November 30, 2009 (Revised)

Benjamin J. Stables III
ARMSTRONG & BROOKS CONSULTING ENGINEERS
1530 Consumer Circle, Suite B
Corona, CA 92880

RE: **TTM 34760 - Localized Significance Thresholds Analysis**

The purpose of this Localized Significance Threshold Analysis (LST) is to identify maximum localized thresholds for TTM 34760 and is an addendum study to the project Air Quality Conformity Assessment (Source: Air Quality Conformity Assessment – TPM 34760 – Investigative Science and Engineering – May 22, 2008). This report utilizes construction data from that report and does not modify any of the original findings but provides additional information requested by the City.

The proposed (TTM 34760) development project seeks to develop approximately 34 single family residential parcels with Open Space on an approximate 64 acre site located within the City of Corona and the County of Riverside. The project applicant is also seeking to annex the portion of the project located within the County of Riverside.

In June 2003 South Coast Air Quality Management District (SCAQMD) proposed a methodology for calculating Localized Significance Thresholds (LSTs) for NO_2, CO and fugitive $PM_{2.5}$ and PM_{10}. The LST methodology was developed to be used as a tool to assist lead agencies to analyze localized impacts associated with project-specific level proposed projects and would not be applicable to regional projects such as general plans. Recently, the LST methodology was updated to incorporate the most recent ambient air quality standards (July 2008). The LST methodology is often utilized by the City of Corona for projects requiring CEQA review.

SCAQMD developed mass rate look-up tables for projects less than five acres to assist agencies with development of LSTs, however LST guidelines recommend project specific air quality dispersion modeling for projects greater than five acres (http://aqmd.gov/ceqa/handbook/LST/LST.html). Air dispersion modeling utilizing the Environmental Protection Agency's Industrial Source Complex Short Term Version 3 (ISCST3) is the preferred dispersion modeling software because of its ability to incorporate meteorological inputs as well as multiple source and receptor locations.

Per the requirements of SCAQMDs LSTs methodology, emissions for gases in attainment such as NO_2 and CO are calculated by adding emission impacts from the project development to the peak background ambient NO_2 and CO concentrations and comparing the total concentration

to the most stringent ambient air quality standards. Per SCAQMD Rule 403, emissions for non-attainment particulate matter such as PM 10 and PM 2.5 can produce no more than 10.4 µg/m^3 (Source: SCAQMD Final Localized Significance Threshold Methodology, July 2008). Ambient Air quality data is shown below in Table 1.

Table 1: Ambient Air Quality Standards (Modified to Show LST Pollutants Only)

Ambient Air Quality Standards						
Pollutant	Average Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[3,5]	Secondary[3,6]	Method[7]
Respirable Particulate Matter (PM10)	24 Hour	50 µg/m3	Gravimetric or Beta Attenuation	150 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m3		-		
Fine Particulate Matter PM2.5	24 Hour	No Separate State Standard		35 µg/m3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m3	Gravimetric or Beta Attenuation	15 µg/m3		
Carbon Monoxide (CO)	8 hour	9.0 ppm (10mg/m3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m3)	None	Non-Dispersive Infrared Photometry
	1 hour	20 ppm (23 mg/m3)		35 ppm (40 mg/m3)		
	8 Hour (Lake Tahoe)	6 ppm (7 mg/m3)		-	-	-
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (57 µg/m3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1 Hour	0.18 ppm (339 µg/m3)				

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1 and 24 hour), nitrogen dioxide, suspended particulate matter—PM10, PM2.5, and visibility reducing articles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2. National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest eight hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM10, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m3 is equal to or less than one. For PM2.5, the 24 hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

3. Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4. Any equivalent procedure which can be shown to the satisfaction of the ARB to give equivalent results at or near the level of the air quality standard may be used.

Source: California Air Resources Board (4/1/08)

Utilizing the ISCST3 dispersion model, project level air quality emissions for NO_x, CO, $PM_{2.5}$ and PM_{10} emissions were calculated utilizing a single volume source over the project site and was assumed to occur over the entire site. Emission rates were taken from the project Air Quality report but were normalized to a worst-case hourly level produced in an eight our workday. A polar coordinate system was utilized for sources because there is a high level of residential uses to the north of the project site. The model output files are attached to the end of this letter.

Ambient Air Quality thresholds are not given for NO_x as is typically quantified for project related emission outputs. This is because NO_x emitted during the combustion process primarily consists of NO and NO_2. Initially it is assumed that 5% of NO_x is NO_2 and the remaining NO gradually is converted to NO_2 through photochemical and reactions with ozone O_3

(*Source: A Chemically Reactive Plume Model for the NO-NO_2-O_3 System - Atmospheric Environment 24A – Arellano, J.V., A.M. Talmon, and P.J.H Builtjes).* It was found that the downwind conversion from NO to NO_2 is quantified through the NO_2/NO_x ratio calculated from the emission release point. The reduction ratios are shown in Table 2 below.

Table 2: Three-Year Ambient Air Quality Summary near the Project Site

Downwind Distance (m)	NO_2/NO_x Ratio
20	0.053
50	0.059
70	0.064
100	0.074
200	0.114
500	0.258
1000	0.467
2000	0.75
3000	0.9
4000	0.978
5000	1
Source: A Chemically Reactive Plume Model for the NO-NO_2-O_3 System - Atmospheric Environment 24A – Arellano, J.V., A.M. Talmon, and P.J.H Builtjes	

Ambient Data was obtained from the California Environmental Protection Agency's Air Resources Board Website (Source: http://www.arb.ca.gov/adam/welcome.html). Table 3 identifies the closest criteria pollutants monitored to the project as well as identifies the relative distance from the project site. As can be seen from the project data the 2007 data for Norco is unusually high. This number is not representative of the ambient air quality data and should be thrown out as it was most likely due fires near the monitoring equipment

Table 3: Three-Year Ambient Air Quality Summary near the Project Site

Pollutant	Closest Recorded Ambient Monitoring Site	Relative Distance to the Project Site (miles)	Averaging Time	CAAQS	NAAQS	2006	2007	2008
CO (ppm)	Riverside Rubidoux	15	8 Hour	9 ppm	9 ppm	2.29	2.93	1.86
PM10 (µg/m3)	Norco	6	24 Hour	50 µg/m3	150 µg/m3	74	332	86
PM2.5 (µg/m3)	Riverside Rubidoux	15	24 Hour	-	35 µg/m3	68.4	75.6	53.3
NO2 (ppm)	Riverside Rubidoux	15	1 Hour	0.18 ppm	-	0.076	0.072	0.092

LST concentrations for $PM_{2.5}$ and PM_{10} is 10.4 µg/m^3 however, to derive LST concentrations for NO_2 and CO, the difference between the worst case ambient air quality standard and the ambient concentration for the pollutant must be determined. The following equation is used:

$$C_{pc} = C_{AAQS} - C_b$$

Where: C_{PC} = Project contribution emission levels in micrograms per cubic meter; and

C_b = Background Concentration measured at the closest air quality monitorin station in micrograms per cubic meter; and

C_{AAQS} = is the limiting state or federal standards in micrograms per cubic meter.

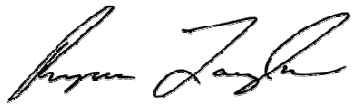
Table 4 below identifies the localize significance threshold and compares it to the project contributions. Based upon this analysis, the proposed project would exceed PM_{10} and $PM_{2.5}$ thresholds of 10.4 µg/m^3 and would require mitigation per SCAQMD Rule 403.

Table 4: LST Findings

Pollutant	Averaging Time	Threshold	Worst Case Background Ambient Air Quality Data		LST (µg/m3)	Project Contribution (µg/m3)						Significant ?
			Data	(µg/m3)		100 (m)	200 (m)	300 (m)	400 (m)	800 (m)	1000 (m)	
CO	8 Hour	9 ppm (10000 µg/m^3)	2.93 ppm	3,255	6745	0	0	21	14	5	4	No
PM10	24 Hour	10.4 µg/m3	86 µg/m^3	86	10.4	0	0	1	0	0	0	No
PM2.5	24 Hour	10.4 µg/m3	75.6 µg/m^3	75.6	10.4	0	0	1	0	0	0	No
NO2 (Corrected utilizing NO_2/NO_x Ratio)	1 Hour	0.18 ppm (339 µg/m^3)	.092 ppm	173.2	165.8	0	0	76	55	23	18	No

As shown from the ISCST3 air quality modeling, Localized Significance Thresholds will not be exceeded during the construction of the proposed project. No additional mitigation will be necessary.

Regards,



Ryan S. Taylor, EIT
Senior Air, Traffic, and Noise Engineer
Brian F. Smith and Associates
ryan@bfsa-ca.com

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CO STARTING
   TITLEONE  RANCHO VENENCIA co
   MODELOPT  NOCALM  URBAN  CONC
   AVERTIME  1 8
   POLLUTID  other
   RUNORNOT  RUN
   EVENTFIL  EVENTEXP.INP
   ERRORFIL  ERRORS.OUT
CO FINISHED

SO STARTING
   LOCATION STACK1 VOLUME 0 0 0
**      VOLUME  Source  G/S     RELHT   INILATVOL       INIVERTVOL
**      Parameters:     0.7293  ----    ----    ----    ---
   SRCPARAM STACK1 0.7293 5.00 118.35 1.4
   EMISFACT   stack1  HROFDY   8*0.0  8*1.0  8*0.0
   SRCGROUP ALL
SO FINISHED

RE STARTING
   GRIDPOLR POL1 STA
                ORIG     0.0     0.0
                DIST  25 50 100 200 300 400 800 1000
                GDIR     36     10.0     10.0
   GRIDPOLR POL1 END
RE FINISHED
**      ELEV    90      5       10.00   15.00   20      25

ME STARTING
   INPUTFIL  norco.ASC
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   ANEMHGHT  20 FEET

   SURFDATA  54167  1981  NORCO

   UAIRDATA  99999  1981  NORCO

**   DAYRANGE  1-10

ME FINISHED



OU STARTING

   RECTABLE  ALLAVE  FIRST

OU FINISHED

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*** SETUP Finishes Successfully ***
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 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA co
                        ***          11/30/09
                                     ***
                       ***          11:05:45
**MODELOPTs:
                                    PAGE   1
CONC                     URBAN FLAT                                     NOCALM


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

**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 User-Specified Options:
           1. Final Plume Rise.
           2. Stack-tip Downwash.
           3. Buoyancy-induced Dispersion.
           4. Not Use Calms Processing Routine.
           5. Not Use Missing Data Processing Routine.
           6. Default Wind Profile Exponents.
           7. Default Vertical Potential Temperature Gradients.

