Final
Air Dispersion Analyses Technical Report

Revision to the BLM Farmington Resource Management Plan and Amendment of the Rio Puerco Resource Management Plan

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AIR QUALITY NEAR-FIELD MODELING FOR THE REVISED FARMINGTON AND RIO PUERCO RMPS EIS

1.0 INTRODUCTION

The following describes the methodologies used to estimate near-field ambient pollutant impacts with the use of computerized dispersion modeling from sources associated with the implementation of the Revised Bureau of Land Management (BLM) Resource Management Plans (RMPs) for the Farmington and Rio Puerco Resource District. The intent of the analysis was to identify a reasonable but conservative upper bound of impacts that may occur from the project alternatives.

2.0 DESCRIPTION OF THE MODELED PROJECT ALTERNATIVE

There are four project alternatives under consideration, one being the No Action Alternative (Alternative A). Three of the alternatives reflect a range of land use management approaches within the project region, while the No Action Alternative assumes the BLM would continue to manage programs as stipulated in the 1988 Farmington Resource District RMP and succeeding amendments. Alternative B emphasizes the recovery of hydrocarbon resources and coal and represents the maximum development scenario. Alternative C proposes conservation, protection, and enhancement of natural ecosystems and represents the minimum development scenario. Alternative D represents a scenario that balances both development and ecosystem protection. Because Alternative B would produce the greatest amount of air emissions and resulting impacts, the dispersion modeling analysis focused on this alternative. All other project alternatives would be expected to produce fewer air quality impacts compared to this scenario.

The main petroleum resource produced within the project region is natural gas. Alternative B would increase petroleum production in the region by the development of new oil and gas wells. This would also require the construction of additional roads, well pipelines, major pipelines to transport product out of the region, and small to large natural gas pipeline compressor stations. The New Mexico Institute of Mining and Technology completed a 20-year reasonable foreseeable development (RFD) scenario for the project alternatives (Engler et al 2001). For Alternative B, total available well completions (locations) for the New Mexico portion of the San Juan Basin, considering commingling and dual completion opportunities, would be 13,266. This estimate includes both federal and fee mineral owners. The number of well locations expected on federal lands would be 9,970 locations predicted for development over the 20-year RFD. This reduction is based on the approximate federal acreage holdings of the San Juan Basin.

3.0 EMISSIONS DEVELOPMENT

Construction Impacts

The air quality modeling analysis for this EIS only evaluated operational emission sources. Proposed construction activities associated with gas development would be similar to the construction activities immediately north of the Project Area, as described in the *Oil and Gas*

Development on the Southern Ute Indian Tribe (SUIT) Draft EIS (*DEIS*) (BLM and US Bureau of Indian Affairs [BIA] 2000). This document presents a detailed and conservative modeling analysis of both combustive and fugitive dust (PM_{10}) emission sources associated with well pad construction activities. The results of the analysis showed that construction activities would produce pollutant impacts that would remain below the ambient air quality standards. The maximum impacts from proposed construction activities and fugitive dust sources were shown to occur very close to the activity location source, with concentrations decreasing rapidly with distance from the source.

Operational Impacts

Existing Sources

A dispersion modeling analysis attempts to evaluate the combined impacts of emissions from both proposed sources and existing sources within a project region. One of the main issues associated with the project modeling analysis was how to simulate emissions from existing sources within the Farmington Resource District project region. This portion of a modeling analysis is generally done in one of two ways: (1) use ambient pollutant concentrations monitored over a number of years at stations within a project region or (2) analyze the impact of existing source emissions with the use of the dispersion modeling and then add background pollutant concentrations to these results. The key to an adequate analysis with the use of method (1) is to ensure that the monitored pollutant concentrations simulate reasonable, but conservative impacts that would occur from existing sources within a project region. The magnitudes of background pollutant levels used in method (2) are generally less than what would be used for method (1) – otherwise there would be some double counting of the impacts from existing sources. The modeling analysis for this EIS used method (1) for the reasons specified below.

There are existing stations that monitor ambient pollutant levels within industrialized portions of the Farmington and Rio Puerco Resource Districts project region. In particular, the Bloomfield station was sited by the New Mexico Air Quality Bureau (NMAQB) to monitor elevated pollutant impacts from the highly industrialized Bloomfield gas corridor (personal communication with Mary Uhl, NMAQB). Emission sources associated with the El Paso Blanco compressor station and Conoco San Juan Gas Plant occur within 2 kilometers (km) of the Bloomfield monitoring station. These are the third and fifth largest sources of nitrogen oxides (NO_x) in San Juan County and their combined emissions in 1996 were 2,714 tons of NO_x (EPA 2001a). The annual NO_x potential-to-emit level for these two facilities is about 3,800 tons per year (NMAQB 2001a). Excluding the Four Corners and San Juan power plants west of Farmington, approximately 40 and 52 percent of the remaining NO_x emissions emitted in San Juan County occur within 5 and 10 km of the Bloomfield monitoring station. That equates to roughly 3,500 and 5,000 tons per year of NO_x emissions, respectively, that occurred in 1996 within these radii (EPA 2001a). There are no other areas within the project region that have this density of emissions. In other words, monitored pollutant data from the Bloomfield station simulate some of the highest pollutant impacts that occur within the project region from existing sources. Therefore, the use of ambient pollutant data monitored at the Bloomfield station to simulate reasonable, but conservative air quality impacts from existing sources within the project region provides an adequate analysis for purposes of NEPA. Maximum

concentrations of carbon monoxide (CO) are taken from data monitored at the Farmington station because CO is not monitored at Bloomfield.

Table 1 presents the maximum pollutant levels monitored at the Bloomfield and Farmington stations from years 1995 through 2001 (NMAQB 1997 and 2002 and EPA 2002a). The data in Table 1 show that pollutant levels have not exceeded any ambient air quality standard during this monitoring period. The highest values of ambient pollutant data recorded at the Bloomfield and Farmington stations within the last 7 years (1995-2001) were used to simulate worst-case air quality impacts from existing sources within the project region.

Use of ambient pollutant data to simulate existing emission sources in a modeling analysis is an appropriate method for this EIS, due to the programmatic nature of the RMP. However, this may not be a thorough method for a permitting analysis under NMAQB guidelines, as due to proximity and meteorological effects, the monitoring station may not capture the maximum pollutant concentrations from all existing sources. The monitored data also may not represent future air quality conditions if they do not include impacts from approved, yet un-constructed emission sources.

Proposed Action Sources

The exact locations of operational emission sources associated with the proposed gas development are not known at this time. Therefore, rather than model all possible operational emission sources that would be scattered throughout the project region, the project modeling analysis evaluated the impacts from a single module of proposed emission sources that could occur at a generic location within a projected high density well development area (greater than 6 wells per square mile). This scenario would produce an upper bound of impacts that would be expected to occur from any combination of proposed sources within the planning area. The results of the modeling analysis showed that impacts from proposed gas production emission sources would decrease rapidly with distance from these sources. Therefore, it is expected that distant proposed sources would not substantially contribute to near-field impacts analyzed for this emissions module.

Definition of the proposed emissions module was based on information obtained from the RFD and in consultation with natural gas industry representatives (Personal communications with Burlington Resources, BP Amoco, and El Paso Natural Gas). To be conservative, the analysis focused on the Dakota formation, which would potentially develop up to eight wells per section (square mile). The areal extent of the emissions module was four sections, or a total of 32 wells within the module. The RFD assumes that 50 percent of the future wells developed in the San Juan Basin would have well compressors rated at approximately 95 horsepower (Hp). However, to be conservative, it was assumed that each well in the module would have a 95 Hp gas-fired well compressor. The RFD assumes that the San Juan Basin would require an additional 360,000 Hp of central compression. Therefore, a 10,000 Hp central compressor station also was included as part of the emissions module. This scenario is based on a high-density well placement and is deemed to represent an upper bound of emissions that would produce near-field impacts within the planning area under any alternative.

