.	5.3	5.1	4.9	4.3
150.	5.5	5.0	4.9	4.3
160.	6.0	5.0	5.1	4.3
170.	6.3	5.0	5.1	4.3
180.	5.7	5.3	4.6	4.5

190.	*	5.4	5.8	4.3	5.0
200.	*	5.5	5.9	4.3	5.0
210.	*	5.5	5.8	4.3	4.8
220.	*	5.6	5.4	4.3	4.8
230.	*	5.6	5.1	4.3	4.7
240.	*	5.4	5.4	4.3	4.7
250.	*	5.0	6.2	4.3	4.8
260.	*	4.8	6.1	4.3	5.0
270.	*	4.6	5.6	4.4	5.6
280.	*	4.3	5.1	4.9	6.8
290.	*	4.3	5.0	5.4	6.4
300.	*	4.3	4.9	5.8	5.6
310.	*	4.3	4.7	5.9	5.4
320.	*	4.3	4.8	5.7	5.3
330.	*	4.3	4.8	5.7	5.4
340.	*	4.3	5.0	5.6	5.4
350.	*	4.3	5.0	5.5	5.4
360.	*	4.6	4.5	5.9	5.2
MAX	*	6.3	6.2	6.7	6.8
DEGR.	*	170	250	20	280

THE HIGHEST CONCENTRATION IS 6.84 PPM AT 280 DEGREES FROM REC4 .

1

JOB: LACC Master Plan RUN: Virgil & Melrose Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
	*	REC1	REC2	REC3	REC4
LINK #	*	170	250	20	280
1	*	0.2	0.0	0.0	0.2
2	*	0.0	0.2	0.2	0.0
3	*	0.0	0.0	0.0	0.6
4	*	0.0	0.2	0.5	0.0
5	*	0.7	0.1	0.1	0.2
6	*	0.0	0.1	0.4	0.0
7	*	0.1	0.2	0.1	0.3
8	*	0.0	0.0	0.0	0.0
9	*	0.9	0.9	1.0	1.0
10	*	0.0	0.0	0.0	0.0
11	*	0.1	0.2	0.1	0.2
12	*	0.0	0.0	0.0	0.0

RUN ENDED ON 03/19/02 AT 23:52

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\VERBEVEX.DAT

RUN BEGIN ON 03/19/02 AT 23:48

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Vermont & Beverly Existing

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 7.7 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	0.0	524.0	500.0	500.	360.	AG	1291.	12.3	0.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1302.	12.3	0.0	56.0		
3. nbq	524.0	476.0	524.0	432.0	44.	180.	AG	1006.	100.0	0.0	48.0	0.40	2.2
4. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	2178.	12.3	0.0	68.0		
5. sbd	476.0	500.0	476.0	0.0	500.	180.	AG	1898.	12.3	0.0	56.0		
6. sbq	476.0	536.0	476.0	610.4	74.	360.	AG	1006.	100.0	0.0	48.0	0.68	3.8
7. eba	0.0	488.0	500.0	488.0	500.	90.	AG	1217.	12.3	0.0	44.0		
8. ebd	500.0	488.0	1000.0	488.0	500.	90.	AG	1372.	12.3	0.0	44.0		
9. ebq	452.0	488.0	234.1	488.0	218.	270.	AG	644.	100.0	0.0	24.0	0.99	11.1
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1469.	12.3	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1583.	12.3	0.0	44.0		
12. wbq	548.0	518.0	644.4	518.0	96.	90.	AG	966.	100.0	0.0	36.0	0.80	4.9

1 PAGE 2

JOB: LACC Master Plan RUN: Vermont & Beverly Existing

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. nbq	60	25	3.0	1291	1600	225.00	3	3
6. sbq	60	25	3.0	2178	1600	225.00	3	3
9. ebq	60	32	3.0	1217	1600	225.00	3	3
12. wbq	60	32	3.0	1469	1600	225.00	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	432.0	556.0	5.4
2. ne	568.0	556.0	5.4
3. sw	432.0	456.0	5.4
4. se	568.0	456.0	5.4