**Model Assumes Receptors on FLAT Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates  2 Short Term Average(s) of:   1-HR   8-HR
```

**This Run Includes: 1 Source(s); 1 Source Group(s); and 288 Receptor(s)

**The Model Assumes A Pollutant Type of: OTHER

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

**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)

**Misc. Inputs: Anem. Hgt. (m) = 6.10 ; 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: valco2.inp

**Output Print File: valco2.out

**Detailed Error/Message File: ERRORS.OUT

**File Created for Event Model: EVENTEXP.INP

CONC URBAN FLAT NOCALM

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
STACK1	0	0.72930E+00	0.0	0.0	0.0	5.00	118.35	1.40	HROFDY

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*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

ALL STACK1 ,

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* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00
5	.00000E+00	6	.00000E+00				
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01
11	.10000E+01	12	.10000E+01				
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01
17	.00000E+00	18	.00000E+00				
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00
23	.00000E+00	24	.00000E+00				

SOURCE ID = STACK1 ; SOURCE TYPE = VOLUME :

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*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

*** ORIGIN FOR POLAR NETWORK ***
X-ORIG = 0.00 ; Y-ORIG = 0.00 (METERS)

*** DISTANCE RANGES OF NETWORK ***
(METERS)

25.0, 50.0, 100.0, 200.0, 300.0, 400.0, 800.0, 1000.0,

*** DIRECTION RADIALS OF NETWORK ***
(DEGREES)

10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0,
80.0, 90.0, 100.0,
110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0,
180.0, 190.0, 200.0,
210.0, 220.0, 230.0, 240.0, 250.0, 260.0, 270.0,
280.0, 290.0, 300.0,
310.0, 320.0, 330.0, 340.0, 350.0, 360.0,

**MODELOPTs:

CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	4.3	24.6	-229.45
STACK1	8.7	49.2	-204.45
STACK1	17.4	98.5	-154.45
STACK1	34.7	197.0	-54.45
STACK1	8.6	23.5	-229.45
STACK1	17.1	47.0	-204.45
STACK1	34.2	94.0	-154.45
STACK1	68.4	187.9	-54.45
STACK1	12.5	21.7	-229.45
STACK1	25.0	43.3	-204.45
STACK1	50.0	86.6	-154.45
STACK1	100.0	173.2	-54.45
STACK1	16.1	19.2	-229.45
STACK1	32.1	38.3	-204.45
STACK1	64.3	76.6	-154.45
STACK1	128.6	153.2	-54.45
STACK1	19.2	16.1	-229.45

	STACK1	38.3	32.1	
-204.45				
	STACK1	76.6	64.3	
-154.45				
	STACK1	153.2	128.6	
-54.45				
	STACK1	21.7	12.5	
-229.45				
	STACK1	43.3	25.0	
-204.45				
	STACK1	86.6	50.0	
-154.45				
	STACK1	173.2	100.0	
-54.45				
	STACK1	23.5	8.6	
-229.45				
	STACK1	47.0	17.1	
-204.45				
	STACK1	94.0	34.2	
-154.45				
	STACK1	187.9	68.4	
-54.45				
	STACK1	24.6	4.3	
-229.45				
	STACK1	49.2	8.7	
-204.45				
	STACK1	98.5	17.4	
-154.45				
	STACK1	197.0	34.7	
-54.45				
	STACK1	25.0	0.0	
-229.45				
	STACK1	50.0	0.0	
-204.45				
	STACK1	100.0	0.0	
-154.45				
	STACK1	200.0	0.0	
-54.45				
	STACK1	24.6	-4.3	
-229.45				
	STACK1	49.2	-8.7	
-204.45				
	STACK1	98.5	-17.4	
-154.45				
	STACK1	197.0	-34.7	
-54.45				

*** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA co
*** 11/30/09
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*** 11:05:45
**MODELOPTs:
PAGE 7
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE - - RECEPTOR LOCATION - - DISTANCE

ID	XR (METERS)	YR (METERS)	(METERS)
STACK1	23.5	-8.6	-229.45
STACK1	47.0	-17.1	-204.45
STACK1	94.0	-34.2	-154.45
STACK1	187.9	-68.4	-54.45
STACK1	21.7	-12.5	-229.45
STACK1	43.3	-25.0	-204.45
STACK1	86.6	-50.0	-154.45
STACK1	173.2	-100.0	-54.45
STACK1	19.2	-16.1	-229.45
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STACK1	4.3	-24.6	-229.45
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STACK1	17.4	-98.5	-154.45
STACK1	34.7	-197.0	-54.45
STACK1	0.0	-25.0	-229.45

	STACK1	0.0	-50.0
-204.45			
	STACK1	0.0	-100.0
-154.45			
	STACK1	0.0	-200.0
-54.45			
	STACK1	-4.3	-24.6
-229.45			
	STACK1	-8.7	-49.2
-204.45			
	STACK1	-17.4	-98.5
-154.45			
	STACK1	-34.7	-197.0
-54.45			
	STACK1	-8.6	-23.5
-229.45			
	STACK1	-17.1	-47.0
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-154.45			
	STACK1	-68.4	-187.9
-54.45			

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STACK1	-19.2	-16.1	-229.45
STACK1	-38.3	-32.1	

-204.45	STACK1	-76.6	-64.3
-154.45	STACK1	-153.2	-128.6
-54.45	STACK1	-21.7	-12.5
-229.45	STACK1	-43.3	-25.0
-204.45	STACK1	-86.6	-50.0
-154.45	STACK1	-173.2	-100.0
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-204.45	STACK1	-94.0	-34.2
-154.45	STACK1	-187.9	-68.4
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-229.45	STACK1	-49.2	-8.7
-204.45	STACK1	-98.5	-17.4
-154.45	STACK1	-197.0	-34.7
-54.45	STACK1	-25.0	0.0
-229.45	STACK1	-50.0	0.0
-204.45	STACK1	-100.0	0.0
-154.45	STACK1	-200.0	0.0
-54.45	STACK1	-24.6	4.3
-229.45	STACK1	-49.2	8.7
-204.45	STACK1	-98.5	17.4
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-204.45	STACK1	-86.6	50.0
-154.45	STACK1	-173.2	100.0
-54.45			

**MODELOPTs:
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STACK1	0.0	50.0	

-204.45
STACK1 0.0 100.0
-154.45
STACK1 0.0 200.0
-54.45
 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA co
*** 11/30/09
***
*** 11:05:45
**MODELOPTs:
PAGE 10
CONC URBAN FLAT NOCALM

*** 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
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1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
1 1 1 1 1 1 1 1 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

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA co
*** 11/30/09
***
*** 11:05:45
**MODELOPTs:
PAGE 11
CONC URBAN FLAT NOCALM

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

FILE: norco.ASC

FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)

SURFACE STATION NO.: 54167 NAME: NORCO
UPPER AIR STATION NO.: 99999 NAME: NORCO

YEAR: 1981
YEAR: 1981

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL	MIXING HEIGHT (M) URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
81	01	01	01	202.3	1.00	284.3	7	522.6	170.0	0.0000	0.0	0.0000	0	0.00
81	01	01	02	192.4	0.00	284.3	7	507.0	170.0	0.0000	0.0	0.0000	0	0.00
81	01	01	03	197.5	0.00	283.1	7	491.4	170.0	0.0000	0.0	0.0000	0	0.00
81	01	01	04	211.0	0.00	283.1	7	475.8	170.0	0.0000	0.0	0.0000	0	0.00
81	01	01	05	174.0	1.00	282.6	7	460.3	170.0	0.0000	0.0	0.0000	0	0.00

81 01 01 06	207.0	1.00	283.1	7	444.7	170.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 07	207.0	0.00	285.4	6	1.4	170.7	0.0000	0.0	0.0000
0 0.00									
81 01 01 08	202.1	0.00	287.6	5	47.0	192.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 09	231.5	1.00	289.8	4	92.5	213.3	0.0000	0.0	0.0000
0 0.00									
81 01 01 10	9.1	1.00	291.5	3	138.0	234.7	0.0000	0.0	0.0000
0 0.00									
81 01 01 11	359.1	1.34	294.3	2	183.5	256.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 12	350.6	0.00	297.6	2	229.0	277.3	0.0000	0.0	0.0000
0 0.00									
81 01 01 13	19.7	2.24	298.7	3	274.5	298.7	0.0000	0.0	0.0000
0 0.00									
81 01 01 14	56.7	2.68	299.8	3	320.0	320.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 15	89.8	2.68	299.3	3	320.0	320.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 16	98.2	3.13	298.7	4	320.0	320.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 17	87.6	1.79	295.4	5	325.6	318.5	0.0000	0.0	0.0000
0 0.00									
81 01 01 18	75.1	1.00	291.5	6	357.2	310.3	0.0000	0.0	0.0000
0 0.00									
81 01 01 19	110.5	1.00	289.8	7	388.8	302.1	0.0000	0.0	0.0000
0 0.00									
81 01 01 20	235.7	1.00	287.0	7	420.4	293.9	0.0000	0.0	0.0000
0 0.00									
81 01 01 21	246.1	1.00	286.5	7	452.0	285.7	0.0000	0.0	0.0000
0 0.00									
81 01 01 22	204.5	1.00	287.0	7	483.5	277.4	0.0000	0.0	0.0000
0 0.00									
81 01 01 23	203.2	0.00	285.9	7	515.1	269.2	0.0000	0.0	0.0000
0 0.00									
81 01 01 24	202.2	0.00	285.4	7	546.7	261.0	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 02035 *** *** RANCHO VENENCIA co
*** 11/30/09
***
*** 11:05:45
**MODELOPTs:
PAGE 12
CONC URBAN FLAT NOCALM

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STACK1 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR
***

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

DIRECTION | DISTANCE (METERS)

(DEGREES)	25.00	50.00	100.00	200.00	300.00
10.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.25416 (81010809)
20.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	35.96676 (81012709)
30.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26219 (81012813)
40.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.24772 (81111209)
50.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.20267 (81120609)
60.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.23742 (81040110)
70.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26260 (81113009)
80.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26423 (81051409)
90.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26519 (81121509)
100.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26546 (81102711)
110.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26440 (81042009)
120.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.25364 (81123110)
130.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.24501 (81020509)
140.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26204 (81042309)
150.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26080 (81102714)
160.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26544 (81122009)
170.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26344 (81120209)
180.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26470 (81111710)
190.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26506 (81012810)
200.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26344 (81022809)
210.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26506 (81021010)
220.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26516 (81112812)
230.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.23184 (81010109)
240.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.24174 (81040109)
250.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26548 (81042510)
260.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26423 (81012509)
270.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.10690 (81052409)
280.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.26527 (81031609)
290.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	36.25283 (81011509)

300.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)
0.00000 (00000000)	36.23094 (81013109)		
310.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)
0.00000 (00000000)	35.89093 (81042509)		
320.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)
0.00000 (00000000)	35.64610 (81012710)		
330.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)
0.00000 (00000000)	36.25141 (81120809)		
340.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)
0.00000 (00000000)	36.26204 (81111509)		
350.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)
0.00000 (00000000)	36.26028 (81013009)		
360.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)
0.00000 (00000000)	36.26547 (81111309)		

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA co
*** 11/30/09
***
*** 11:05:45

**MODELOPTs:

CONC URBAN FLAT NOCALM

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STACK1 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

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

DIRECTION (DEGREES)	DISTANCE (METERS) 400.00	800.00	1000.00
10.0	25.99431 (81010809)	11.06868 (81010809)	8.30152 (81010809)
20.0	25.63285 (81012709)	10.62627 (81012709)	7.86294 (81012709)
30.0	26.00442 (81012813)	11.08121 (81012813)	8.31403 (81012813)
40.0	25.98618 (81111209)	11.05860 (81111209)	8.29148 (81111209)
50.0	25.92942 (81120609)	11.03656 (81120609)	8.48546 (81120609)
60.0	25.97320 (81040110)	11.04253 (81040110)	8.27545 (81040110)
70.0	26.00494 (81113009)	11.08185 (81113009)	8.31467 (81113009)
80.0	26.00700 (81051409)	11.08441 (81051409)	8.31723 (81051409)
90.0	26.00822 (81121509)	11.08594 (81121509)	8.31995 (81121509)
100.0	26.00854 (81102711)	11.08632 (81102711)	8.43968 (81012009)
110.0	26.00722 (81042009)	11.08467 (81042009)	8.31749 (81042009)
120.0	25.99365 (81123110)	11.06785 (81123110)	8.30070 (81123110)
130.0	25.98277 (81020509)	11.05438 (81020509)	8.28726 (81020509)
140.0	26.00424 (81042309)	11.08099 (81042309)	8.31381 (81042309)
150.0	26.00267 (81102714)	11.07904 (81102714)	8.31187 (81102714)
160.0	26.00852 (81122009)	11.08629 (81122009)	8.31911 (81122009)
170.0	26.00601 (81120209)	11.08338 (81120209)	8.32269 (81120209)
180.0	26.00759 (81111710)	11.08514 (81111710)	8.31796 (81111710)
190.0	26.00805 (81012810)	11.08570 (81012810)	8.31852 (81012810)
200.0	26.00601 (81022809)	11.08317 (81022809)	8.31599 (81022809)
210.0	26.00805 (81021010)	11.08570 (81021010)	8.31852 (81021010)
220.0	26.00817 (81112812)	11.08585 (81112812)	8.31867 (81112812)
230.0	25.96617 (81010109)	11.03723 (81010109)	8.31101 (81010109)
240.0	25.97865 (81040109)	11.04928 (81040109)	8.28218 (81040109)
250.0	26.00858 (81042510)	11.08637 (81042510)	8.31918 (81042510)

260.0	26.00700 (81012509)	11.08441 (81012509)	8.31723 (81012509)
270.0	25.80888 (81052409)	10.84035 (81052409)	8.07446 (81052409)
280.0	26.00832 (81031609)	11.08604 (81031609)	8.33713 (81120909)
290.0	25.99263 (81011509)	11.06658 (81011509)	8.29972 (81011509)
300.0	25.96503 (81013109)	11.04152 (81120309)	8.36594 (81120309)
310.0	25.53777 (81042509)	10.51173 (81042509)	7.75032 (81042509)
320.0	25.23165 (81012710)	10.14806 (81012710)	7.39538 (81012710)
330.0	25.99084 (81120809)	11.06438 (81120809)	8.29723 (81120809)
340.0	26.00424 (81111509)	11.08099 (81111509)	8.31384 (81111509)
350.0	26.00203 (81013009)	11.07823 (81013009)	8.31106 (81013009)
360.0	26.00857 (81111309)	11.08636 (81111309)	8.31917 (81111309)

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA co
*** 11/30/09
***
*** 11:05:45
**MODELOPTs:
PAGE 14
CONC URBAN FLAT NOCALM

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STACK1 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR
***

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

DIRECTION (DEGREES)	DISTANCE (METERS) 25.00	50.00	100.00	200.00	300.00
10.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	10.62263 (81020816)
20.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	9.47060 (81112616)
30.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	13.35512 (81012816)
40.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	14.08432 (81012816)
50.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	15.70355 (81012816)
60.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	14.83063 (81012816)
70.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	18.57612 (81041016)
80.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	20.32512 (81041016)
90.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	20.81424 (81041016)
100.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	18.48870 (81041916)
110.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	18.84016 (81041916)
120.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	19.83471 (81041916)
130.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	21.09180 (81041916)
140.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)		