Table 1. Maximum Pollutant Concentrations Monitored in the Farmington RMP Project Region—1995 to 2001

Pollutant/Monitoring Station	Averaging Time/ Measurement	Maximum Concentration by Year						
		1995	1996	1997	1998	1999	2000	2001
Ozone								
Bloomfield	1-hour (ppm)	–	–	–	–	–	0.10	0.09
Shiprock Substation		–	–	0.08	0.08	0.08	0.09	0.09
Bloomfield	8-hour (1) (ppm)	–	–	–	–	–	0.085	0.077
Shiprock Substation		–	–	–	–	0.074	0.084	0.077
Carbon Monoxide								
Farmington	8-hour (ppm)	2.8	3.0	2.7	5.2	2.5	1.9	–
	1-hour (ppm)	5.5	6.1	5.4	9.2	8.3	5.4	–
Nitrogen Dioxide								
Bloomfield	Annual (ppm)	–	–	0.010	0.010	0.012	0.011	0.012
Shiprock Substation		–	–	0.007	0.008	0.009	0.009	0.009
Bloomfield	24-hour (ppm)	–	–	0.026	0.022	0.027	0.028	0.033
Shiprock Substation		–	–	0.027	0.026	0.033	0.031	0.034
Sulfur Dioxide								
Bloomfield	Annual (ppm)	–	0.003	0.003	0.002	0.002	0.001	0.002
Farmington Airport		0.002	0.003	0.003	0.002	0.002	0.002	0.002
Shiprock		0.003	0.003	0.003	0.002	–	–	–
Shiprock Substation		0.014	0.013	0.016	0.016	0.009	0.007	0.004
Bloomfield	24-hour (ppm)	–	0.01	0.038	0.012	0.007	–	0.010
Farmington Airport		0.011	0.012	0.035	0.012	0.011	0.008	0.007
Shiprock		0.014	0.012	0.032	0.012	–	–	–
Shiprock Substation		0.045	0.060	0.073	0.075	0.052	0.033	0.020
Bloomfield	3-hour (ppm)	–	0.041	0.096	0.029	0.024	0.019	0.024
Farmington Airport		0.035	0.041	0.077	0.032	0.033	0.026	0.030
Shiprock		0.068	0.043	0.148	0.032	–	–	–
Shiprock Substation		0.196	0.233	0.267	0.267	0.139	0.144	0.058
PM10								
Farmington	Annual Arithmetic Mean ($\mu g/m^3$)	17	16	16	12	16	14	16
Gallup		18	–	–	–	–	–	–
Shiprock		13	13	13	7	–	–	–
Farmington	24-hour ($\mu g/m^3$)	30	31	41	29	84	24	30
Gallup		37	35	–	–	–	–	–
Shiprock		27	30	79	14	–	–	–
PM2.5								
Farmington	Annual ($\mu g/m^3$)	–	–	–	–	–	–	6.1
Farmington	24-hour ($\mu g/m^3$)	–	–	–	–	–	–	15.1

Sources: NMAQB 1997 and 2002; USEPA 2002.a

The emissions module aligns well compressors in rows and columns, with the central compressor situated at the end of one of these columns (see Figure 1). This arrangement was selected to maximize the overlap of emission plumes dispersing from the various sources. This scenario is deemed to represent an upper bound of impacts that would occur under any project alternative.

To further ensure the identification of conservative impacts, all sources were modeled to operate 24 hours per day and 365 days per year. Stack parameters for typical well compressors and compressor stations were obtained from industry sources and the NMAQB.

Criteria Pollutant Emissions

The overwhelming majority of project emission sources would be fueled by natural gas. Since CO and NO_x are the two main pollutants emitted from natural gas combustion, the modeling analysis focused on these two criteria pollutants. If the analysis shows that these pollutants do not produce any significant impacts, this implies that project impacts from other criteria pollutants would also be less than significant.

Table 2 lists the source characteristics of various wellhead and central compressors presently used in the project region. The 95 Hp Caterpillar model G3304 gas-fired engine was selected as the wellhead compressor for use in the modeling analysis. The central compressor station was designed with three Caterpillar model G3312 gas-fired engines, each rated at 3,350 Hp.

To produce a conservative analysis, the highest emission rates between (1) vendor emission estimates identified in Table 2 and (2) the average of source testing performed by the NMAQB on gas-fired engines rated within the proposed wellhead and central compressor Hp ranges were used in the modeling analysis. Table 3 lists the source characteristics of 12 wellhead compression units ranging from 65 to 145 Hp that were source tested by the NMAQB (NMAQB 2001b). Table 4 lists NMAQB source testing data for 39 central compression units ranging from 2,500 to 4,500 Hp (NMAQB 2001b). As a result, the highest NO_x and CO emission factors for the wellhead compressors units were determined to be 15.8 (vendor data [Caterpillar Inc. 2001a]) and 13.1 Gm/Hp-Hr (NMAQB 2001a), respectively. The NO_x and CO emission factors used in the analysis for the central compression engine were 2.0 and 2.5 Gm/Hp-Hr, respectively. The CO emission factor was based on vendor data (Caterpillar Inc. 2001b). The NO_x emission factor for the 3312 engine provided by Caterpillar was 0.7 Gm/Hp-Hr. However, the modeling analysis used a more conservative NO_x factor of 2.0 Gm/Hp-Hr to simulate the possible implementation of the emission limitation associated with the *Level One Oil and Gas Installations Air Quality Permit* under NMAQB Regulation *20NMAC2.72 - Construction Permits*.

Wellhead compressors typically operate an average of 85 percent of the year at a load factor of 100 percent, with usage decreasing over time as production decreases. However, for this modeling analysis it was conservatively assumed that both the wellhead and central compressors would operate 24 hours per day at 100 percent load for the life of the project. The modeling analysis also used low-end values of stack exit temperatures and stack exit velocities to minimize plume rise and therefore to maximize near-field pollutant impacts (Caterpillar Inc. 2001a and 2001b and personal communication with Jim Shively, NMAQB).

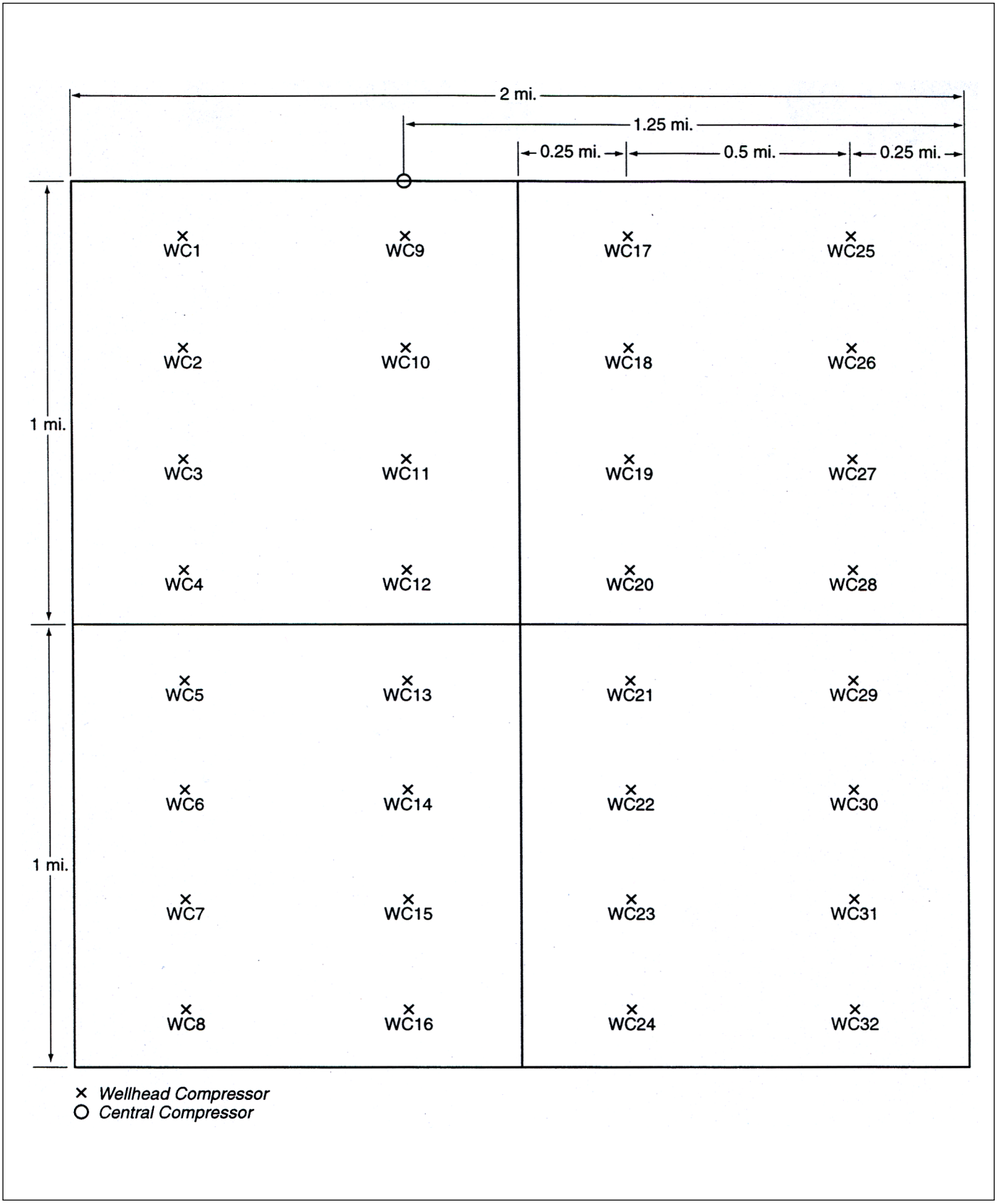

Figure 1. Farmington RMP Emission Source Module

Table 2. Source Data for Wellhead/Central Compressors Used in the BLM Farmington/Rio Puerco RMPs Project Dispersion Modeling.