1 PAGE 3

JOB: LACC Master Plan RUN: Vermont & Beverly Existing

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
0.	8.3	8.0	11.4	11.2
10.	9.6	7.7	13.5	10.7
20.	10.2	7.7	14.3	10.9
30.	10.6	7.7	12.9	11.0
40.	11.2	7.7	11.1	11.0
50.	11.7	7.7	10.5	10.4
60.	11.7	7.7	11.3	9.6
70.	11.4	7.7	12.7	9.5
80.	11.4	7.7	12.7	9.5
90.	12.7	8.3	11.2	8.3
100.	15.2	9.7	10.0	7.7
110.	13.8	10.7	9.1	7.7
120.	11.7	11.6	8.9	7.7
130.	11.4	12.1	8.9	7.7
140.	11.5	11.9	8.9	7.7
150.	11.0	11.7	9.2	7.7
160.	10.8	11.3	9.4	7.7
170.	11.5	11.2	9.3	7.7
180.	10.5	12.0	8.2	8.1

190.	*	9.8	13.4	7.7	9.1
200.	*	9.9	13.9	7.7	9.3
210.	*	10.0	12.6	7.7	9.2
220.	*	10.3	11.0	7.7	9.2
230.	*	10.4	10.5	7.7	9.5
240.	*	10.7	10.9	7.7	10.1
250.	*	10.5	12.7	7.7	10.9
260.	*	9.4	12.9	7.7	11.4
270.	*	8.2	11.3	8.8	13.3
280.	*	7.7	10.5	11.6	15.5
290.	*	7.7	10.6	12.4	13.2
300.	*	7.7	10.0	11.6	11.6
310.	*	7.7	9.1	11.1	11.5
320.	*	7.7	9.0	10.7	12.0
330.	*	7.7	9.2	10.7	11.6
340.	*	7.7	9.4	10.5	11.5
350.	*	7.7	9.1	10.3	12.0
360.	*	8.3	8.0	11.4	11.2
MAX	*	15.2	13.9	14.3	15.5
DEGR.	*	100	200	20	280

THE HIGHEST CONCENTRATION IS 15.49 PPM AT 280 DEGREES FROM REC4 .

1

JOB: LACC Master Plan RUN: Vermont & Beverly Existing

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 100	REC2 200	REC3 20	REC4 280
1	*	0.0	0.7	0.0	0.4
2	*	0.3	0.1	0.5	0.0
3	*	0.0	1.5	0.0	2.6
4	*	0.7	0.0	1.2	0.0
5	*	0.0	0.8	0.1	0.5
6	*	2.6	0.0	2.3	0.0
7	*	0.0	0.0	0.4	0.9
8	*	0.6	0.4	0.0	0.2
9	*	0.0	0.0	1.6	2.4
10	*	1.1	0.5	0.0	0.0
11	*	0.1	0.0	0.5	0.8
12	*	2.1	2.2	0.0	0.0

RUN ENDED ON 03/19/02 AT 23:48

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\VERBEVNP.DAT

RUN BEGIN ON 03/19/02 AT 23:48

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Vermont & Beverly No Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	0.0	524.0	500.0	500.	360.	AG	1420.	6.1	0.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1431.	6.1	0.0	56.0		
3. nbq	524.0	476.0	524.0	427.5	49.	180.	AG	472.	100.0	0.0	48.0	0.44	2.5
4. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	2392.	6.1	0.0	68.0		
5. sbd	476.0	500.0	476.0	0.0	500.	180.	AG	2086.	6.1	0.0	56.0		
6. sbq	476.0	536.0	476.0	618.4	82.	360.	AG	472.	100.0	0.0	48.0	0.75	4.2
7. eba	0.0	488.0	500.0	488.0	500.	90.	AG	1366.	6.1	0.0	44.0		
8. ebd	500.0	488.0	1000.0	488.0	500.	90.	AG	1536.	6.1	0.0	44.0		
9. ebq	452.0	488.0	-491.5	488.0	943.	270.	AG	302.	100.0	0.0	24.0	1.11	47.9
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1625.	6.1	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1750.	6.1	0.0	44.0		
12. wbq	548.0	518.0	676.3	518.0	128.	90.	AG	453.	100.0	0.0	36.0	0.88	6.5

1

JOB: LACC Master Plan RUN: Vermont & Beverly No Project

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. nbq	60	25	3.0	1420	1600	105.60	3	3
6. sbq	60	25	3.0	2392	1600	105.60	3	3
9. ebq	60	32	3.0	1366	1600	105.60	3	3
12. wbq	60	32	3.0	1625	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	432.0	556.0	5.4
2. ne	568.0	556.0	5.4
3. sw	432.0	456.0	5.4
4. se	568.0	456.0	5.4