```
    0.00000 (00000000)     14.98644 (81123116)
    150.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     18.09600 (81102716)
    160.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     18.31543 (81102716)
    170.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     18.31692 (81032916)
    180.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     17.39838 (81032916)
    190.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     16.87436 (81112816)
    200.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     18.64467 (81112816)
    210.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     17.55401 (81112816)
    220.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     17.59425 (81112816)
    230.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     16.41518 (81112816)
    240.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     12.68681 (81112816)
    250.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     10.83431 (81112416)
    260.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)      9.32315 (81012516)
    270.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)      8.96712 (81012516)
    280.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)      8.84892 (81120316)
    290.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)      8.80686 (81120316)
    300.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)      8.52834 (81120816)
    310.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)      8.50046 (81122416)
    320.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     10.00926 (81120816)
    330.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)      9.91221 (81120816)
    340.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)      7.80962 (81102616)
    350.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)      9.22768 (81020816)
    360.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     10.12529 (81020816)
 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA co
                          ***         11/30/09
                                      ***
                         ***         11:05:45
**MODELOPTs:
                                    PAGE  15
CONC                     URBAN FLAT                                    NOCALM


                              *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL       ***
                                    INCLUDING SOURCE(S):      STACK1  ,

                                     *** NETWORK ID: POL1     ;  NETWORK TYPE: GRIDPOLR
***

                                         ** CONC OF OTHER    IN MICROGRAMS/M**3
                    **
```

DIRECTION (DEGREES)	DISTANCE (METERS) 400.00	800.00	1000.00
10.0	6.80337 (81020816)	2.46732 (81111316)	1.78202 (81111316)
20.0	7.25493 (81012816)	2.34055 (81020816)	1.64196 (81020816)
30.0	9.39180 (81012816)	2.99284 (81012816)	2.02989 (81012816)
40.0	10.53375 (81012816)	3.75983 (81012816)	2.64731 (81012816)
50.0	10.58514 (81012816)	3.64457 (81012816)	2.53343 (81012816)
60.0	10.19798 (81021116)	3.72274 (81100316)	2.67464 (81100316)
70.0	11.73160 (81041016)	4.07535 (81021116)	2.88342 (81021116)
80.0	13.70123 (81041016)	4.47917 (81041016)	3.16687 (81051416)
90.0	14.34571 (81041016)	5.36297 (81041016)	3.84367 (81041016)
100.0	13.43484 (81041916)	4.96430 (81041916)	3.55967 (81041916)
110.0	14.18353 (81041916)	5.39683 (81041916)	3.88998 (81041916)
120.0	14.33010 (81041916)	4.31473 (81041916)	2.84020 (81041916)
130.0	12.81724 (81041916)	3.07223 (81123116)	2.08754 (81052916)
140.0	11.94220 (81102716)	3.40214 (81102716)	2.26710 (81092916)
150.0	12.97229 (81102716)	4.48342 (81102716)	3.18355 (81102716)
160.0	12.55498 (81102716)	4.50473 (81102716)	3.12780 (81102716)
170.0	12.52921 (81032916)	4.43998 (81032916)	3.08078 (81032916)
180.0	11.48233 (81032916)	3.61189 (81032916)	2.39446 (81032916)
190.0	11.21578 (81112716)	3.73653 (81112716)	2.59465 (81112716)
200.0	12.11479 (81112816)	3.54648 (81112716)	2.35483 (81112716)
210.0	13.20927 (81112816)	4.72948 (81112816)	3.32638 (81112816)
220.0	13.64375 (81112816)	4.84456 (81112816)	3.48743 (81112816)
230.0	11.88361 (81112816)	3.56652 (81112816)	2.45274 (81112416)
240.0	9.85403 (81112816)	2.40628 (81122716)	1.68202 (81122716)
250.0	7.56802 (81112816)	2.12047 (81012516)	1.43824 (81012516)
260.0	6.52797 (81012516)	2.28685 (81012516)	1.61982 (81012516)
270.0	5.99669 (81012516)	2.27986 (81030516)	1.64601 (81030516)
280.0	5.85067 (81030516)	2.14480 (81030516)	1.49730 (81030516)
290.0	5.62407 (81120316)	1.73936 (81122316)	1.21590 (81122316)
300.0	5.87979 (81120816)	2.06389 (81122316)	1.51574 (81122316)
310.0	6.66315 (81120816)	1.81541 (81120816)	1.20928 (81011216)
320.0	6.62669 (81120816)	2.15133 (81120816)	1.43895 (81120816)
330.0	6.54802 (81120816)	2.21141 (81120816)	1.54074 (81120816)
340.0	6.40884 (81102616)	2.33739 (81102616)	1.68348 (81102616)
350.0	6.68449 (81020816)	1.92205 (81111316)	1.28977 (81102616)
360.0	7.04271 (81020816)	2.66782 (81111316)	1.97746 (81111316)

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA co
*** 11/30/09
***
*** 11:05:45
**MODELOPTs:
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CONC URBAN FLAT NOCALM

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

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

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

ALL HIGH 1ST HIGH VALUE IS 36.26548 ON 81042510: AT (-281.91, -102.61, 0.00, 0.00) GP POL1

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

*** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA co
*** 11/30/09
***
*** 11:05:45
**MODELOPTs:
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CONC URBAN FLAT NOCALM

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

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

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

ALL HIGH 1ST HIGH VALUE IS 21.09180 ON 81041916: AT (229.81, -192.84, 0.00, 0.00) GP POL1

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

*** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA co
*** 11/30/09
***
*** 11:05:45
**MODELOPTs:
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CONC URBAN FLAT NOCALM

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

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

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 762 Informational Message(s)

A Total of 762 Calm Hours Identified

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

********   WARNING MESSAGES   ********
           ***  NONE  ***

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

```
CO STARTING
   TITLEONE  RANCHO VENENCIA pm2.5
   MODELOPT  NOCALM  URBAN  CONC
   AVERTIME  24
   POLLUTID  pm10
   RUNORNOT  RUN
   EVENTFIL  EVENTEXP.INP
   ERRORFIL  ERRORS.OUT
CO FINISHED

SO STARTING
   LOCATION STACK1 VOLUME 0 0 0
**      VOLUME  Source  G/S     RELHT   INILATVOL       INIVERTVOL
**      Parameters:     0.2431  ----    ----    ----    ---
   SRCPARAM STACK1 .0882 5 118.35 1.4
   EMISFACT   stack1  HROFDY   8*0.0  8*1.0  8*0.0
   SRCGROUP ALL
SO FINISHED

RE STARTING
   GRIDPOLR POL1 STA
                ORIG     0.0     0.0
                DIST  25 50 100 200 300 400 800 1000
                GDIR     36     10.0     10.0
   GRIDPOLR POL1 END
RE FINISHED
**      ELEV    90      5       10.00   15.00   20      25

ME STARTING
   INPUTFIL  norco.ASC
```

```
   ANEMHGHT  20 FEET

   SURFDATA  54167  1981  NORCO

   UAIRDATA  99999  1981  NORCO

**   DAYRANGE  1-10

ME FINISHED


OU STARTING

   RECTABLE  ALLAVE  fourth

OU FINISHED


 *** Message Summary For ISC3 Model Setup ***

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

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


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


   ********   WARNING MESSAGES   ********
OU W197    40 OUTQA :Post-97 PM10 without MAXIFILE is incompatible with EVENTFIL

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

 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA pm2.5
                          ***         11/30/09
                                      ***
                         ***         12:57:25
**MODELOPTs:
                                     PAGE   1
CONC                     URBAN FLAT                                        NOCALM


                                              ***     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 User-Specified Options:
          1. Final Plume Rise.
          2. Stack-tip Downwash.
          3. Buoyancy-induced Dispersion.
          4. Not Use Calms Processing Routine.
          5. Not Use Missing Data Processing Routine.
          6. Default Wind Profile Exponents.
          7. Default Vertical Potential Temperature Gradients.

**Model Assumes Receptors on FLAT Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates  1 Short Term Average(s) of:  24-HR

**This Run Includes:     1 Source(s);      1 Source Group(s); and     288
Receptor(s)

**The Model Assumes A Pollutant Type of:  PM10

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

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)

**Misc. Inputs:  Anem. Hgt. (m) =     6.10 ;    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:          valpm25.inp

**Output Print File:             valpm25.out

**Detailed Error/Message File:   ERRORS.OUT

 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA pm2.5
                          ***         11/30/09
                                      ***
                        ***         12:57:25
**MODELOPTs:
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CONC                     URBAN FLAT                                      NOCALM



                                                  *** 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
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

- - - - - - - - - - - - - - - - - - - -

STACK1 0 0.88200E-01 0.0 0.0 0.0 5.00 118.35
1.40 HROFDY

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA pm2.5 *** 11/30/09
***
*** 12:57:25
**MODELOPTs:
PAGE 3
CONC URBAN FLAT NOCALM

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

ALL STACK1 ,

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA pm2.5 *** 11/30/09
***
*** 12:57:25
**MODELOPTs:
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* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = STACK1 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA pm2.5 *** 11/30/09
***
*** 12:57:25
**MODELOPTs:
PAGE 5
CONC URBAN FLAT NOCALM

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

*** ORIGIN FOR POLAR NETWORK ***
X-ORIG = 0.00 ; Y-ORIG = 0.00 (METERS)

*** DISTANCE RANGES OF NETWORK ***
(METERS)

25.0, 50.0, 100.0, 200.0, 300.0, 400.0, 800.0, 1000.0,

*** DIRECTION RADIALS OF NETWORK ***
(DEGREES)

10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0, 80.0, 90.0, 100.0,
110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0, 180.0, 190.0, 200.0,
210.0, 220.0, 230.0, 240.0, 250.0, 260.0, 270.0, 280.0, 290.0, 300.0,
310.0, 320.0, 330.0, 340.0, 350.0, 360.0,

**MODELOPTs:
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	4.3	24.6	-229.45
STACK1	8.7	49.2	-204.45
STACK1	17.4	98.5	-154.45
STACK1	34.7	197.0	-54.45
STACK1	8.6	23.5	-229.45
STACK1	17.1	47.0	-204.45
STACK1	34.2	94.0	-154.45
STACK1	68.4	187.9	-54.45
STACK1	12.5	21.7	-229.45
STACK1	25.0	43.3	

-204.45	STACK1	50.0	86.6
-154.45	STACK1	100.0	173.2
-54.45	STACK1	16.1	19.2
-229.45	STACK1	32.1	38.3
-204.45	STACK1	64.3	76.6
-154.45	STACK1	128.6	153.2
-54.45	STACK1	19.2	16.1
-229.45	STACK1	38.3	32.1
-204.45	STACK1	76.6	64.3
-154.45	STACK1	153.2	128.6
-54.45	STACK1	21.7	12.5
-229.45	STACK1	43.3	25.0
-204.45	STACK1	86.6	50.0
-154.45	STACK1	173.2	100.0
-54.45	STACK1	23.5	8.6
-229.45	STACK1	47.0	17.1
-204.45	STACK1	94.0	34.2
-154.45	STACK1	187.9	68.4
-54.45	STACK1	24.6	4.3
-229.45	STACK1	49.2	8.7
-204.45	STACK1	98.5	17.4
-154.45	STACK1	197.0	34.7
-54.45	STACK1	25.0	0.0
-229.45	STACK1	50.0	0.0
-204.45	STACK1	100.0	0.0
-154.45	STACK1	200.0	0.0
-54.45	STACK1	24.6	-4.3
-229.45	STACK1	49.2	-8.7
-204.45	STACK1	98.5	-17.4
-154.45	STACK1	197.0	-34.7
-54.45			