Source Type/Manufacturer	Hp	Load Factor	Hourly Hp-Hr	Fuel Use (CF/Hr)	Emission Rates						Stack Parameters				Source
					NOx (Gm/Hp-Hr)	NOx (Lb/Hr)	NOx (Gm/S)	CO (Gm/Hp-Hr)	CO (Lb/Hr)	CO (Gm/S)	Hs (m)	Ts (K)	Vs (m/s)	Ds (m)	
Wellhead Compressors															
Waukeshaw VRG220 (best power)	43	100%	43	358	ND	ND	ND	ND	ND	ND	3.1	977	12.3	0.10	(1)
Waukeshaw VRG220 (best economy)	43	100%	43	331	ND	ND	ND	ND	ND	ND	3.1	977	11.3	0.10	(1)
Waukeshaw VRG220 (best power)	64	100%	64	533	ND	ND	ND	ND	ND	ND	3.1	977	18.2	0.10	(1)
Waukeshaw VRG220 (best economy)	64	100%	64	493	ND	ND	ND	ND	ND	ND	3.1	977	16.9	0.10	(1)
Caterpillar G3304	95	100%	95	802	**15.8**	**3.31**	**0.42**	1.4	0.29	0.04	**3.1**	**836**	**27.8**	**0.10**	(2)
Caterpillar G3306	125	100%	125	944	16.0	4.41	0.56	0.7	0.20	0.03	3.1	811	29.6	0.10	(1)
Ajax - DPC115	115	100%	115	1,037	3.0	0.76	0.10	2.2	0.56	0.07	4.9	ND	ND	0.31	(1)
Ajax - DPC115 LE	115	100%	115	933	2.0	0.51	0.06	2.0	0.51	0.06	4.9	477	ND	0.31	(1)
Arrow - VRG220	45	100%	45	377	11.6	1.15	0.15	14.6	1.45	0.18	2.5	977	ND	0.09	(1)
Arrow - VRG330	68	100%	68	569	11.6	1.74	0.22	14.6	2.19	0.28	2.5	977	ND	0.09	(1)
Composite	65-145	100%	95	796	13.2	2.75	0.35	**13.1**	**2.73**	**0.34**	2.5	977	ND	0.09	(3)
Central Compressors															
Caterpillar G3606	1,665	100%	1,665	12,584	0.7	2.57	0.32	2.5	9.18	1.16	ND	733	ND	ND	(2)
Caterpillar G3608	2,225	100%	2,225	16,743	0.7	3.43	0.43	2.5	12.26	1.55	ND	734	ND	ND	(2)
Caterpillar G3612 - DM5310-00	3,550	100%	3,550	26,517	0.7	5.48	0.69	**2.5**	**19.57**	**2.47**	**6.1**	732	76.2	0.43	(2)
Caterpillar G3612 - DM5310-00	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	**661**	**25.8**	**0.67**	(3)
Composite	>2500	100%	---	---	1.6	---	---	1.3	---	---	---	---	---	---	(3)

Notes: (1) Burlington Resources.

(2) Caterpillar Inc.

(3) New Mexico Air Quality Bureau.

ND = No Data.

Bolded values were selected for the modeling analysis.

Table 3. NMAQB Source Test Data for Small Reciprocating Natural Gas-Fired Compressors.

Manufacturer	*Model*	*Hp*	*HP (Test)*	*% Load*	*NOx (lb/hr)*	*CO (lb/hr)*	*NOx (g/hp-hr)*	*CO (g/hp-hr)*	*Date*
Caterpillar	G3306TA-LCR	108	55	51%	3.8	0.2	31.2	1.9	Feb-98
Caterpillar	G3306TA-HCR	126	126	100%	4.6	1.8	16.6	6.5	Sep-93
Caterpillar	G3306TA	144	60	42%	1.0	5.0	7.7	37.9	Jan-98
Caterpillar	G3306	145	93	64%	0.8	0.4	4.1	2.0	Mar-94
Cummins	G743	141	128	91%	3.7	3.2	13.0	11.3	Jun-95
Waukesha	VRG330U	65	22	34%	1.4	1.3	29.2	25.9	Sep-94
Waukesha	F817GU	89	83	93%	1.8	4.6	9.6	25.3	Jan-98
Waukesha	F817G	118	96	81%	3.2	2.8	15.5	13.8	Mar-94
Waukesha	F817G	106	98	92%	1.2	1.1	5.6	5.0	Sep-95
Waukesha	F817G	101	46	46%	1.0	1.0	9.4	9.9	Jun-94
Waukesha	F817 GU LCR	132	40	40%	0.9	0.5	10.7	5.1	Jan-00
Waukesha	F817 GU HCR	132	31	31%	0.4	0.8	5.2	12.0	Jan-00
Averages		**117**	**73**	**64%**	**2.0**	**1.9**	**13.15**	**13.05**	

Table 4. NMAQB Source Test Data for Large Reciprocating Natural Gas-Fired Compressors.

Manufacturer	*Model*	*HP*	*HP (Test)*	*% Load*	*NOx (lb/hr)*	*CO (lb/hr)*	*NOx (g/hp-hr)*	*CO (g/hp-hr)*	*Date*
Caterpillar	G3616LE	3,674	3,605	98%	5.41	-	0.68	-	Aug-96
Caterpillar	G3612LE	3,335	2,894	87%	1.23	15.92	0.19	2.51	May-96
Caterpillar	G3612LE (1)	3,235	3,235	100%	3.18	0.12	0.48	0.02	Jul-96
Caterpillar	G3612LE	3,235	3,134	97%	2.20	0.11	0.32	0.02	May-96
Caterpillar	G3612LE	3,100	2,774	89%	2.92	-	0.47	-	May-96
Caterpillar	G3612LE	3,068	2,965	97%	3.06	11.51	0.46	1.76	May-96
Caterpillar	G3612LE	3,068	3,161	103%	1.40	15.27	0.21	2.24	May-96
Cooper Bessemer	Quad 4	4,500	4,287	95%	33.47	17.55	3.54	1.86	Aug-98
Cooper Bessemer	LSV-16 UnitWT-103	4,400	4,221	91%	17.75	9.75	1.91	1.05	Oct-98
Cooper Bessemer	12V-250	4,170	4,170	100%	198.96	7.83	21.63	0.85	May-96
Clark	TLA10	3,400	3,229	95%	44.77	14.44	6.29	2.03	Aug-96
Superior	2416G	3,200	3,200	100%	5.51	18.14	0.85	2.81	Aug-96
Superior	16SGTC	2,650	2,450	92%	3.94	7.44	0.73	1.37	Jul-96
Superior	16SGTC	2,650	2,522	95%	5.91	6.57	1.06	1.18	Oct-96
Superior	16SGTC	2,650	2,570	97%	4.10	8.93	0.72	1.57	Dec-95
Superior	16SGTC	2,650	2,615	99%	3.87	8.13	0.67	1.41	Dec-95
Superior	16SGTB	2,650	2,300		5.08	8.39	1.00	1.65	Jun-99
Superior	16SGTB (1)	2,650	2,650	100%	6.90	0.10	1.18	0.02	Mar-89
Superior	16SGTB (1)	2,650	2,650	100%	4.50	0.02	0.77	0.00	Mar-89
Superior	16SGTB (1)	2,650	2,650	100%	7.59	7.00	1.30	1.20	Jul-90
Superior	16SGTB (1)	2,650	2,650	100%	7.00	8.76	1.20	1.50	Jul-90
Superior	16SGTB	2,650	2,650	100%	4.67	8.76	0.80	1.50	Apr-91
Superior	16SGTB	2,650	2,650	100%	7.00	8.17	1.20	1.40	Apr-91
Superior	16SGTB	2,650	2,650	100%	12.84	8.17	2.20	1.40	Apr-91
Superior	16SGTB	2,650	2,650	100%	4.67	7.59	0.80	1.30	May-91
Superior	16SGTB	2,650	2,650	100%	6.42	7.59	1.10	1.30	May-91
Superior	16SGTB	2,650	2,650	100%	9.92	8.76	1.70	1.50	May-91
Superior	16SGTB	2,650	2,650	100%	7.59	7.59	1.30	1.30	Oct-91
Superior	16SGTB	2,650	2,650	100%	4.60	7.60	0.80	1.40	Jul-92
Superior	16SGTB	2,650	2,509	95%	5.20	7.20	0.90	1.30	Apr-93
Superior	16SGTB	2,650	2,525	95%	11.60	10.80	2.10	1.90	May-92
Superior	16SGTB	2,650	2,539	96%	5.20	8.30	0.90	1.50	Apr-93
Superior	16SGTB	2,650	2,590	98%	4.00	8.50	0.70	1.50	Apr-93
Superior	16SGTB	2,650	2,677	101%	2.70	8.90	0.50	1.50	Dec-93
Superior	16SGTB	2,650	2,310	103%	5.08	8.39	1.00	1.65	Jun-99
Superior	16SGTB	2,503	2,249	90%	4.40	7.70	0.90	1.60	Nov-93
Superior	16 SGTC	2,650	2,747	104%	6.15	7.97	1.08	1.32	Oct-96
Waukesha	AT27GL	2,816	2,767	98%	1.50	5.70	0.30	0.90	Feb-99
Waukesha	AT27GL	2,816	2,767	98%	1.40	4.76	0.20	0.80	Feb-99
Averages		**2,926**	**2,841**	**98%**	**12.15**	**7.91**	**1.64**	**1.29**	