1

JOB: LACC Master Plan RUN: Vermont & Beverly No Project

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
0.	4.7	4.5	6.1	6.0
10.	5.3	4.3	7.3	5.8
20.	5.7	4.3	7.8	5.9
30.	5.9	4.3	6.9	6.0
40.	6.2	4.3	6.1	6.0
50.	6.4	4.3	5.8	6.2
60.	6.3	4.3	6.2	5.8
70.	6.2	4.3	7.1	5.5
80.	6.1	4.3	7.1	5.2
90.	6.9	4.6	6.3	4.7
100.	8.2	5.6	5.6	4.3
110.	7.5	6.4	5.2	4.3
120.	6.5	6.7	5.0	4.3
130.	6.3	6.6	4.9	4.3
140.	6.4	6.3	5.0	4.3
150.	6.0	6.2	5.1	4.3
160.	6.1	6.1	5.3	4.3
170.	6.3	6.0	5.2	4.3
180.	5.7	6.4	4.6	4.5

190.	*	5.4	7.2	4.3	5.0
200.	*	5.4	7.4	4.3	5.2
210.	*	5.4	6.7	4.3	5.2
220.	*	5.6	6.0	4.3	5.2
230.	*	5.6	5.8	4.3	5.4
240.	*	6.0	6.0	4.3	5.8
250.	*	6.3	6.9	4.3	6.0
260.	*	6.4	7.7	4.4	6.2
270.	*	4.9	6.6	6.0	7.8
280.	*	4.3	5.7	7.4	8.5
290.	*	4.3	5.7	6.7	7.1
300.	*	4.3	5.6	6.3	6.3
310.	*	4.3	5.2	5.9	6.2
320.	*	4.3	5.0	5.8	6.6
330.	*	4.3	5.1	5.8	6.5
340.	*	4.3	5.2	5.7	6.4
350.	*	4.3	5.1	5.5	6.5
360.	*	4.7	4.5	6.1	6.0
MAX	*	8.2	7.7	7.8	8.5
DEGR.	*	100	260	20	280

THE HIGHEST CONCENTRATION IS 8.54 PPM AT 280 DEGREES FROM REC4 .

1

JOB: LACC Master Plan RUN: Vermont & Beverly No Project

RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
LINK #	*	REC1 100	REC2 260	REC3 20	REC4 280
1	*	0.0	0.0	0.0	0.2
2	*	0.2	0.2	0.3	0.0
3	*	0.0	0.0	0.0	1.2
4	*	0.4	0.3	0.7	0.0
5	*	0.0	0.0	0.1	0.2
6	*	1.2	0.6	1.1	0.0
7	*	0.0	0.3	0.2	0.5
8	*	0.3	0.0	0.0	0.1
9	*	0.0	1.3	0.8	1.6
10	*	0.6	0.1	0.0	0.0
11	*	0.0	0.6	0.3	0.4
12	*	1.2	0.0	0.0	0.0

RUN ENDED ON 03/19/02 AT 23:48

1

CAL3QHC (93157)
IBM-PC VERSION (2.02)
(C) COPYRIGHT 1993, TRINITY CONSULTANTS, INC.
SERIAL NUMBER 9920 SOLD TO TERRY A. HAYES ASSOCIATES