**MODELOPTs:
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	23.5	-8.6	-229.45
STACK1	47.0	-17.1	-204.45
STACK1	94.0	-34.2	-154.45
STACK1	187.9	-68.4	-54.45
STACK1	21.7	-12.5	-229.45
STACK1	43.3	-25.0	-204.45
STACK1	86.6	-50.0	-154.45
STACK1	173.2	-100.0	-54.45
STACK1	19.2	-16.1	-229.45
STACK1	38.3	-32.1	-204.45
STACK1	76.6	-64.3	-154.45
STACK1	153.2	-128.6	-54.45
STACK1	16.1	-19.2	-229.45
STACK1	32.1	-38.3	-204.45
STACK1	64.3	-76.6	-154.45
STACK1	128.6	-153.2	-54.45
STACK1	12.5	-21.7	-229.45
STACK1	25.0	-43.3	-204.45
STACK1	50.0	-86.6	-154.45
STACK1	100.0	-173.2	-54.45
STACK1	8.6	-23.5	-229.45
STACK1	17.1	-47.0	

-204.45	STACK1	34.2	-94.0
-154.45	STACK1	68.4	-187.9
-54.45	STACK1	4.3	-24.6
-229.45	STACK1	8.7	-49.2
-204.45	STACK1	17.4	-98.5
-154.45	STACK1	34.7	-197.0
-54.45	STACK1	0.0	-25.0
-229.45	STACK1	0.0	-50.0
-204.45	STACK1	0.0	-100.0
-154.45	STACK1	0.0	-200.0
-54.45	STACK1	-4.3	-24.6
-229.45	STACK1	-8.7	-49.2
-204.45	STACK1	-17.4	-98.5
-154.45	STACK1	-34.7	-197.0
-54.45	STACK1	-8.6	-23.5
-229.45	STACK1	-17.1	-47.0
-204.45	STACK1	-34.2	-94.0
-154.45	STACK1	-68.4	-187.9
-54.45			

**MODELOPTs:
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	-12.5	-21.7	-229.45
STACK1	-25.0	-43.3	-204.45

-154.45	STACK1	-50.0	-86.6
-54.45	STACK1	-100.0	-173.2
-229.45	STACK1	-16.1	-19.2
-204.45	STACK1	-32.1	-38.3
-154.45	STACK1	-64.3	-76.6
-54.45	STACK1	-128.6	-153.2
-229.45	STACK1	-19.2	-16.1
-204.45	STACK1	-38.3	-32.1
-154.45	STACK1	-76.6	-64.3
-54.45	STACK1	-153.2	-128.6
-229.45	STACK1	-21.7	-12.5
-204.45	STACK1	-43.3	-25.0
-154.45	STACK1	-86.6	-50.0
-54.45	STACK1	-173.2	-100.0
-229.45	STACK1	-23.5	-8.6
-204.45	STACK1	-47.0	-17.1
-154.45	STACK1	-94.0	-34.2
-54.45	STACK1	-187.9	-68.4
-229.45	STACK1	-24.6	-4.3
-204.45	STACK1	-49.2	-8.7
-154.45	STACK1	-98.5	-17.4
-54.45	STACK1	-197.0	-34.7
-229.45	STACK1	-25.0	0.0
-204.45	STACK1	-50.0	0.0
-154.45	STACK1	-100.0	0.0
-54.45	STACK1	-200.0	0.0
-229.45	STACK1	-24.6	4.3
-204.45	STACK1	-49.2	8.7
-154.45	STACK1	-98.5	17.4
-54.45	STACK1	-197.0	34.7
-229.45	STACK1	-23.5	8.6
	STACK1	-47.0	17.1

-204.45

STACK1 -94.0 34.2

-154.45

STACK1 -187.9 68.4

-54.45

STACK1 -21.7 12.5

-229.45

STACK1 -43.3 25.0

-204.45

STACK1 -86.6 50.0

-154.45

STACK1 -173.2 100.0

-54.45

**MODELOPTs:

CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *

LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	-19.2	16.1	-229.45
STACK1	-38.3	32.1	-204.45
STACK1	-76.6	64.3	-154.45
STACK1	-153.2	128.6	-54.45
STACK1	-16.1	19.2	-229.45
STACK1	-32.1	38.3	-204.45
STACK1	-64.3	76.6	-154.45
STACK1	-128.6	153.2	-54.45
STACK1	-12.5	21.7	-229.45
STACK1	-25.0	43.3	-204.45
STACK1	-50.0	86.6	-154.45
STACK1	-100.0	173.2	-54.45
STACK1	-8.6	23.5	-229.45
STACK1	-17.1	47.0	-204.45

```
                              STACK1               -34.2          94.0
-154.45
                              STACK1               -68.4         187.9
-54.45
                              STACK1                -4.3          24.6
-229.45
                              STACK1                -8.7          49.2
-204.45
                              STACK1               -17.4          98.5
-154.45
                              STACK1               -34.7         197.0
-54.45
                              STACK1                 0.0          25.0
-229.45
                              STACK1                 0.0          50.0
-204.45
                              STACK1                 0.0         100.0
-154.45
                              STACK1                 0.0         200.0
-54.45
 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA pm2.5
                        ***        11/30/09
                                   ***
                       ***        12:57:25
**MODELOPTs:
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                                           *** 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

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA pm2.5
*** 11/30/09
*** ***
*** 12:57:25
**MODELOPTs:
PAGE 11
CONC URBAN FLAT NOCALM

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

FILE: norco.ASC

FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)

SURFACE STATION NO.: 54167 NAME: NORCO
UPPER AIR STATION NO.: 99999 NAME: NORCO

YEAR: 1981
YEAR: 1981

FLOW	SPEED	TEMP	STAB	MIXING HEIGHT (M)	USTAR	M-O LENGTH	Z-0	IPCODE	PRATE

YR MN DY HR	VECTOR	(M/S)	(K)	CLASS	RURAL	URBAN	(M/S)	(M)	(M) (mm/HR)
81 01 01 01	202.3	1.00	284.3	7	522.6	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 02	192.4	0.00	284.3	7	507.0	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 03	197.5	0.00	283.1	7	491.4	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 04	211.0	0.00	283.1	7	475.8	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 05	174.0	1.00	282.6	7	460.3	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 06	207.0	1.00	283.1	7	444.7	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 07	207.0	0.00	285.4	6	1.4	170.7	0.0000	0.0	0.0000 0 0.00
81 01 01 08	202.1	0.00	287.6	5	47.0	192.0	0.0000	0.0	0.0000 0 0.00
81 01 01 09	231.5	1.00	289.8	4	92.5	213.3	0.0000	0.0	0.0000 0 0.00
81 01 01 10	9.1	1.00	291.5	3	138.0	234.7	0.0000	0.0	0.0000 0 0.00
81 01 01 11	359.1	1.34	294.3	2	183.5	256.0	0.0000	0.0	0.0000 0 0.00
81 01 01 12	350.6	0.00	297.6	2	229.0	277.3	0.0000	0.0	0.0000 0 0.00
81 01 01 13	19.7	2.24	298.7	3	274.5	298.7	0.0000	0.0	0.0000 0 0.00
81 01 01 14	56.7	2.68	299.8	3	320.0	320.0	0.0000	0.0	0.0000 0 0.00
81 01 01 15	89.8	2.68	299.3	3	320.0	320.0	0.0000	0.0	0.0000 0 0.00
81 01 01 16	98.2	3.13	298.7	4	320.0	320.0	0.0000	0.0	0.0000 0 0.00
81 01 01 17	87.6	1.79	295.4	5	325.6	318.5	0.0000	0.0	0.0000 0 0.00
81 01 01 18	75.1	1.00	291.5	6	357.2	310.3	0.0000	0.0	0.0000 0 0.00
81 01 01 19	110.5	1.00	289.8	7	388.8	302.1	0.0000	0.0	0.0000 0 0.00
81 01 01 20	235.7	1.00	287.0	7	420.4	293.9	0.0000	0.0	0.0000 0 0.00
81 01 01 21	246.1	1.00	286.5	7	452.0	285.7	0.0000	0.0	0.0000 0 0.00
81 01 01 22	204.5	1.00	287.0	7	483.5	277.4	0.0000	0.0	0.0000 0 0.00
81 01 01 23	203.2	0.00	285.9	7	515.1	269.2	0.0000	0.0	0.0000 0 0.00
81 01 01 24	202.2	0.00	285.4	7	546.7	261.0	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 02035 *** *** RANCHO VENENCIA pm2.5
*** 11/30/09
*** ***
*** 12:57:25

**MODELOPTs:

CONC URBAN FLAT NOCALM

*** THE AVERAGE HIGH-4TH-HIGH 24-HR AVERAGE CONCENTRATION VALUES OVER 1 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STACK1 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

DIRECTION (DEGREES)	DISTANCE (METERS) 25.00	50.00	100.00	200.00	300.00	400.00	800.00	1000.00
10.00	0.00000	0.00000	0.00000	0.00000	0.27963	0.21144	0.06690	0.04985
20.00	0.00000	0.00000	0.00000	0.00000	0.32455	0.24052	0.06478	0.04201
30.00	0.00000	0.00000	0.00000	0.00000	0.34708	0.27032	0.07796	0.04932
40.00	0.00000	0.00000	0.00000	0.00000	0.40864	0.30857	0.08894	0.06076
50.00	0.00000	0.00000	0.00000	0.00000	0.46115	0.33906	0.10377	0.06933
60.00	0.00000	0.00000	0.00000	0.00000	0.54773	0.37968	0.11341	0.07799
70.00	0.00000	0.00000	0.00000	0.00000	0.60756	0.40868	0.13555	0.09375
80.00	0.00000	0.00000	0.00000	0.00000	0.63262	0.43583	0.15417	0.11611
90.00	0.00000	0.00000	0.00000	0.00000	0.65690	0.44032	0.15842	0.11712
100.00	0.00000	0.00000	0.00000	0.00000	0.55720	0.41063	0.14958	0.10266
110.00	0.00000	0.00000	0.00000	0.00000	0.56880	0.40311	0.11935	0.07963
120.00	0.00000	0.00000	0.00000	0.00000	0.51525	0.37117	0.10309	0.07209
130.00	0.00000	0.00000	0.00000	0.00000	0.51468	0.40639	0.11322	0.07006
140.00	0.00000	0.00000	0.00000	0.00000	0.50015	0.39098	0.10092	0.06577
150.00	0.00000	0.00000	0.00000	0.00000	0.54511	0.39580	0.12740	0.08648
160.00	0.00000	0.00000	0.00000	0.00000	0.56001	0.36923	0.13921	0.09492
170.00	0.00000	0.00000	0.00000	0.00000	0.56372	0.37410	0.13247	0.08958
180.00	0.00000	0.00000	0.00000	0.00000	0.54531	0.40863	0.11615	0.08101
190.00	0.00000	0.00000	0.00000	0.00000	0.47158	0.39477	0.09668	0.06576
200.00	0.00000	0.00000	0.00000	0.00000	0.39206	0.33255	0.08504	0.06285
210.00	0.00000	0.00000	0.00000	0.00000	0.43881	0.37767	0.10313	0.07230
220.00	0.00000	0.00000	0.00000	0.00000	0.42087

```
0.36383        0.09603        0.06602
     230.00 |        0.00000        0.00000        0.00000        0.00000        0.39735
0.26721        0.09838        0.06423
     240.00 |        0.00000        0.00000        0.00000        0.00000        0.33835
0.24448        0.07798        0.04579
     250.00 |        0.00000        0.00000        0.00000        0.00000        0.32714
0.25126        0.06535        0.04249
     260.00 |        0.00000        0.00000        0.00000        0.00000        0.27560
0.20412        0.06642        0.04750
     270.00 |        0.00000        0.00000        0.00000        0.00000        0.30784
0.20208        0.05463        0.04069
     280.00 |        0.00000        0.00000        0.00000        0.00000        0.28386
0.19695        0.05586        0.04009
     290.00 |        0.00000        0.00000        0.00000        0.00000        0.29223
0.19749        0.06349        0.04189
     300.00 |        0.00000        0.00000        0.00000        0.00000        0.28518
0.20638        0.06205        0.04275
     310.00 |        0.00000        0.00000        0.00000        0.00000        0.29522
0.19625        0.06453        0.04330
     320.00 |        0.00000        0.00000        0.00000        0.00000        0.29152
0.19235        0.06316        0.04233
     330.00 |        0.00000        0.00000        0.00000        0.00000        0.26178
0.17918        0.06234        0.04587
     340.00 |        0.00000        0.00000        0.00000        0.00000        0.28472
0.20889        0.05754        0.04189
     350.00 |        0.00000        0.00000        0.00000        0.00000        0.27859
0.21527        0.05707        0.04190
     360.00 |        0.00000        0.00000        0.00000        0.00000        0.27646
0.20101        0.06104        0.04364
 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA pm2.5
                        ***        11/30/09
                                   ***
                       ***        12:57:25
**MODELOPTs:
                                  PAGE  13
CONC                        URBAN FLAT                                      NOCALM