Note: (1) Compressors with catalytic converters.

HAP Emissions

The modeling analysis also evaluated the incremental impact of hazardous air pollutant (HAP) emissions from proposed wellhead and central compressor operational sources. These natural gas-fired sources would emit various HAPs, including 1,1,2,2-tetrachloroethane; 1,1,2-trichloroethane; 1,1-dichloroethane; 1,3-butadiene; acetaldehyde; acrolein; benzene; carbon tetrachloride; chlorobenzene; chloroform; ethylbenzene; ethylene dibromide; formaldehyde; methanol; methylene chloride; n-hexane; naphthalene; styrene; toluene; vinyl chloride; and xylene. However, 1,3-butadiene, acetaldehyde, acrolein, benzene, and formaldehyde are the only HAPs that would be emitted in sufficient quantities from proposed operations to pose an appreciable risk to public health. These five pollutants were therefore analyzed in detail. The risk from these pollutants would be in the form of either potential cancer risk or non-carcinogenic risk to a target endpoint such as the kidney, liver, eye, reproductive system, respiratory system, cardiovascular system, central nervous system, or immune system. Factors used to estimate HAPs emissions from proposed natural gas-fired sources were obtained from *Compilation of Air Pollutant Emission Factors, AP-42* (USEPA 2000).

4.0 AIR QUALITY MODELING

Model Selection

The Industrial Source Complex Short-Term Model 3 (ISCST3, Version 99155) was used to estimate the operation phase (production) near-field impacts. The selection of the ISCST3 model was based on (1) a consideration of the availability of a representative year of hourly meteorological data, (2) the physical characteristics of the proposed sources, and (3) the ability of the model to simulate multiple point sources of the types associated with the proposed development. The ISCST3 model is an EPA-approved gaussian dispersion model that was designated as an EPA Guideline model in August 1995. The ISCST3 model is recommended for use by the NMAQB for dispersion modeling within 50 kilometers (km) of a source (NMAQB 1998).

Receptor Grid

A nested receptor grid consisting of both fine and coarse grids was used in the modeling analysis. The fine receptor grid was designed to identify the maximum pollutant impact concentrations resulting from the emission sources associated with the module. The coarse grid was designed to identify the extent of the module's region of influence (ROI) radius for the various pollutants and averaging periods of concern, i.e., the distances at which module impacts fall below the pollutant-specific significant impact levels (see Table 5). A rectangular fine grid was constructed at intervals of 100 meters from the module's central compressor station location out to a distance sufficient to capture the maximum impact location.

The coarse grid was also constructed around the module's central compressor station location. The coarse grid was overlaid on the fine grid in a rectangular grid pattern with 1-km spacing out to a distance sufficient to determine where concentrations fall below the pollutant-specific significant impact levels.

Table 5
Impact Significance Levels, Ambient Air Quality Standards, and PSD Increments

Pollutant	*Averaging Period*	*Impact Significance Level ($\mu g/m^3$) [(a)]*	*NAAQS (ppm) [(a)]*	*NMAAQS (ppm) [(a)]*	*PSD Class I Increments ($\mu g/m^3$) [(a)]*	*PSD Class II Increments ($\mu g/m^3$) [(a)]*
Sulfur Dioxide	Annual 24-hour 3-hour	1.0 5.0 25.0	0.03 (80 $\mu g/m^3$) 0.14 (365 $\mu g/m^3$) 0.50 (1300 $\mu g/m^3$)	0.02 (52 $\mu g/m^3$) 0.10 (260 $\mu g/m^3$) --	2 5 25	20 91 512
Particulates (TSP)	Annual [b] 24-hour	1.0 5.0	-- --	60 $\mu g/m^3$ 150 $\mu g/m^3$	-- --	-- --
PM-10	Annual [c] 24-hour	1.0 5.0	50 $\mu g/m^3$ 150 $\mu g/m^3$	-- --	4 8	17 30
Carbon Monoxide	8-hour 1-hour	500 2,000	9.0 (10 mg/m^3) 35.0 (40 mg/m^3)	8.7 (9.7 mg/m^3) 13.1 (15 mg/m^3)	-- --	-- --
Nitrogen Dioxide	Annual 24-hour	1.0 5.0	0.053 (100 $\mu g/m^3$) --	0.050 (94.3 $\mu g/m^3$) 0.10 (188 $\mu g/m^3$)	2.5 --	25 --

Notes: (a) Units shown as $\mu g/m^3$ are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury.
(b) Geometric mean
(c) Arithmetic mean

Air dispersion modeling is very sensitive to the relationship between emission source locations and terrain features and the use of hypothetical locations in the analysis could mislead the public and decision makers. Since the programmatic nature of the actions associated with this EIS does not provide information on the site-specific locations of proposed emission sources, it was appropriate that the near-field modeling analysis not incorporate terrain features. As a result, the modeling analysis used a flat terrain grid system. However, dramatic variations in topography occur within the project region and predicted impacts of air effluent plumes in complex terrain can be substantially greater compared to those in flat terrain. The NMAQB permitting process would require the use of site-specific terrain data to ensure identification of maximum pollutant impacts from proposed emission sources within its surrounding terrain.

Model Options

The Regulatory Default Options of the ISCST3 model were selected for all modeling runs. These options include:

- Use final plume rise.
- Use stack-tip downwash.

- Use buoyancy induced dispersion.
- Use calms processing routine.
- Do not use missing data processing routine.
- Use default wind profile exponents.
- Use default vertical potential temperature gradients.
- Do not use exponential decay for rural mode.

The model was run in the "rural" mode using rural dispersion coefficients because of the low level of development throughout most of the project area.

Meteorological Data

The NMAQB developed a 1-year set of hourly meteorological data recorded at the Bloomfield monitoring station for ISCST3 modeling purposes. These data are considered to be representative of the general project region and were therefore used in the modeling analysis. These data have a high frequency of westerly and easterly winds, due to the presence of the east-west alignment of the San Juan River Valley. These data also show a high frequency of northerly winds, which occur from nighttime drainage flow down the Bloomfield Canyon. These data show that terrain has a substantial effect on local wind conditions. Hence, a site-specific dispersion modeling analysis would have to use meteorological data that is representative of the proposed project site.

The WDROTATE model option was used to rotate the source location field at 10-degree intervals after each run of the annual meteorological data set. Thirty-six runs were performed for each pollutant to capture the worst-case module alignment in the 360 degrees of rotation. Use of this option ensured that the modeling analysis identified maximum pollutant impacts due to the overlapping of plumes from two or more sources within the proposed emissions module. Maximum overlap occurs when the predominant wind flow direction is parallel to the alignment of the sources.