RUN NAME: C:\CAL3QHC\VERBEVP.DAT

RUN BEGIN ON 03/19/02 AT 23:48

CAL3QHC: LINE SOURCE DISPERSION MODEL - VERSION 2.0, JANUARY 1992

JOB: LACC Master Plan RUN: Vermont & Beverly Project

SITE & METEOROLOGICAL VARIABLES

VS = 0.0 CM/S VD = 0.0 CM/S Z0 = 114. CM
U = 1.0 M/S CLAS = 6 (F) ATIM = 60. MINUTES MIXH = 1000. M AMB = 4.3 PPM

LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	LENGTH (FT)	BRG (DEG)	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)	V/C	QUEUE (VEH)
1. nba	524.0	0.0	524.0	500.0	500.	360.	AG	1476.	6.1	0.0	68.0		
2. nbd	524.0	500.0	524.0	1000.0	500.	360.	AG	1487.	6.1	0.0	56.0		
3. nbq	524.0	476.0	524.0	425.6	50.	180.	AG	472.	100.0	0.0	48.0	0.46	2.6
4. sba	476.0	1000.0	476.0	500.0	500.	180.	AG	2397.	6.1	0.0	68.0		
5. sbd	476.0	500.0	476.0	0.0	500.	180.	AG	2091.	6.1	0.0	56.0		
6. sbq	476.0	536.0	476.0	618.7	83.	360.	AG	472.	100.0	0.0	48.0	0.75	4.2
7. eba	0.0	488.0	500.0	488.0	500.	90.	AG	1366.	6.1	0.0	44.0		
8. ebd	500.0	488.0	1000.0	488.0	500.	90.	AG	1536.	6.1	0.0	44.0		
9. ebq	452.0	488.0	-491.5	488.0	943.	270.	AG	302.	100.0	0.0	24.0	1.11	47.9
10. wba	1000.0	518.0	500.0	518.0	500.	270.	AG	1625.	6.1	0.0	56.0		
11. wbd	500.0	518.0	0.0	518.0	500.	270.	AG	1750.	6.1	0.0	44.0		
12. wbq	548.0	518.0	676.3	518.0	128.	90.	AG	453.	100.0	0.0	36.0	0.88	6.5

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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. nbq	60	25	3.0	1476	1600	105.60	3	3
6. sbq	60	25	3.0	2397	1600	105.60	3	3
9. ebq	60	32	3.0	1366	1600	105.60	3	3
12. wbq	60	32	3.0	1625	1600	105.60	3	3

RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. nw	432.0	556.0	5.4
2. ne	568.0	556.0	5.4
3. sw	432.0	456.0	5.4
4. se	568.0	456.0	5.4

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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
0.	4.7	4.5	6.1	6.0
10.	5.4	4.3	7.3	5.8
20.	5.7	4.3	7.8	5.9
30.	6.0	4.3	7.0	6.0
40.	6.2	4.3	6.1	6.0
50.	6.4	4.3	5.8	6.2
60.	6.3	4.3	6.2	5.8
70.	6.2	4.3	7.1	5.5
80.	6.1	4.3	7.1	5.2
90.	6.9	4.6	6.3	4.7
100.	8.2	5.6	5.6	4.3
110.	7.5	6.4	5.3	4.3
120.	6.5	6.7	5.0	4.3
130.	6.3	6.6	4.9	4.3
140.	6.5	6.3	5.0	4.3
150.	6.0	6.2	5.1	4.3
160.	6.1	6.1	5.3	4.3
170.	6.3	6.0	5.2	4.3
180.	5.7	6.4	4.6	4.5

190.	*	5.4	7.2	4.3	5.0
200.	*	5.4	7.5	4.3	5.2
210.	*	5.4	6.8	4.3	5.2
220.	*	5.6	6.0	4.3	5.2
230.	*	5.6	5.8	4.3	5.5
240.	*	6.0	6.0	4.3	5.8
250.	*	6.3	6.9	4.3	6.0
260.	*	6.4	7.7	4.4	6.2
270.	*	4.9	6.7	6.0	7.9
280.	*	4.3	5.7	7.4	8.6
290.	*	4.3	5.7	6.7	7.2
300.	*	4.3	5.6	6.3	6.3
310.	*	4.3	5.2	5.9	6.2
320.	*	4.3	5.0	5.8	6.7
330.	*	4.3	5.1	5.8	6.5
340.	*	4.3	5.3	5.7	6.4
350.	*	4.3	5.1	5.5	6.5
360.	*	4.7	4.5	6.1	6.0
MAX	*	8.2	7.7	7.8	8.6
DEGR.	*	100	260	20	280

THE HIGHEST CONCENTRATION IS 8.64 PPM AT 280 DEGREES FROM REC4 .

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RECEPTOR - LINK MATRIX FOR THE ANGLE PRODUCING
THE MAXIMUM CONCENTRATION FOR EACH RECEPTOR

		CO/LINK (PPM) ANGLE (DEGREES)			
		REC1	REC2	REC3	REC4
LINK #	*	100	260	20	280
1	*	0.0	0.0	0.0	0.3
2	*	0.2	0.2	0.3	0.0
3	*	0.0	0.0	0.0	1.2
4	*	0.4	0.3	0.7	0.0
5	*	0.0	0.0	0.1	0.2
6	*	1.2	0.6	1.1	0.0
7	*	0.0	0.3	0.2	0.5
8	*	0.3	0.0	0.0	0.1
9	*	0.0	1.3	0.8	1.6
10	*	0.6	0.1	0.0	0.0
11	*	0.0	0.6	0.3	0.4
12	*	1.2	0.0	0.0	0.0

RUN ENDED ON 03/19/02 AT 23:48