                              *** THE SUMMARY OF MAXIMUM AVERAGE HIGH-4TH-HIGH 24-HR
RESULTS OVER   1 YEARS ***


                                        ** CONC OF PM10     IN MICROGRAMS/M**3
                  **


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

ALL       1ST HIGHEST VALUE IS       0.65690 AT (     300.00,        0.00,      0.00,
     0.00)  GP   POL1
          2ND HIGHEST VALUE IS       0.63262 AT (     295.44,       52.09,      0.00,
     0.00)  GP   POL1
          3RD HIGHEST VALUE IS       0.60756 AT (     281.91,      102.61,      0.00,
     0.00)  GP   POL1
          4TH HIGHEST VALUE IS       0.56880 AT (     281.91,     -102.61,      0.00,
     0.00)  GP   POL1
          5TH HIGHEST VALUE IS       0.56372 AT (      52.09,     -295.44,      0.00,
     0.00)  GP   POL1
          6TH HIGHEST VALUE IS       0.56001 AT (     102.61,     -281.91,      0.00,
```

```
     0.00)  GP   POL1
         7TH HIGHEST VALUE IS       0.55720 AT (     295.44,      -52.09,      0.00,
     0.00)  GP   POL1
         8TH HIGHEST VALUE IS       0.54773 AT (     259.81,      150.00,      0.00,
     0.00)  GP   POL1
         9TH HIGHEST VALUE IS       0.54531 AT (       0.00,     -300.00,      0.00,
     0.00)  GP   POL1
        10TH HIGHEST VALUE IS       0.54511 AT (     150.00,     -259.81,      0.00,
     0.00)  GP   POL1


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
                      BD = BOUNDARY
  *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA pm2.5
                          ***        11/30/09
                                     ***
                         ***        12:57:25
**MODELOPTs:
                                    PAGE  14
CONC                      URBAN FLAT                                        NOCALM


*** 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          762 Informational Message(s)

A Total of          762 Calm Hours Identified


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


   ********   WARNING MESSAGES   ********
OU W197    40 OUTQA :Post-97 PM10 without MAXIFILE is incompatible with EVENTFIL

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

```
CO STARTING
   TITLEONE  RANCHO VENENCIA NOX
   MODELOPT  NOCALM  URBAN  CONC
   AVERTIME  1 8
   POLLUTID  other
   RUNORNOT  RUN
   EVENTFIL  EVENTEXP.INP
   ERRORFIL  ERRORS.OUT
CO FINISHED

SO STARTING
   LOCATION STACK1 VOLUME 0 0 0
** VOLUME       Source  G/S     RELHT   INILATVOL       INIVERTVOL
**      Parameters:     0.5124  ----    ----    ----    ---
   SRCPARAM STACK1 1.5372 5.00 118.35 1.4
   EMISFACT   stack1  HROFDY   8*0.0  8*1.0  8*0.0
   SRCGROUP ALL
SO FINISHED

RE STARTING
   GRIDPOLR POL1 STA
                ORIG     0.0     0.0
                DIST  25 50 100 200 300 400 800 1000
                GDIR     36     10.0     10.0
   GRIDPOLR POL1 END
RE FINISHED
**      ELEV    90      5       10.00   15.00   20      25

ME STARTING
   INPUTFIL  norco.ASC
```

```
   ANEMHGHT  20 FEET

   SURFDATA  54167  1981  NORCO

   UAIRDATA  99999  1981  NORCO

**   DAYRANGE  1-10

ME FINISHED


OU STARTING

   RECTABLE  ALLAVE  FIRST

OU FINISHED

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

 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA NOX
                        ***        11/30/09
                                   ***
                       ***        11:06:27
**MODELOPTs:
                                  PAGE   1
CONC                        URBAN FLAT                                     NOCALM


                                                    ***     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 User-Specified Options:
           1. Final Plume Rise.
           2. Stack-tip Downwash.
           3. Buoyancy-induced Dispersion.
           4. Not Use Calms Processing Routine.
           5. Not Use Missing Data Processing Routine.
           6. Default Wind Profile Exponents.
           7. Default Vertical Potential Temperature Gradients.

**Model Assumes Receptors on FLAT Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates  2 Short Term Average(s) of:   1-HR   8-HR
```

**This Run Includes: 1 Source(s); 1 Source Group(s); and 288 Receptor(s)

**The Model Assumes A Pollutant Type of: OTHER

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

**Output Options Selected:
Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)

**Misc. Inputs: Anem. Hgt. (m) = 6.10 ; 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: valnox.inp

**Output Print File: valnox.out

**Detailed Error/Message File: ERRORS.OUT

**File Created for Event Model: EVENTEXP.INP

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX
*** 11/30/09
***
*** 11:06:27
**MODELOPTs:
PAGE 2
CONC URBAN FLAT NOCALM

*** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	EMISSION RATE SCALAR VARY BY
STACK1	0	0.15372E+01	0.0	0.0	0.0	5.00	118.35	1.40	HROFDY

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX
*** 11/30/09
***
*** 11:06:27
**MODELOPTs:
PAGE 3
CONC URBAN FLAT NOCALM

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

ALL STACK1 ,

CONC URBAN FLAT NOCALM

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00
5	.00000E+00	6	.00000E+00				
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01
11	.10000E+01	12	.10000E+01				
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01
17	.00000E+00	18	.00000E+00				
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00
23	.00000E+00	24	.00000E+00				

SOURCE ID = STACK1 ; SOURCE TYPE = VOLUME :

*** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX
*** 11/30/09
***
*** 11:06:27
**MODELOPTs:

CONC URBAN FLAT NOCALM

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

*** ORIGIN FOR POLAR NETWORK ***
X-ORIG = 0.00 ; Y-ORIG = 0.00 (METERS)

*** DISTANCE RANGES OF NETWORK ***
(METERS)

25.0, 50.0, 100.0, 200.0, 300.0, 400.0, 800.0, 1000.0,

*** DIRECTION RADIALS OF NETWORK ***
(DEGREES)

10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0,
80.0, 90.0, 100.0,
110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0,
180.0, 190.0, 200.0,
210.0, 220.0, 230.0, 240.0, 250.0, 260.0, 270.0,
280.0, 290.0, 300.0,
310.0, 320.0, 330.0, 340.0, 350.0, 360.0,

*** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX
*** 11/30/09
***
*** 11:06:27

**MODELOPTs:

CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	4.3	24.6	-229.45
STACK1	8.7	49.2	-204.45
STACK1	17.4	98.5	-154.45
STACK1	34.7	197.0	-54.45
STACK1	8.6	23.5	-229.45
STACK1	17.1	47.0	-204.45
STACK1	34.2	94.0	-154.45
STACK1	68.4	187.9	-54.45
STACK1	12.5	21.7	-229.45
STACK1	25.0	43.3	-204.45
STACK1	50.0	86.6	-154.45
STACK1	100.0	173.2	-54.45
STACK1	16.1	19.2	-229.45
STACK1	32.1	38.3	-204.45
STACK1	64.3	76.6	-154.45
STACK1	128.6	153.2	-54.45
STACK1	19.2	16.1	-229.45

	STACK1	38.3	32.1
-204.45			
	STACK1	76.6	64.3
-154.45			
	STACK1	153.2	128.6
-54.45			
	STACK1	21.7	12.5
-229.45			
	STACK1	43.3	25.0
-204.45			
	STACK1	86.6	50.0
-154.45			
	STACK1	173.2	100.0
-54.45			
	STACK1	23.5	8.6
-229.45			
	STACK1	47.0	17.1
-204.45			
	STACK1	94.0	34.2
-154.45			
	STACK1	187.9	68.4
-54.45			
	STACK1	24.6	4.3
-229.45			
	STACK1	49.2	8.7
-204.45			
	STACK1	98.5	17.4
-154.45			
	STACK1	197.0	34.7
-54.45			
	STACK1	25.0	0.0
-229.45			
	STACK1	50.0	0.0
-204.45			
	STACK1	100.0	0.0
-154.45			
	STACK1	200.0	0.0
-54.45			
	STACK1	24.6	-4.3
-229.45			
	STACK1	49.2	-8.7
-204.45			
	STACK1	98.5	-17.4
-154.45			
	STACK1	197.0	-34.7
-54.45			

**MODELOPTs:
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

	SOURCE	- - RECEPTOR LOCATION - -	
DISTANCE			

ID	XR (METERS)	YR (METERS)	(METERS)
STACK1	23.5	-8.6	-229.45
STACK1	47.0	-17.1	-204.45
STACK1	94.0	-34.2	-154.45
STACK1	187.9	-68.4	-54.45
STACK1	21.7	-12.5	-229.45
STACK1	43.3	-25.0	-204.45
STACK1	86.6	-50.0	-154.45
STACK1	173.2	-100.0	-54.45
STACK1	19.2	-16.1	-229.45
STACK1	38.3	-32.1	-204.45
STACK1	76.6	-64.3	-154.45
STACK1	153.2	-128.6	-54.45
STACK1	16.1	-19.2	-229.45
STACK1	32.1	-38.3	-204.45
STACK1	64.3	-76.6	-154.45
STACK1	128.6	-153.2	-54.45
STACK1	12.5	-21.7	-229.45
STACK1	25.0	-43.3	-204.45
STACK1	50.0	-86.6	-154.45
STACK1	100.0	-173.2	-54.45
STACK1	8.6	-23.5	-229.45
STACK1	17.1	-47.0	-204.45
STACK1	34.2	-94.0	-154.45
STACK1	68.4	-187.9	-54.45
STACK1	4.3	-24.6	-229.45
STACK1	8.7	-49.2	-204.45
STACK1	17.4	-98.5	-154.45
STACK1	34.7	-197.0	-54.45
STACK1	0.0	-25.0	-229.45

	STACK1	0.0	-50.0
-204.45			
	STACK1	0.0	-100.0
-154.45			
	STACK1	0.0	-200.0
-54.45			
	STACK1	-4.3	-24.6
-229.45			
	STACK1	-8.7	-49.2
-204.45			
	STACK1	-17.4	-98.5
-154.45			
	STACK1	-34.7	-197.0
-54.45			
	STACK1	-8.6	-23.5
-229.45			
	STACK1	-17.1	-47.0
-204.45			
	STACK1	-34.2	-94.0
-154.45			
	STACK1	-68.4	-187.9
-54.45			

*** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX
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*** 11:06:27
**MODELOPTs:
PAGE 8
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	-12.5	-21.7	-229.45
STACK1	-25.0	-43.3	-204.45
STACK1	-50.0	-86.6	-154.45
STACK1	-100.0	-173.2	-54.45
STACK1	-16.1	-19.2	-229.45
STACK1	-32.1	-38.3	-204.45
STACK1	-64.3	-76.6	-154.45
STACK1	-128.6	-153.2	-54.45
STACK1	-19.2	-16.1	-229.45
STACK1	-38.3	-32.1	

-204.45	STACK1	-76.6	-64.3
-154.45	STACK1	-153.2	-128.6
-54.45	STACK1	-21.7	-12.5
-229.45	STACK1	-43.3	-25.0
-204.45	STACK1	-86.6	-50.0
-154.45	STACK1	-173.2	-100.0
-54.45	STACK1	-23.5	-8.6
-229.45	STACK1	-47.0	-17.1
-204.45	STACK1	-94.0	-34.2
-154.45	STACK1	-187.9	-68.4
-54.45	STACK1	-24.6	-4.3
-229.45	STACK1	-49.2	-8.7
-204.45	STACK1	-98.5	-17.4
-154.45	STACK1	-197.0	-34.7
-54.45	STACK1	-25.0	0.0
-229.45	STACK1	-50.0	0.0
-204.45	STACK1	-100.0	0.0
-154.45	STACK1	-200.0	0.0
-54.45	STACK1	-24.6	4.3
-229.45	STACK1	-49.2	8.7
-204.45	STACK1	-98.5	17.4
-154.45	STACK1	-197.0	34.7
-54.45	STACK1	-23.5	8.6
-229.45	STACK1	-47.0	17.1
-204.45	STACK1	-94.0	34.2
-154.45	STACK1	-187.9	68.4
-54.45	STACK1	-21.7	12.5
-229.45	STACK1	-43.3	25.0
-204.45	STACK1	-86.6	50.0
-154.45	STACK1	-173.2	100.0
-54.45			

**MODELOPTs:
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	-19.2	16.1	-229.45
STACK1	-38.3	32.1	-204.45
STACK1	-76.6	64.3	-154.45
STACK1	-153.2	128.6	-54.45
STACK1	-16.1	19.2	-229.45
STACK1	-32.1	38.3	-204.45
STACK1	-64.3	76.6	-154.45
STACK1	-128.6	153.2	-54.45
STACK1	-12.5	21.7	-229.45
STACK1	-25.0	43.3	-204.45
STACK1	-50.0	86.6	-154.45
STACK1	-100.0	173.2	-54.45
STACK1	-8.6	23.5	-229.45
STACK1	-17.1	47.0	-204.45
STACK1	-34.2	94.0	-154.45
STACK1	-68.4	187.9	-54.45
STACK1	-4.3	24.6	-229.45
STACK1	-8.7	49.2	-204.45
STACK1	-17.4	98.5	-154.45
STACK1	-34.7	197.0	-54.45
STACK1	0.0	25.0	-229.45
STACK1	0.0	50.0	