NO_2 Impact Analysis

Methods recommended by the NMAQB were used to estimate NO_2 impacts from project operational sources. To estimate annual NO_2 impacts, a factor of 0.75 was used to convert modeled annual NO_x concentrations to NO_2 concentrations (the same as the Ambient Ratio Method, as adopted in Supplement C to the *Guideline on Air Quality Models* [EPA 1995]). To estimate 24-hour NO_2 impacts for comparison to the New Mexico State 24-hour standard, the analysis used a factor of 0.40 to convert modeled 24-hour NO_x concentrations to 24-hour NO_2 concentrations.

5.0 ASSESSMENT OF AIR QUALITY IMPACTS

State and National Ambient Air Quality Standards

To be consistent with NMAQB dispersion modeling guidelines, background pollutant data and ambient air quality standards were converted from units of ppm to $\mu g/m^3$ to take into

consideration the effects of elevation (NMAQB 1998). To be conservative, the emissions module was analyzed at an elevation of 6,000 feet. For example, this procedure would convert the New Mexico State 24-hour NO_2 standard of 0.10 ppm to 153 $\mu g/m^3$.

Table 6 summarizes the ambient pollutant impacts predicted for Alternative B. These data show that the emissions scenario evaluated for natural gas development under Alternative B would contribute to an exceedance of the 24-hour state NO_2 standard, which would be a potentially significant air quality impact. The emissions module would not contribute to an exceedance of any other ambient air quality standard. As part of the AQB permitting process, proposed stationary sources that emit more than 25 tons per year or 10 pounds per hour would be required to demonstrate compliance with the ambient air quality standards prior to gaining approval for construction (Regulation 20.2.72 NMAC). This would include a consideration of existing emission sources and terrain features within the proposed source region of influence. Measures that could reduce predicted significant pollutant impacts include the reconfiguration of emission source locations, enhancement of effluent plume rises, and additional emission controls. Modeling result printouts for maximum impact cases are provided as Attachments 1 through 4 of this Technical Report.

During the NMAQB permitting process, if an initial dispersion modeling analysis shows that proposed emission sources contribute to an exceedance of an ambient NO_2 standard, a second tier analysis is performed to more accurately estimate ambient NO_2 impacts. This ozone limiting method (OLM) considers atmospheric chemistry and the role ambient O_3 plays in converting NO_x emissions to ambient NO_2. It is possible that use of the OLM in the dispersion modeling analysis for this EIS would reduce the maximum NO_2 impacts estimated for the project emissions module to the point that they would not contribute to an exceedance of the State 24-hour standard. However, to be conservative, it is assumed that proposed NO_x emissions would remain potentially significant.

Table 6. Maximum Pollutant Impacts Analyzed for Gas Production—Alternative B.

Pollutant	*Averaging Period*	*Modeled Maximum Impact[b] ($\mu g/m^3$)*	*Background Concentration [(a)] ($\mu g/m^3$)*	*Total Impact[b] ($\mu g/m^3$)*	*NAAQS [b)] ($\mu g/m^3$)*	*NMAAQS[(b)] ($\mu g/m^3$)*
Carbon Monoxide	8-hour	332	4,838	5,170	8,374	8,095
	1-hour	778	8,560	9,338	32,567	12,189
Nitrogen Dioxide	Annual [(d)]	33	17	50	81	76
	24-hour [(e)]	120	50	170	--	153

Notes: (a) Background concentrations of CO and NO_2 are equal to the maximum values monitored at the Farmington and Bloomfield monitoring stations during the period 1996-2001 (see Table 3-14 of this FEIS). Data then converted from units of ppm to $\mu g/m^3$ for an elevation of 6,000 feet (NMAQB 1998).

(b) AAQS converted from units of ppm to $\mu g/m^3$ for an elevation of 6,000 feet (NMAQB 1998).

(c) Annual/24-hour NO2 modeled impacts is equal to the maximum modeled NOx impact, times a factor of 0.4/0.75 (NMAQB 1998).

Wellhead compressors contributed the overwhelming majority of ground level pollutant concentrations at the predicted maximum impact locations. The central compressors only contributed approximately 2 percent of the total impact estimated for both the annual average and 24-hour averaging periods at these locations. The reason for this is that the central compression units have much greater plume rise compared to the wellhead compressors. As a result, most of the plumes from the central compressors lofted over the maximum impact locations produced by the wellhead compressors. Additionally, since the location of maximum NO_2 impacts from the central compressors was several miles downwind of the emissions module and well dispersed, the NO_2 concentrations at these locations were much lower then those located adjacent to the emissions module.

Prevention of Significant Deterioration Increment Consumption

Modeling results indicate that the high-density module of proposed compressor emission sources would generate a maximum annual NO_2 impact of 33 $\mu g/m^3$. This impact is greater than the annual Prevention of Significant Deterioration (PSD) Class II increment (25 $\mu g/m^3$) and is potentially significant. Emissions from the wellhead compressors are predicted to produce the overwhelming majority of this impact. Under AQB Regulation 20.2.72 (Construction Permits), proposed stationary sources that emit more than 25 tons per year or 10 pounds per hour would be required to demonstrate compliance with the PSD increments, in addition to the ambient air quality standards. In the event of PSD review, a detailed analysis would occur at the time of permitting to determine the amount of NO_2 increment consumed by a proposed source(s). Existing and approved emission sources in the project area consume PSD increment and therefore the amount of increment available to new sources is something less than the total increment. There are several localized areas within the RMP project area where the available PSD Class II increment is nearly exhausted (such as the Bloomfield gas corridor). As a result, a permit application for the proposed emissions module within this area would be denied under the requirements of NMAQB Regulation 20.2.72, unless emission reductions were provided to offset a large portion of PSD increment consumed by the module. However, since Regulation 20.2.72 only applies to sources that emit more 25 tons per year or 10 pounds per hour of a pollutant, the wellhead compressors would be exempt from these requirements, unless a portion or all of their emissions were combined to represent one permit unit or source.

Region of Influence

The ROI radius for the various pollutants and averaging periods of concern, i.e., the distances at which module impacts fall below the pollutant-specific significant impact levels contained in Table 5, were determined by examination of the coarse grid modeling runs. The maximum distances at which pollutant levels of the module fall below significance levels are provided in Table 7. For NO_2 the distances were 40 kilometers and 25 kilometers for the annual and 24-hour averaging periods, respectively. For CO it was determined that all modeled impacts, including the maximum value, were below the significance levels for both the 8-hour and 1-hour averaging periods. Figures 2 through 6 present isopleths of the maximum NO_2 and CO concentrations predicted by the modeling analysis. Figures 2 and 3 are provided for the NO_2 annual impact case. Figure 2 shows the coarse and fine grid coverage area, while Figure 3 focus on the nearby fine grid area.

Table 7
Maximum Distances at Which Modeled Module Impact Concentrations Fall Below Significance Levels (ROI Radius)

Pollutant	*Averaging Period*	*Impact Significance Level [(a)] ($\mu g/m^3$)*	*ROI Radius (km)*
Carbon Monoxide	8-hour	500	(b)
	1-hour	2,000	(b)
Nitrogen Dioxide	Annual	1.0	40
	24-hour	5.0	25

Notes: (a) Units shown as $\mu g/m^3$ are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury.
(b) All modeled impacts were below the significance level.

Incremental Risk from HAPS

Acetaldehyde, acrolein, benzene, 1,3-butadiene, and formaldehyde are the only HAPs that would be emitted in sufficient quantities from proposed operations to pose an appreciable risk to public health. The risk from these pollutants would be in the form of either potential cancer risk or non-carcinogenic risk to a target endpoint such as the kidney, liver, eye, reproductive system, respiratory system, cardiovascular system, central nervous system, or immune system. Non-carcinogenic health risks occur as either a long-term (chronic) concern or as a short-term (acute) concern.

The modeling analysis calculated maximum incremental short-term and annual average concentrations for each of these pollutants. The concentrations are compared to acceptable values of exposure, i.e., Acceptable Ambient Concentration Levels (AACL) as reported in the USEPA's National Air Toxics Information Clearinghouse (NATICH) database (USEPA 1997a) or Reference Exposure Levels (RELs), as reported in the California's Office of Environmental Health Hazard Assessment (OEHHA) database (OEHHA 2002a and 2002b). The AACLs and RELs are the maximum exposure concentration levels at which no adverse acute or chronic health effects would occur. Table 8 shows the AACLs/RELs compared to the maximum concentrations predicted by the ISCST3 model. With the exception of short-term acrolein, the results in Table 8 indicate that emissions from the module would not be sufficient to cause an acute or chronic health concern. Maximum concentrations would be less than the AACLs/RELs. The short-term AACL/REL for acrolein was established based on an exposure concentration that caused mild eye irritation to some subjects over a period of one hour.

Long-term incremental exposure to the carcinogenic compounds (1,3-butadiene, acetaldehyde, benzene, and formaldehyde) is evaluated based on estimates of the increased latent "cancer risk" over a 70-year lifetime. The cancer risk is calculated by summing the products of the maximum annual average pollutant concentrations predicted by the ISCST3 model times the applicable USEPA unit risk factors (USEPA 1997b). The resulting estimated cancer risk is compared to the generally accepted cancer risk range of 1×10^{-6} to 100×10^{-6}, as found in the "Superfund" National Oil and Hazardous Substances Pollution Contingency Plan (EPA 1990).

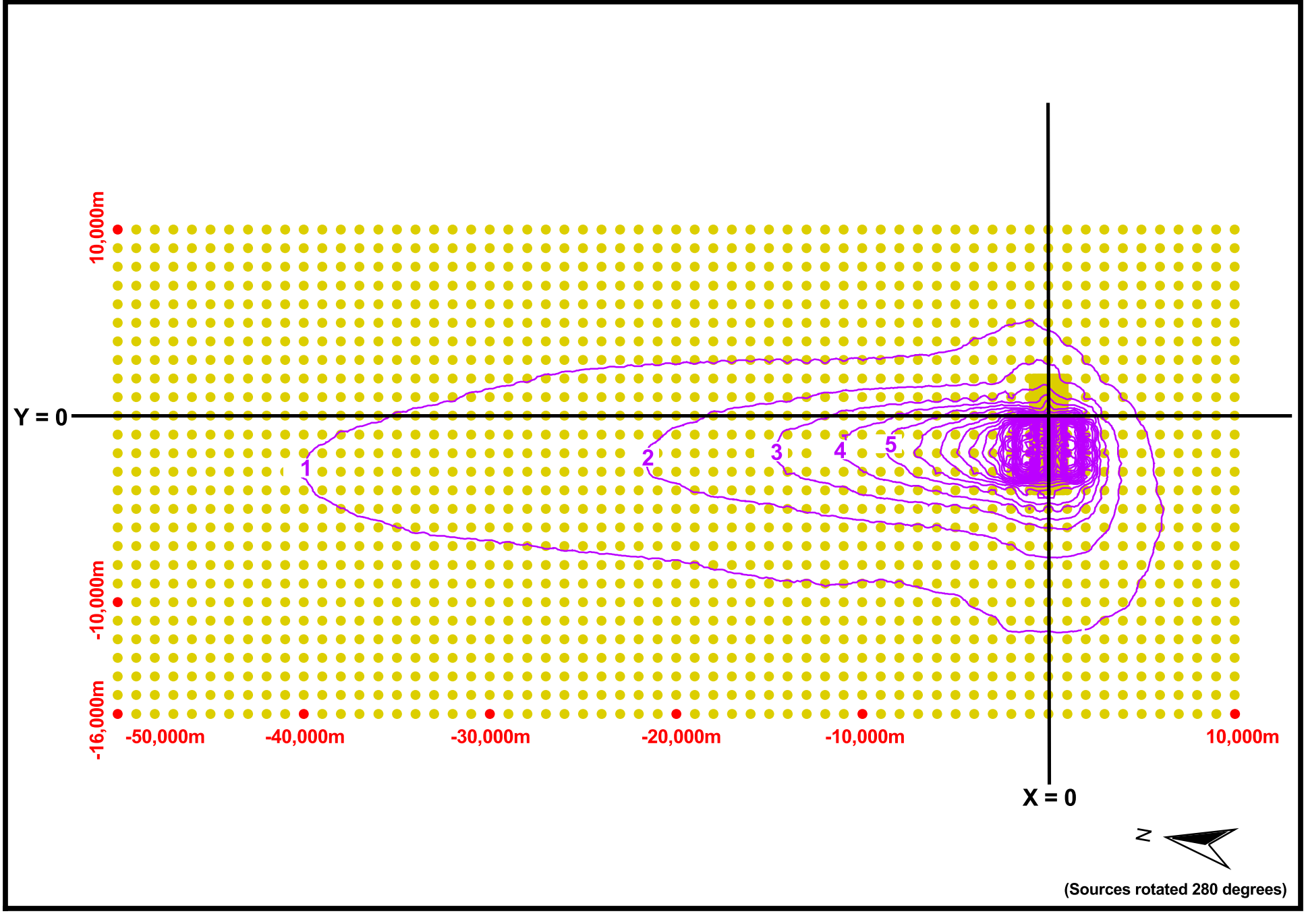

Figure 2. Isopleth Plot of Maximum Annual NO_2 Impact Concentration Values (ug/m^3)

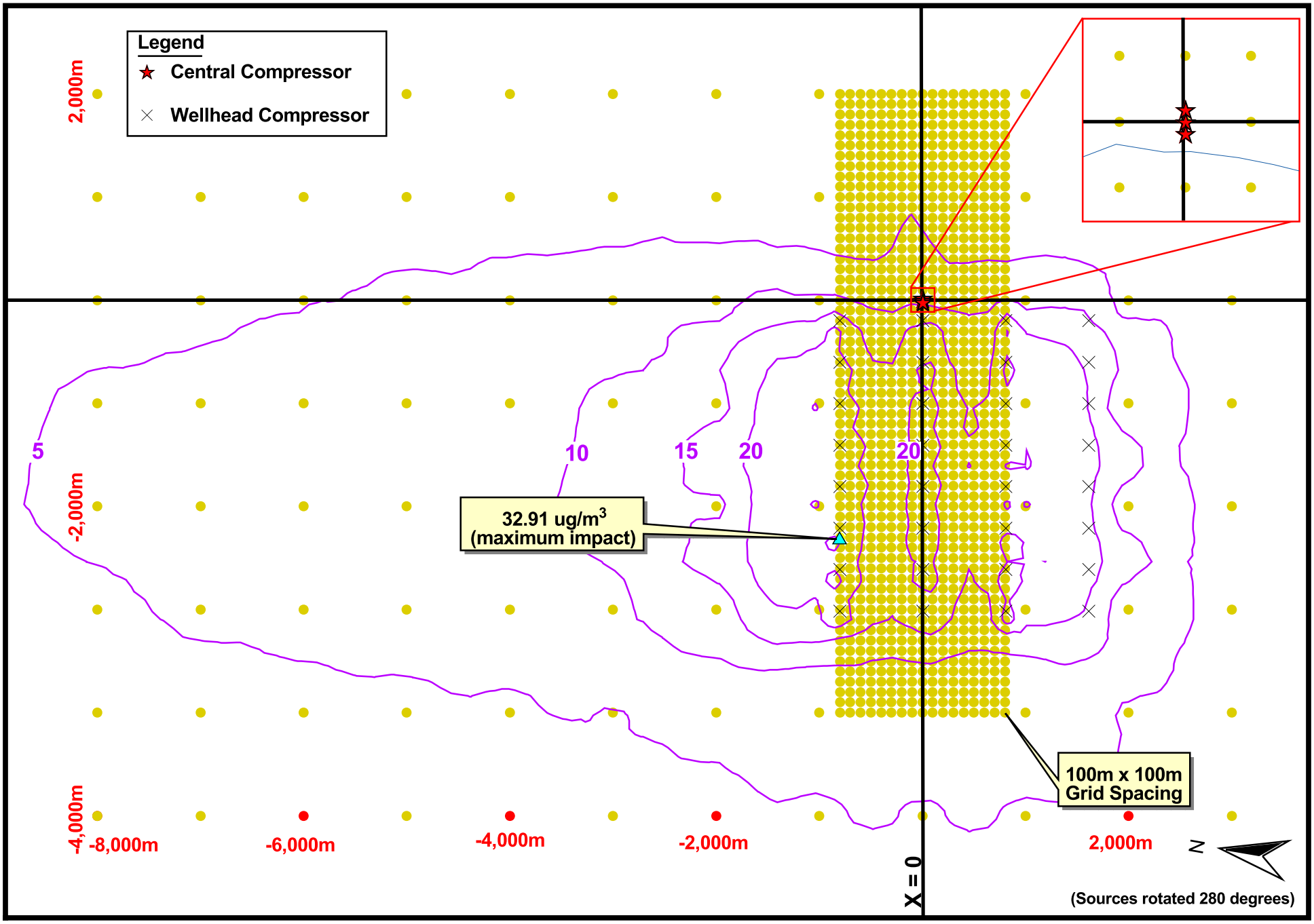

Figure 3. Isopleth Plot of Maximum Annual NO_2 Impact Concentration Values (ug/m^3) - Zoom in of Fine Grid Area