-204.45
STACK1 0.0 100.0
-154.45
STACK1 0.0 200.0
-54.45
 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX *** 11/30/09 ***
*** 11:06:27
**MODELOPTs:
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CONC URBAN FLAT NOCALM

*** 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

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX
*** 11/30/09
*** 11:06:27
**MODELOPTs:
PAGE 11
CONC URBAN FLAT NOCALM

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

FILE: norco.ASC

FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)

SURFACE STATION NO.: 54167 NAME: NORCO
UPPER AIR STATION NO.: 99999 NAME: NORCO

YEAR: 1981
YEAR: 1981

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M) RURAL	MIXING HEIGHT (M) URBAN	USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
81	01	01	01	202.3	1.00	284.3	7	522.6	170.0	0.0000	0.0	0.0000	0	0.00
81	01	01	02	192.4	0.00	284.3	7	507.0	170.0	0.0000	0.0	0.0000	0	0.00
81	01	01	03	197.5	0.00	283.1	7	491.4	170.0	0.0000	0.0	0.0000	0	0.00
81	01	01	04	211.0	0.00	283.1	7	475.8	170.0	0.0000	0.0	0.0000	0	0.00
81	01	01	05	174.0	1.00	282.6	7	460.3	170.0	0.0000	0.0	0.0000	0	0.00

81 01 01 06	207.0	1.00	283.1	7	444.7	170.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 07	207.0	0.00	285.4	6	1.4	170.7	0.0000	0.0	0.0000
0 0.00									
81 01 01 08	202.1	0.00	287.6	5	47.0	192.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 09	231.5	1.00	289.8	4	92.5	213.3	0.0000	0.0	0.0000
0 0.00									
81 01 01 10	9.1	1.00	291.5	3	138.0	234.7	0.0000	0.0	0.0000
0 0.00									
81 01 01 11	359.1	1.34	294.3	2	183.5	256.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 12	350.6	0.00	297.6	2	229.0	277.3	0.0000	0.0	0.0000
0 0.00									
81 01 01 13	19.7	2.24	298.7	3	274.5	298.7	0.0000	0.0	0.0000
0 0.00									
81 01 01 14	56.7	2.68	299.8	3	320.0	320.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 15	89.8	2.68	299.3	3	320.0	320.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 16	98.2	3.13	298.7	4	320.0	320.0	0.0000	0.0	0.0000
0 0.00									
81 01 01 17	87.6	1.79	295.4	5	325.6	318.5	0.0000	0.0	0.0000
0 0.00									
81 01 01 18	75.1	1.00	291.5	6	357.2	310.3	0.0000	0.0	0.0000
0 0.00									
81 01 01 19	110.5	1.00	289.8	7	388.8	302.1	0.0000	0.0	0.0000
0 0.00									
81 01 01 20	235.7	1.00	287.0	7	420.4	293.9	0.0000	0.0	0.0000
0 0.00									
81 01 01 21	246.1	1.00	286.5	7	452.0	285.7	0.0000	0.0	0.0000
0 0.00									
81 01 01 22	204.5	1.00	287.0	7	483.5	277.4	0.0000	0.0	0.0000
0 0.00									
81 01 01 23	203.2	0.00	285.9	7	515.1	269.2	0.0000	0.0	0.0000
0 0.00									
81 01 01 24	202.2	0.00	285.4	7	546.7	261.0	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 02035 *** *** RANCHO VENENCIA NOX
*** 11/30/09
***
*** 11:06:27
**MODELOPTs:
PAGE 12
CONC URBAN FLAT NOCALM

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STACK1 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR
***

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

DIRECTION | DISTANCE (METERS)

(DEGREES)	25.00	50.00	100.00	200.00	300.00
10.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.41560 (81010809)
20.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	75.80982 (81012709)
30.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43252 (81012813)
40.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.40202 (81111209)
50.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.30706 (81120609)
60.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.38030 (81040110)
70.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43337 (81113009)
80.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43681 (81051409)
90.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43885 (81121509)
100.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43941 (81102711)
110.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43717 (81042009)
120.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.41449 (81123110)
130.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.39630 (81020509)
140.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43221 (81042309)
150.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.42958 (81102714)
160.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43936 (81122009)
170.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43515 (81120209)
180.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43781 (81111710)
190.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43857 (81012810)
200.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43515 (81022809)
210.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43856 (81021010)
220.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43878 (81112812)
230.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.36855 (81010109)
240.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.38942 (81040109)
250.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43946 (81042510)
260.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43681 (81012509)
270.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.10520 (81052409)
280.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.43901 (81031609)
290.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	76.41278 (81011509)

300.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000) 76.36665 (81013109)
310.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000) 75.64999 (81042509)
320.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000) 75.13393 (81012710)
330.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000) 76.40979 (81120809)
340.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000) 76.43220 (81111509)
350.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000) 76.42849 (81013009)
360.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000) 76.43944 (81111309)

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX
*** 11/30/09
***
*** 11:06:27

**MODELOPTs:

CONC URBAN FLAT NOCALM

*** THE 1ST HIGHEST 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STACK1 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

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

DIRECTION (DEGREES)	DISTANCE (METERS) 400.00	800.00	1000.00
10.0	54.79015 (81010809)	23.33027 (81010809)	17.49774 (81010809)
20.0	54.02827 (81012709)	22.39779 (81012709)	16.57331 (81012709)
30.0	54.81145 (81012813)	23.35669 (81012813)	17.52410 (81012813)
40.0	54.77301 (81111209)	23.30904 (81111209)	17.47657 (81111209)
50.0	54.65336 (81120609)	23.26257 (81120609)	17.88543 (81120609)
60.0	54.74564 (81040110)	23.27516 (81040110)	17.44278 (81040110)
70.0	54.81255 (81113009)	23.35804 (81113009)	17.52545 (81113009)
80.0	54.81690 (81051409)	23.36343 (81051409)	17.53084 (81051409)
90.0	54.81947 (81121509)	23.36665 (81121509)	17.53659 (81121509)
100.0	54.82014 (81102711)	23.36746 (81102711)	17.78894 (81012009)
110.0	54.81734 (81042009)	23.36399 (81042009)	17.53139 (81042009)
120.0	54.78875 (81123110)	23.32854 (81123110)	17.49601 (81123110)
130.0	54.76582 (81020509)	23.30014 (81020509)	17.46769 (81020509)
140.0	54.81107 (81042309)	23.35622 (81042309)	17.52364 (81042309)
150.0	54.80777 (81102714)	23.35212 (81102714)	17.51954 (81102714)
160.0	54.82010 (81122009)	23.36741 (81122009)	17.53480 (81122009)
170.0	54.81480 (81120209)	23.36127 (81120209)	17.54235 (81120209)
180.0	54.81814 (81111710)	23.36497 (81111710)	17.53237 (81111710)
190.0	54.81910 (81012810)	23.36616 (81012810)	17.53356 (81012810)
200.0	54.81480 (81022809)	23.36083 (81022809)	17.52824 (81022809)
210.0	54.81910 (81021010)	23.36616 (81021010)	17.53356 (81021010)
220.0	54.81935 (81112812)	23.36648 (81112812)	17.53387 (81112812)
230.0	54.73083 (81010109)	23.26399 (81010109)	17.51772 (81010109)
240.0	54.75713 (81040109)	23.28938 (81040109)	17.45696 (81040109)
250.0	54.82022 (81042510)	23.36757 (81042510)	17.53496 (81042510)

260.0	54.81690 (81012509)	23.36343 (81012509)	17.53086 (81012509)
270.0	54.39930 (81052409)	22.84901 (81052409)	17.01914 (81052409)
280.0	54.81967 (81031609)	23.36687 (81031609)	17.57279 (81120909)
290.0	54.78660 (81011509)	23.32586 (81011509)	17.49395 (81011509)
300.0	54.72844 (81013109)	23.27304 (81120309)	17.63352 (81120309)
310.0	53.82786 (81042509)	22.15635 (81042509)	16.33593 (81042509)
320.0	53.18262 (81012710)	21.38983 (81012710)	15.58779 (81012710)
330.0	54.78283 (81120809)	23.32121 (81120809)	17.48870 (81120809)
340.0	54.81107 (81111509)	23.35622 (81111509)	17.52369 (81111509)
350.0	54.80641 (81013009)	23.35042 (81013009)	17.51784 (81013009)
360.0	54.82021 (81111309)	23.36754 (81111309)	17.53494 (81111309)

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX
*** 11/30/09
***
*** 11:06:27
**MODELOPTs:
PAGE 14
CONC URBAN FLAT NOCALM

*** THE 1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STACK1 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR
***

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

DIRECTION (DEGREES)	DISTANCE (METERS) 25.00	50.00	100.00	200.00	300.00
10.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	22.39010 (81020816)
20.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	19.96188 (81112616)
30.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	28.14958 (81012816)
40.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	29.68657 (81012816)
50.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	33.09954 (81012816)
60.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	31.25961 (81012816)
70.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	39.15427 (81041016)
80.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	42.84077 (81041016)
90.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	43.87173 (81041016)
100.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	38.97002 (81041916)
110.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	39.71080 (81041916)
120.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	41.80710 (81041916)
130.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)	44.45675 (81041916)
140.0	0.00000 (00000000)	0.00000 (00000000)	0.00000 (00000000)		

```
    0.00000 (00000000)     31.58803 (81123116)
    150.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     38.14229 (81102716)
    160.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     38.60480 (81102716)
    170.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     38.60793 (81032916)
    180.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     36.67186 (81032916)
    190.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     35.56734 (81112816)
    200.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     39.29877 (81112816)
    210.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     36.99990 (81112816)
    220.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     37.08471 (81112816)
    230.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     34.59949 (81112816)
    240.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     26.74093 (81112816)
    250.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     22.83628 (81112416)
    260.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     19.65109 (81012516)
    270.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     18.90068 (81012516)
    280.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     18.65153 (81120316)
    290.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     18.56289 (81120316)
    300.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     17.97581 (81120816)
    310.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     17.91705 (81122416)
    320.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     21.09727 (81120816)
    330.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     20.89270 (81120816)
    340.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     16.46091 (81102616)
    350.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     19.44988 (81020816)
    360.0 |      0.00000 (00000000)      0.00000 (00000000)      0.00000 (00000000)
    0.00000 (00000000)     21.34182 (81020816)
 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA NOX
                          ***         11/30/09
                                      ***
                         ***         11:06:27
**MODELOPTs:
                                    PAGE  15
CONC                     URBAN FLAT                                    NOCALM


                              *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL       ***
                                   INCLUDING SOURCE(S):      STACK1  ,

                                    *** NETWORK ID: POL1     ;  NETWORK TYPE: GRIDPOLR
***

                                        ** CONC OF OTHER    IN MICROGRAMS/M**3
                    **
```