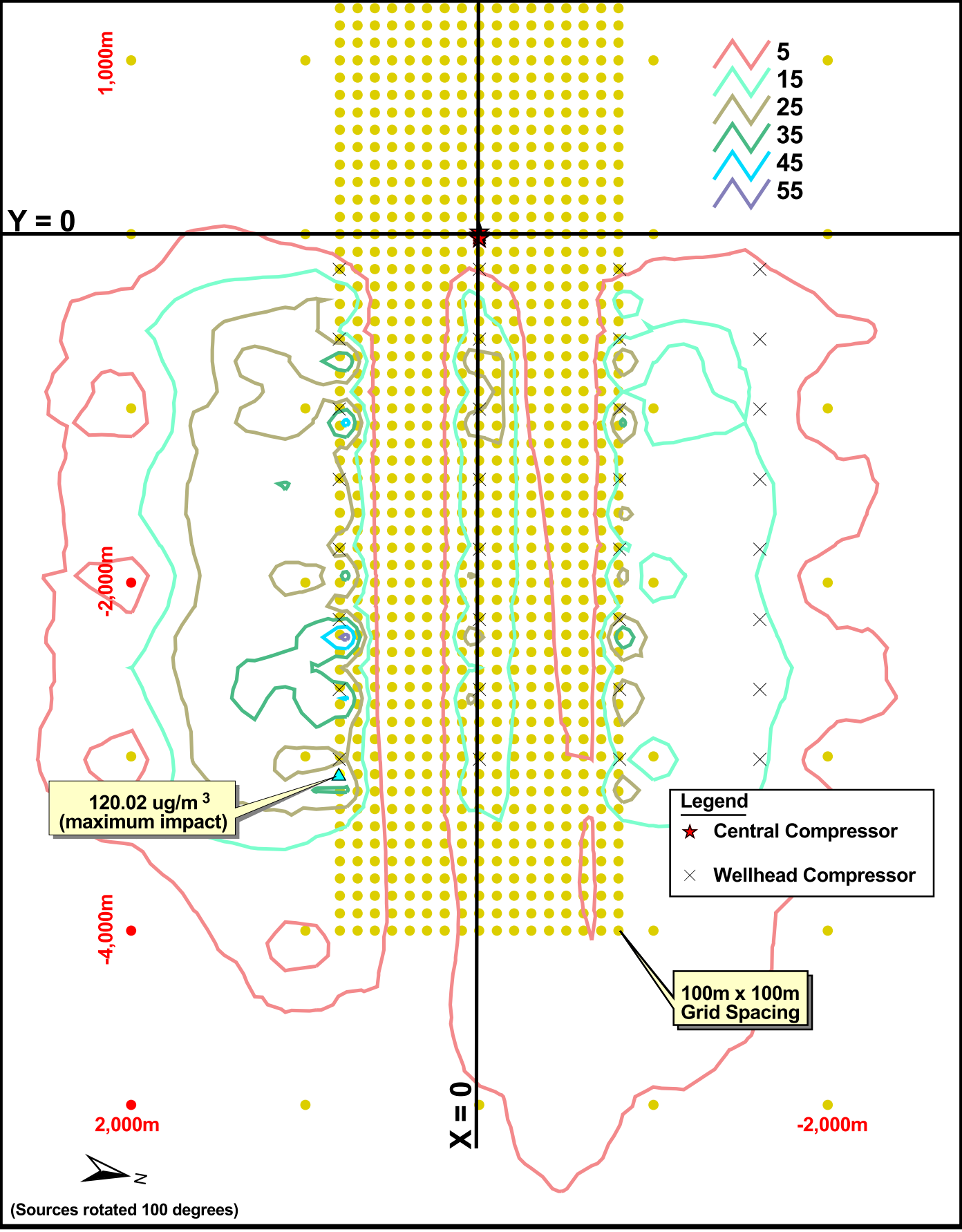

Figure 4. Isopleth Plot of Maximum 24-hour NO_2 Impact Concentration Values (ug/m^3)

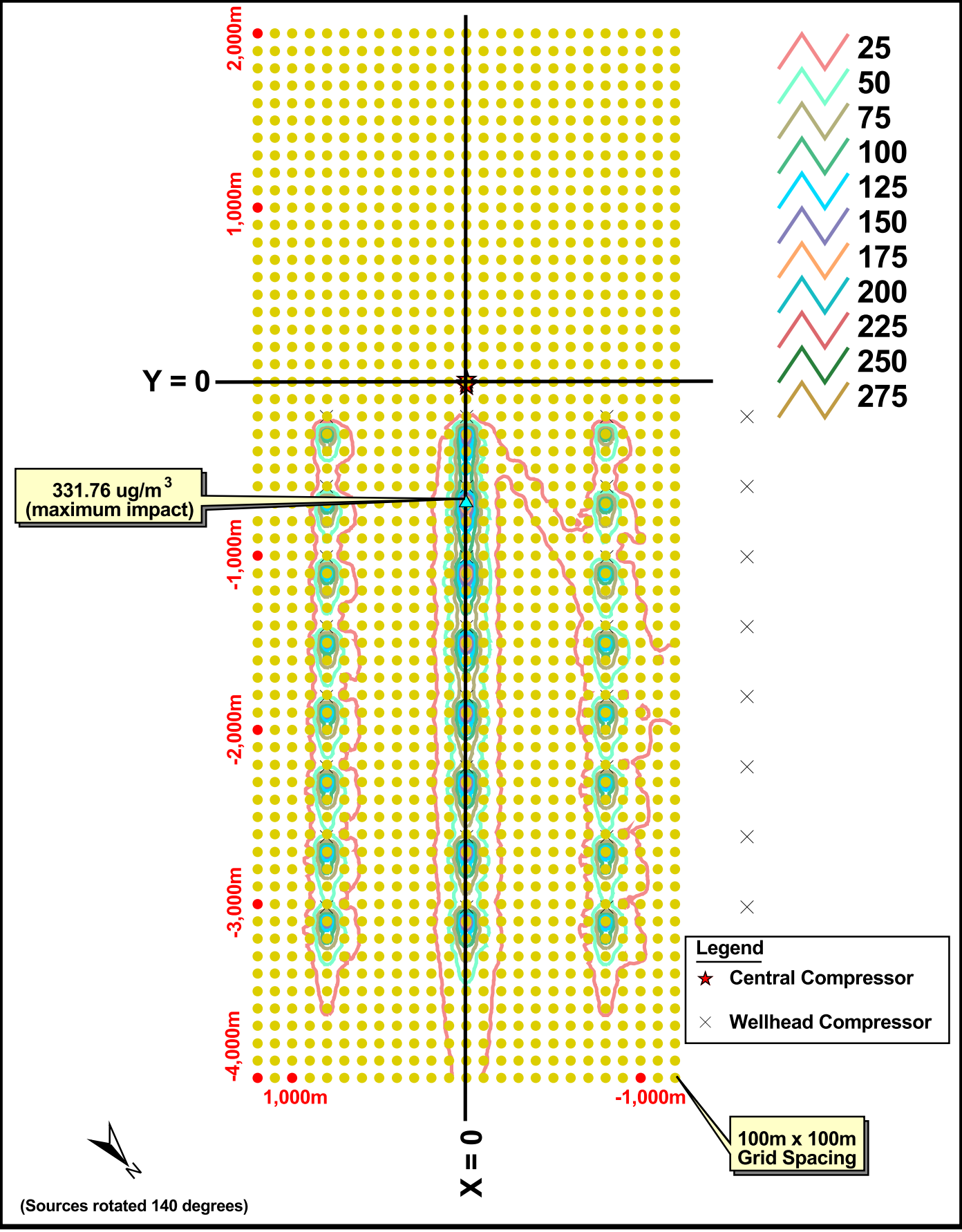

Figure 5. Isopleth Plot of Maximum 8-Hour CO Impact Concentration Values (ug/m^3)