DIRECTION (DEGREES)	DISTANCE (METERS) 400.00	800.00	1000.00
10.0	14.33998 (81020816)	5.20056 (81111316)	3.75610 (81111316)
20.0	15.29175 (81012816)	4.93335 (81020816)	3.46089 (81020816)
30.0	19.79579 (81012816)	6.30823 (81012816)	4.27854 (81012816)
40.0	22.20277 (81012816)	7.92487 (81012816)	5.57993 (81012816)
50.0	22.31109 (81012816)	7.68192 (81012816)	5.33990 (81012816)
60.0	21.49504 (81021116)	7.84670 (81100316)	5.63754 (81100316)
70.0	24.72756 (81041016)	8.58992 (81021116)	6.07759 (81021116)
80.0	28.87911 (81041016)	9.44107 (81041016)	6.67505 (81051416)
90.0	30.23753 (81041016)	11.30393 (81041016)	8.10158 (81041016)
100.0	28.31760 (81041916)	10.46363 (81041916)	7.50298 (81041916)
110.0	29.89569 (81041916)	11.37530 (81041916)	8.19921 (81041916)
120.0	30.20462 (81041916)	9.09447 (81041916)	5.98651 (81041916)
130.0	27.01586 (81041916)	6.47557 (81123116)	4.40006 (81052916)
140.0	25.17147 (81102716)	7.17095 (81102716)	4.77854 (81092916)
150.0	27.34266 (81102716)	9.45005 (81102716)	6.71021 (81102716)
160.0	26.46307 (81102716)	9.49496 (81102716)	6.59269 (81102716)
170.0	26.40876 (81032916)	9.35847 (81032916)	6.49359 (81032916)
180.0	24.20216 (81032916)	7.61305 (81032916)	5.04698 (81032916)
190.0	23.64034 (81112716)	7.87575 (81112716)	5.46894 (81112716)
200.0	25.53525 (81112816)	7.47519 (81112716)	4.96344 (81112716)
210.0	27.84217 (81112816)	9.96868 (81112816)	7.01126 (81112816)
220.0	28.75795 (81112816)	10.21124 (81112816)	7.35071 (81112816)
230.0	25.04796 (81112816)	7.51741 (81112816)	5.16983 (81112416)
240.0	20.77007 (81112816)	5.07189 (81122716)	3.54533 (81122716)
250.0	15.95167 (81112816)	4.46948 (81012516)	3.03149 (81012516)
260.0	13.75948 (81012516)	4.82017 (81012516)	3.41421 (81012516)
270.0	12.63966 (81012516)	4.80543 (81030516)	3.46941 (81030516)
280.0	12.33190 (81030516)	4.52075 (81030516)	3.15597 (81030516)
290.0	11.85427 (81120316)	3.66619 (81122316)	2.56284 (81122316)
300.0	12.39327 (81120816)	4.35021 (81122316)	3.19485 (81122316)
310.0	14.04441 (81120816)	3.82647 (81120816)	2.54889 (81011216)
320.0	13.96757 (81120816)	4.53451 (81120816)	3.03299 (81120816)
330.0	13.80175 (81120816)	4.66116 (81120816)	3.24753 (81120816)
340.0	13.50839 (81102616)	4.92669 (81102616)	3.54841 (81102616)
350.0	14.08940 (81020816)	4.05126 (81111316)	2.71855 (81102616)
360.0	14.84444 (81020816)	5.62317 (81111316)	4.16805 (81111316)

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX
*** 11/30/09
***
*** 11:06:27
**MODELOPTs:
PAGE 16
CONC URBAN FLAT NOCALM

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

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

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

ALL HIGH 1ST HIGH VALUE IS 76.43946 ON 81042510: AT (-281.91, -102.61, 0.00, 0.00) GP POL1

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

*** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX *** 11/30/09 *** *** 11:06:27

**MODELOPTs:

CONC URBAN FLAT NOCALM

*** THE SUMMARY OF HIGHEST 8-HR RESULTS ***

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

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

ALL HIGH 1ST HIGH VALUE IS 44.45675 ON 81041916: AT (229.81, -192.84, 0.00, 0.00) GP POL1

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

*** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA NOX *** 11/30/09 *** *** 11:06:27

**MODELOPTs:

CONC URBAN FLAT NOCALM

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

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

A Total of 0 Fatal Error Message(s)
A Total of 0 Warning Message(s)
A Total of 762 Informational Message(s)

A Total of 762 Calm Hours Identified

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

********   WARNING MESSAGES   ********
           ***  NONE  ***

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

```
CO STARTING
   TITLEONE  RANCHO VENENCIA pm10
   MODELOPT  NOCALM  URBAN  CONC
   AVERTIME  24
   POLLUTID  pm10
   RUNORNOT  RUN
   EVENTFIL  EVENTEXP.INP
   ERRORFIL  ERRORS.OUT
CO FINISHED

SO STARTING
   LOCATION STACK1 VOLUME 0 0 0
**      VOLUME  Source  G/S     RELHT   INILATVOL       INIVERTVOL
**      Parameters:     0.2431  ----    ----    ----    ---
   SRCPARAM STACK1 .0975 5 118.35 1.4
   EMISFACT   stack1  HROFDY   8*0.0  8*1.0  8*0.0
   SRCGROUP ALL
SO FINISHED

RE STARTING
   GRIDPOLR POL1 STA
                ORIG     0.0     0.0
                DIST  25 50 100 200 300 400 800 1000
                GDIR     36     10.0     10.0
   GRIDPOLR POL1 END
RE FINISHED
**      ELEV    90      5       10.00   15.00   20      25

ME STARTING
   INPUTFIL  norco.ASC
```

```
   ANEMHGHT  20 FEET

   SURFDATA  54167  1981  NORCO

   UAIRDATA  99999  1981  NORCO

**   DAYRANGE  1-10

ME FINISHED


OU STARTING

   RECTABLE  ALLAVE  fourth

OU FINISHED


 *** Message Summary For ISC3 Model Setup ***

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

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


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


   ********   WARNING MESSAGES   ********
OU W197    40 OUTQA :Post-97 PM10 without MAXIFILE is incompatible with EVENTFIL

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

 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA pm10
                        ***        11/30/09
                                   ***
                       ***        12:58:09
**MODELOPTs:
                                  PAGE   1
CONC                    URBAN FLAT                                  NOCALM


                                            ***     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 User-Specified Options:
          1. Final Plume Rise.
          2. Stack-tip Downwash.
          3. Buoyancy-induced Dispersion.
          4. Not Use Calms Processing Routine.
          5. Not Use Missing Data Processing Routine.
          6. Default Wind Profile Exponents.
          7. Default Vertical Potential Temperature Gradients.

**Model Assumes Receptors on FLAT Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates  1 Short Term Average(s) of:  24-HR

**This Run Includes:     1 Source(s);      1 Source Group(s); and     288
Receptor(s)

**The Model Assumes A Pollutant Type of:  PM10

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

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)

**Misc. Inputs:  Anem. Hgt. (m) =     6.10 ;    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:          valpm102.inp

**Output Print File:             valpm102.out

**Detailed Error/Message File:   ERRORS.OUT

 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA pm10
                          ***         11/30/09
                                      ***
                        ***           12:58:09
**MODELOPTs:
                                      PAGE   2
CONC                     URBAN FLAT                                      NOCALM



                                                  *** 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
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
```

- - - - - - - - - - - - - - - - - - - -

STACK1 0 0.97500E-01 0.0 0.0 0.0 5.00 118.35
1.40 HROFDY

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA pm10
*** 11/30/09
***
*** 12:58:09
**MODELOPTs:
PAGE 3
CONC URBAN FLAT NOCALM

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

ALL STACK1 ,

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA pm10
*** 11/30/09
***
*** 12:58:09
**MODELOPTs:
PAGE 4
CONC URBAN FLAT NOCALM

* SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF THE DAY *

HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR	HOUR	SCALAR
SOURCE ID = STACK1 ; SOURCE TYPE = VOLUME :											
1	.00000E+00	2	.00000E+00	3	.00000E+00	4	.00000E+00	5	.00000E+00	6	.00000E+00
7	.00000E+00	8	.00000E+00	9	.10000E+01	10	.10000E+01	11	.10000E+01	12	.10000E+01
13	.10000E+01	14	.10000E+01	15	.10000E+01	16	.10000E+01	17	.00000E+00	18	.00000E+00
19	.00000E+00	20	.00000E+00	21	.00000E+00	22	.00000E+00	23	.00000E+00	24	.00000E+00

 *** ISCST3 - VERSION 02035 *** *** RANCHO VENENCIA pm10
*** 11/30/09
***
*** 12:58:09
**MODELOPTs:
PAGE 5
CONC URBAN FLAT NOCALM

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR
***

*** ORIGIN FOR POLAR NETWORK ***
X-ORIG = 0.00 ; Y-ORIG = 0.00 (METERS)

*** DISTANCE RANGES OF NETWORK ***
(METERS)

25.0, 50.0, 100.0, 200.0, 300.0, 400.0, 800.0,
1000.0,

*** DIRECTION RADIALS OF NETWORK ***
(DEGREES)

10.0, 20.0, 30.0, 40.0, 50.0, 60.0, 70.0,
80.0, 90.0, 100.0,
110.0, 120.0, 130.0, 140.0, 150.0, 160.0, 170.0,
180.0, 190.0, 200.0,
210.0, 220.0, 230.0, 240.0, 250.0, 260.0, 270.0,
280.0, 290.0, 300.0,
310.0, 320.0, 330.0, 340.0, 350.0, 360.0,

**MODELOPTs:
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	4.3	24.6	-229.45
STACK1	8.7	49.2	-204.45
STACK1	17.4	98.5	-154.45
STACK1	34.7	197.0	-54.45
STACK1	8.6	23.5	-229.45
STACK1	17.1	47.0	-204.45
STACK1	34.2	94.0	-154.45
STACK1	68.4	187.9	-54.45
STACK1	12.5	21.7	-229.45
STACK1	25.0	43.3	

-204.45	STACK1	50.0	86.6
-154.45	STACK1	100.0	173.2
-54.45	STACK1	16.1	19.2
-229.45	STACK1	32.1	38.3
-204.45	STACK1	64.3	76.6
-154.45	STACK1	128.6	153.2
-54.45	STACK1	19.2	16.1
-229.45	STACK1	38.3	32.1
-204.45	STACK1	76.6	64.3
-154.45	STACK1	153.2	128.6
-54.45	STACK1	21.7	12.5
-229.45	STACK1	43.3	25.0
-204.45	STACK1	86.6	50.0
-154.45	STACK1	173.2	100.0
-54.45	STACK1	23.5	8.6
-229.45	STACK1	47.0	17.1
-204.45	STACK1	94.0	34.2
-154.45	STACK1	187.9	68.4
-54.45	STACK1	24.6	4.3
-229.45	STACK1	49.2	8.7
-204.45	STACK1	98.5	17.4
-154.45	STACK1	197.0	34.7
-54.45	STACK1	25.0	0.0
-229.45	STACK1	50.0	0.0
-204.45	STACK1	100.0	0.0
-154.45	STACK1	200.0	0.0
-54.45	STACK1	24.6	-4.3
-229.45	STACK1	49.2	-8.7
-204.45	STACK1	98.5	-17.4
-154.45	STACK1	197.0	-34.7
-54.45			

**MODELOPTs:
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	23.5	-8.6	-229.45
STACK1	47.0	-17.1	-204.45
STACK1	94.0	-34.2	-154.45
STACK1	187.9	-68.4	-54.45
STACK1	21.7	-12.5	-229.45
STACK1	43.3	-25.0	-204.45
STACK1	86.6	-50.0	-154.45
STACK1	173.2	-100.0	-54.45
STACK1	19.2	-16.1	-229.45
STACK1	38.3	-32.1	-204.45
STACK1	76.6	-64.3	-154.45
STACK1	153.2	-128.6	-54.45
STACK1	16.1	-19.2	-229.45
STACK1	32.1	-38.3	-204.45
STACK1	64.3	-76.6	-154.45
STACK1	128.6	-153.2	-54.45
STACK1	12.5	-21.7	-229.45
STACK1	25.0	-43.3	-204.45
STACK1	50.0	-86.6	-154.45
STACK1	100.0	-173.2	-54.45
STACK1	8.6	-23.5	-229.45
STACK1	17.1	-47.0	

-204.45	STACK1	34.2	-94.0
-154.45	STACK1	68.4	-187.9
-54.45	STACK1	4.3	-24.6
-229.45	STACK1	8.7	-49.2
-204.45	STACK1	17.4	-98.5
-154.45	STACK1	34.7	-197.0
-54.45	STACK1	0.0	-25.0
-229.45	STACK1	0.0	-50.0
-204.45	STACK1	0.0	-100.0
-154.45	STACK1	0.0	-200.0
-54.45	STACK1	-4.3	-24.6
-229.45	STACK1	-8.7	-49.2
-204.45	STACK1	-17.4	-98.5
-154.45	STACK1	-34.7	-197.0
-54.45	STACK1	-8.6	-23.5
-229.45	STACK1	-17.1	-47.0
-204.45	STACK1	-34.2	-94.0
-154.45	STACK1	-68.4	-187.9
-54.45			

**MODELOPTs:
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
STACK1	-12.5	-21.7	-229.45
STACK1	-25.0	-43.3	-204.45

-154.45	STACK1	-50.0	-86.6
-54.45	STACK1	-100.0	-173.2
-229.45	STACK1	-16.1	-19.2
-204.45	STACK1	-32.1	-38.3
-154.45	STACK1	-64.3	-76.6
-54.45	STACK1	-128.6	-153.2
-229.45	STACK1	-19.2	-16.1
-204.45	STACK1	-38.3	-32.1
-154.45	STACK1	-76.6	-64.3
-54.45	STACK1	-153.2	-128.6
-229.45	STACK1	-21.7	-12.5
-204.45	STACK1	-43.3	-25.0
-154.45	STACK1	-86.6	-50.0
-54.45	STACK1	-173.2	-100.0
-229.45	STACK1	-23.5	-8.6
-204.45	STACK1	-47.0	-17.1
-154.45	STACK1	-94.0	-34.2
-54.45	STACK1	-187.9	-68.4
-229.45	STACK1	-24.6	-4.3
-204.45	STACK1	-49.2	-8.7
-154.45	STACK1	-98.5	-17.4
-54.45	STACK1	-197.0	-34.7
-229.45	STACK1	-25.0	0.0
-204.45	STACK1	-50.0	0.0
-154.45	STACK1	-100.0	0.0
-54.45	STACK1	-200.0	0.0
-229.45	STACK1	-24.6	4.3
-204.45	STACK1	-49.2	8.7
-154.45	STACK1	-98.5	17.4
-54.45	STACK1	-197.0	34.7
-229.45	STACK1	-23.5	8.6
	STACK1	-47.0	17.1

-204.45				
	STACK1	-94.0	34.2	
-154.45				
	STACK1	-187.9	68.4	
-54.45				
	STACK1	-21.7	12.5	
-229.45				
	STACK1	-43.3	25.0	
-204.45				
	STACK1	-86.6	50.0	
-154.45				
	STACK1	-173.2	100.0	
-54.45				

**MODELOPTS:
CONC URBAN FLAT NOCALM

* SOURCE-RECEPTOR COMBINATIONS FOR WHICH CALCULATIONS MAY NOT BE PERFORMED *
LESS THAN 1.0 METER OR 3*ZLB IN DISTANCE, OR WITHIN OPEN PIT SOURCE

SOURCE ID	- - RECEPTOR LOCATION - - XR (METERS)	YR (METERS)	DISTANCE (METERS)
			- -
STACK1	-19.2	16.1	
-229.45			
STACK1	-38.3	32.1	
-204.45			
STACK1	-76.6	64.3	
-154.45			
STACK1	-153.2	128.6	
-54.45			
STACK1	-16.1	19.2	
-229.45			
STACK1	-32.1	38.3	
-204.45			
STACK1	-64.3	76.6	
-154.45			
STACK1	-128.6	153.2	
-54.45			
STACK1	-12.5	21.7	
-229.45			
STACK1	-25.0	43.3	
-204.45			
STACK1	-50.0	86.6	
-154.45			
STACK1	-100.0	173.2	
-54.45			
STACK1	-8.6	23.5	
-229.45			
STACK1	-17.1	47.0	
-204.45			

```
                              STACK1               -34.2          94.0
-154.45
                              STACK1               -68.4         187.9
-54.45
                              STACK1                -4.3          24.6
-229.45
                              STACK1                -8.7          49.2
-204.45
                              STACK1               -17.4          98.5
-154.45
                              STACK1               -34.7         197.0
-54.45
                              STACK1                 0.0          25.0
-229.45
                              STACK1                 0.0          50.0
-204.45
                              STACK1                 0.0         100.0
-154.45
                              STACK1                 0.0         200.0
-54.45
 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA pm10
                        ***        11/30/09
                                   ***
                       ***        12:58:09
**MODELOPTs:
                                  PAGE  10
CONC                    URBAN FLAT                                    NOCALM


                                            *** 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

CONC URBAN FLAT NOCALM

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

FILE: norco.ASC

FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)

SURFACE STATION NO.: 54167 UPPER AIR STATION NO.: 99999
NAME: NORCO NAME: NORCO

YEAR: 1981 YEAR: 1981

FLOW	SPEED	TEMP	STAB	MIXING HEIGHT (M)	USTAR	M-O LENGTH	Z-0	IPCODE	PRATE

YR MN DY HR	VECTOR	(M/S)	(K)	CLASS	RURAL	URBAN	(M/S)	(M)	(M) (mm/HR)
81 01 01 01	202.3	1.00	284.3	7	522.6	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 02	192.4	0.00	284.3	7	507.0	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 03	197.5	0.00	283.1	7	491.4	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 04	211.0	0.00	283.1	7	475.8	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 05	174.0	1.00	282.6	7	460.3	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 06	207.0	1.00	283.1	7	444.7	170.0	0.0000	0.0	0.0000 0 0.00
81 01 01 07	207.0	0.00	285.4	6	1.4	170.7	0.0000	0.0	0.0000 0 0.00
81 01 01 08	202.1	0.00	287.6	5	47.0	192.0	0.0000	0.0	0.0000 0 0.00
81 01 01 09	231.5	1.00	289.8	4	92.5	213.3	0.0000	0.0	0.0000 0 0.00
81 01 01 10	9.1	1.00	291.5	3	138.0	234.7	0.0000	0.0	0.0000 0 0.00
81 01 01 11	359.1	1.34	294.3	2	183.5	256.0	0.0000	0.0	0.0000 0 0.00
81 01 01 12	350.6	0.00	297.6	2	229.0	277.3	0.0000	0.0	0.0000 0 0.00
81 01 01 13	19.7	2.24	298.7	3	274.5	298.7	0.0000	0.0	0.0000 0 0.00
81 01 01 14	56.7	2.68	299.8	3	320.0	320.0	0.0000	0.0	0.0000 0 0.00
81 01 01 15	89.8	2.68	299.3	3	320.0	320.0	0.0000	0.0	0.0000 0 0.00
81 01 01 16	98.2	3.13	298.7	4	320.0	320.0	0.0000	0.0	0.0000 0 0.00
81 01 01 17	87.6	1.79	295.4	5	325.6	318.5	0.0000	0.0	0.0000 0 0.00
81 01 01 18	75.1	1.00	291.5	6	357.2	310.3	0.0000	0.0	0.0000 0 0.00
81 01 01 19	110.5	1.00	289.8	7	388.8	302.1	0.0000	0.0	0.0000 0 0.00
81 01 01 20	235.7	1.00	287.0	7	420.4	293.9	0.0000	0.0	0.0000 0 0.00
81 01 01 21	246.1	1.00	286.5	7	452.0	285.7	0.0000	0.0	0.0000 0 0.00
81 01 01 22	204.5	1.00	287.0	7	483.5	277.4	0.0000	0.0	0.0000 0 0.00
81 01 01 23	203.2	0.00	285.9	7	515.1	269.2	0.0000	0.0	0.0000 0 0.00
81 01 01 24	202.2	0.00	285.4	7	546.7	261.0	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 02035 *** *** RANCHO VENENCIA pm10
*** 11/30/09
*** 12:58:09

**MODELOPTS:

CONC URBAN FLAT NOCALM

*** THE AVERAGE HIGH-4TH-HIGH 24-HR AVERAGE CONCENTRATION VALUES OVER 1 YEARS FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): STACK1 ,

*** NETWORK ID: POL1 ; NETWORK TYPE: GRIDPOLR ***

** CONC OF PM10 IN MICROGRAMS/M**3 **

DIRECTION (DEGREES)	DISTANCE (METERS) 25.00	50.00	100.00	200.00	300.00	400.00	800.00	1000.00
10.00	0.00000	0.00000	0.00000	0.00000	0.30911	0.23373	0.07396	0.05511
20.00	0.00000	0.00000	0.00000	0.00000	0.35877	0.26588	0.07161	0.04644
30.00	0.00000	0.00000	0.00000	0.00000	0.38368	0.29882	0.08618	0.05452
40.00	0.00000	0.00000	0.00000	0.00000	0.45173	0.34110	0.09831	0.06717
50.00	0.00000	0.00000	0.00000	0.00000	0.50977	0.37481	0.11472	0.07664
60.00	0.00000	0.00000	0.00000	0.00000	0.60548	0.41971	0.12537	0.08621
70.00	0.00000	0.00000	0.00000	0.00000	0.67163	0.45177	0.14984	0.10364
80.00	0.00000	0.00000	0.00000	0.00000	0.69933	0.48178	0.17043	0.12835
90.00	0.00000	0.00000	0.00000	0.00000	0.72617	0.48675	0.17513	0.12947
100.00	0.00000	0.00000	0.00000	0.00000	0.61595	0.45392	0.16536	0.11348
110.00	0.00000	0.00000	0.00000	0.00000	0.62877	0.44561	0.13194	0.08802
120.00	0.00000	0.00000	0.00000	0.00000	0.56958	0.41030	0.11395	0.07969
130.00	0.00000	0.00000	0.00000	0.00000	0.56895	0.44924	0.12516	0.07745
140.00	0.00000	0.00000	0.00000	0.00000	0.55289	0.43220	0.11157	0.07271
150.00	0.00000	0.00000	0.00000	0.00000	0.60258	0.43753	0.14084	0.09560
160.00	0.00000	0.00000	0.00000	0.00000	0.61906	0.40816	0.15389	0.10493
170.00	0.00000	0.00000	0.00000	0.00000	0.62316	0.41354	0.14644	0.09902
180.00	0.00000	0.00000	0.00000	0.00000	0.60281	0.45172	0.12840	0.08956
190.00	0.00000	0.00000	0.00000	0.00000	0.52131	0.43639	0.10688	0.07269
200.00	0.00000	0.00000	0.00000	0.00000	0.43340	0.36762	0.09401	0.06947
210.00	0.00000	0.00000	0.00000	0.00000	0.48507	0.41749	0.11401	0.07992
220.00	0.00000	0.00000	0.00000	0.00000	0.46524			

0.40219 0.10616 0.07298
230.00 | 0.00000 0.00000 0.00000 0.00000 0.43924
0.29539 0.10875 0.07100
240.00 | 0.00000 0.00000 0.00000 0.00000 0.37403
0.27026 0.08620 0.05061
250.00 | 0.00000 0.00000 0.00000 0.00000 0.36164
0.27776 0.07224 0.04697
260.00 | 0.00000 0.00000 0.00000 0.00000 0.30466
0.22564 0.07342 0.05250
270.00 | 0.00000 0.00000 0.00000 0.00000 0.34030
0.22339 0.06039 0.04498
280.00 | 0.00000 0.00000 0.00000 0.00000 0.31379
0.21771 0.06175 0.04431
290.00 | 0.00000 0.00000 0.00000 0.00000 0.32304
0.21831 0.07018 0.04630
300.00 | 0.00000 0.00000 0.00000 0.00000 0.31525
0.22814 0.06859 0.04725
310.00 | 0.00000 0.00000 0.00000 0.00000 0.32635
0.21695 0.07133 0.04787
320.00 | 0.00000 0.00000 0.00000 0.00000 0.32225
0.21264 0.06982 0.04679
330.00 | 0.00000 0.00000 0.00000 0.00000 0.28939
0.19807 0.06892 0.05070
340.00 | 0.00000 0.00000 0.00000 0.00000 0.31474
0.23092 0.06360 0.04631
350.00 | 0.00000 0.00000 0.00000 0.00000 0.30796
0.23797 0.06309 0.04632
360.00 | 0.00000 0.00000 0.00000 0.00000 0.30561
0.22220 0.06748 0.04824

CONC URBAN FLAT NOCALM

*** THE SUMMARY OF MAXIMUM AVERAGE HIGH-4TH-HIGH 24-HR RESULTS OVER 1 YEARS ***

** CONC OF PM10 IN MICROGRAMS/M**3
**

NETWORK GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG) OF TYPE GRID-ID
ALL	1ST HIGHEST VALUE IS	0.72617 AT (300.00, 0.00, 0.00, 0.00) GP POL1
	2ND HIGHEST VALUE IS	0.69933 AT (295.44, 52.09, 0.00, 0.00) GP POL1
	3RD HIGHEST VALUE IS	0.67163 AT (281.91, 102.61, 0.00, 0.00) GP POL1
	4TH HIGHEST VALUE IS	0.62877 AT (281.91, -102.61, 0.00, 0.00) GP POL1
	5TH HIGHEST VALUE IS	0.62316 AT (52.09, -295.44, 0.00, 0.00) GP POL1
	6TH HIGHEST VALUE IS	0.61906 AT (102.61, -281.91, 0.00,

```
     0.00)  GP   POL1
         7TH HIGHEST VALUE IS       0.61595 AT (     295.44,      -52.09,      0.00,
     0.00)  GP   POL1
         8TH HIGHEST VALUE IS       0.60548 AT (     259.81,      150.00,      0.00,
     0.00)  GP   POL1
         9TH HIGHEST VALUE IS       0.60281 AT (       0.00,     -300.00,      0.00,
     0.00)  GP   POL1
        10TH HIGHEST VALUE IS       0.60258 AT (     150.00,     -259.81,      0.00,
     0.00)  GP   POL1


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
                      BD = BOUNDARY
 *** ISCST3 - VERSION 02035 ***    ***  RANCHO VENENCIA pm10
                          ***        11/30/09
                                     ***
                         ***        12:58:09
**MODELOPTs:
                                    PAGE  14
CONC                      URBAN FLAT                                        NOCALM


*** 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          762 Informational Message(s)

A Total of          762 Calm Hours Identified


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


   ********   WARNING MESSAGES   ********
OU W197    40 OUTQA :Post-97 PM10 without MAXIFILE is incompatible with EVENTFIL

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