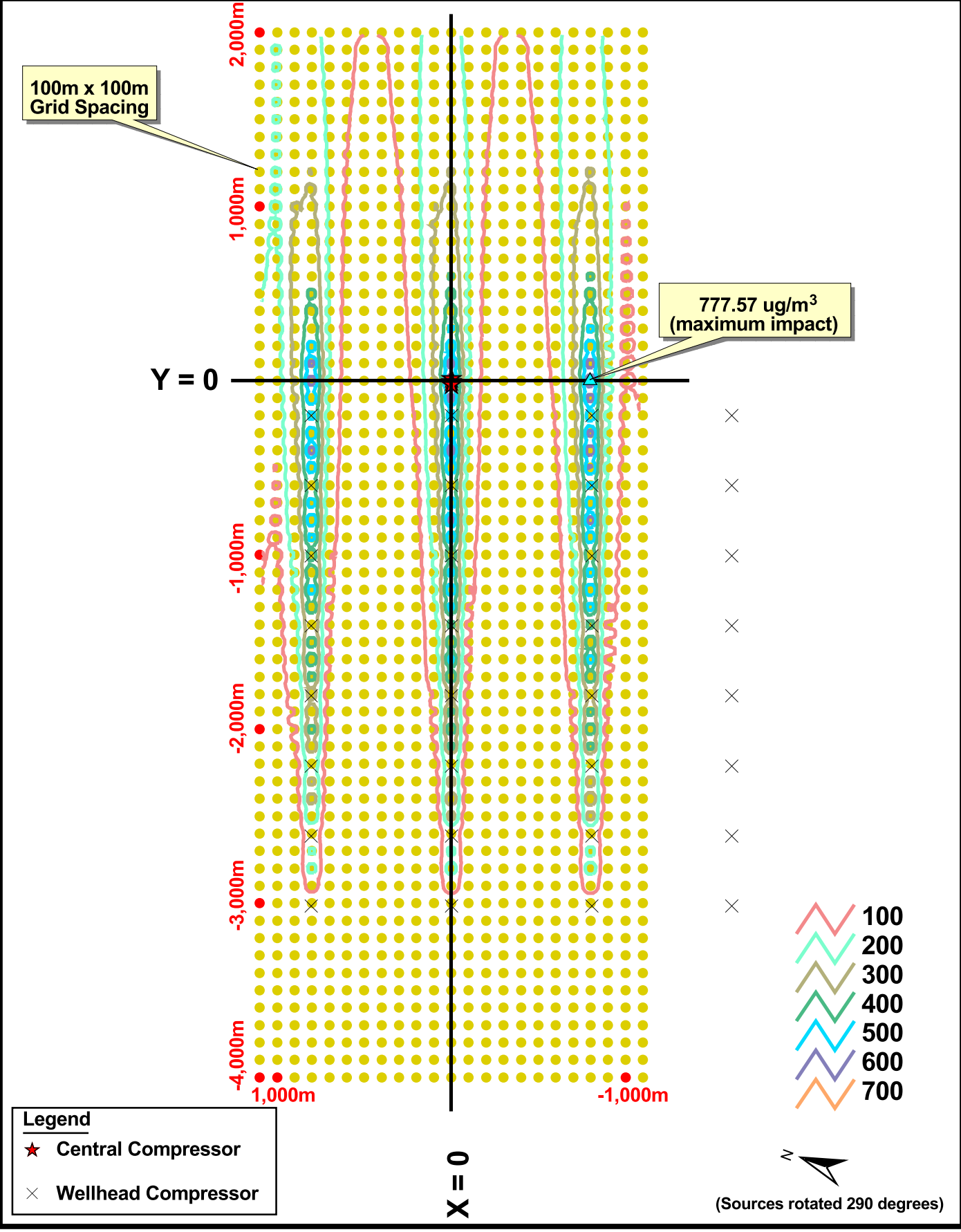

Figure 6. Isopleth Plot of Maximum 1-Hour CO Impact Concentration Values (ug/m^3)

Table 8
Comparison of Maximum Ground-Level Concentrations from Gas Production to AACLs/RELs — Alternative B

Pollutant	ACUTE HEALTH RISK		CHRONIC HEALTH RISK	
	Maximum Short-Term Concentration ($\mu g/m^3$)	*Acute AACL/REL[2]*	*Maximum Annual Concentration ($\mu g/m^3$)*	*Chronic AACL/REL[1]*
1,3-Butadiene	--	NA	0.002	20
Acetaldehyde	--	NA	0.03	9
Acrolein	0.46	0.19	0.02	0.06
Benzene	0.06	1,300	0.01	60
Formaldehyde	4.70	94	0.16	3

Notes: (1) Source: (USEPA 1997a) and (OEHHA 2002a and 2002b).

Two estimates of cancer risk were computed: (1) a maximally-exposed individual (MEI) risk and (2) a most-likely exposure (MLE) risk. The typical EPA criterion for cancer risk assumes that a person will be continuously exposed to maximum HAP concentrations for a period of 70 years. However, the EPA allows an adjustment to reflect the normal years of residence at a specific location. For the MEI scenario, the exposure duration is assumed to be for the life of a typical natural gas well, i.e., 20 years. Therefore, the MEI residency adjustment factor is 20 ÷ 70, or 0.2857. For the MLE scenario, the exposure duration is assumed to be 9 years, corresponding to the mean duration that a family remains at a residence (EPA 1993). Thus, the MLE residency adjustment factor is 9 ÷ 70, or 0.1286.

A second adjustment factor is applied to the MLE scenario to account for the percentage of time during any given day that a potentially exposed person would be at home exposed to the maximum impact concentration. The EPA allows a fraction of 0.64 to be assumed for maximum exposure (EPA 1993). During the remainder of the day, it is conservatively assumed that the person will be exposed to 25 percent of the maximum concentration. Therefore, the MLE daily exposure adjustment factor is [(0.64) x (1.0)] + [(0.36) x (0.25)], or 0.73. As a conservative assumption for the MEI scenario, it is assumed that a person will remain at home 24 hours per day for the entire period of exposure. Thus, the daily adjustment factor for the MEI scenario will be 1.0.

Combining the two adjustment factors results in a value of (0.1286 x 0.73) = 0.0939 for the MLE scenario, and (0.2857 x 1.0) = 0.2857 for the MEI scenario. To calculate the incremental cancer risk for the MEI and MLE scenarios, the predicted maximum annual average pollutant concentrations were multiplied by the unit risk factors and then by the respective overall adjustment factors. As shown in Table 9, the resulting summed values are 0.21×10^{-6} for the MLE risk and 0.65×10^{-6} for the MEI risk. Both the MLE risk and the MEI risk would be below the range of acceptable risk criteria. The cancer risk impact of project emissions under Alternative B would be less than significant. Modeling result printouts for the maximum annual formaldehyde impact case is provided as Attachment 5 of this Technical Report.

Table 9
Maximum Cancer Risk Associated with Emissions from Gas Production — Alternative B

Pollutant	*Maximum Annual Concentration ($\mu g/m^3$)*	*Unit Risk Factor[1] $(\mu g/m^3)^{-1}$*	*MEI Cancer Risk*	*MLE Cancer Risk*
1,3-Butadiene	2.40×10^{-3}	3.0×10^{-5}	2.1×10^{-8}	6.8×10^{-9}
Acetaldehyde	2.50×10^{-2}	2.2×10^{-6}	1.6×10^{-8}	5.2×10^{-9}
Benzene	5.20×10^{-3}	7.8×10^{-6}	1.2×10^{-8}	3.9×10^{-9}
Formaldehyde	1.63×10^{-1}	1.3×10^{-5}	6.0×10^{-7}	2.0×10^{-7}
TOTAL			**6.5×10^{-7}**	**2.1×10^{-7}**
Notes: (1) Source: (USEPA 1997b)				

Far-Field Impact Assessment

Due to the proximity of federal Class I areas to the planning area, proposed gas development sources have the potential to impact air quality in these pristine areas. The Clean Air Act allows almost no degradation of air quality in Class I areas from proposed emission sources. The Regional Haze Regulation promulgated by the USEPA in 1999 also directs states to achieve "natural" visibility conditions in Class I areas within the next 60 years.

The closest Class I areas to the planning area are the Mesa Verde National Park and Weminuche NWA in southwest Colorado and the San Pedro Parks NWA in the SFNF in New Mexico. Mesa Verde National Park is about 12 miles from the northwest corner of the project gas production region. Weminuche NWA is about 28 miles from the northern border of the project gas production region. The San Pedro Parks NWA is about 10 miles from the southeast corner of the gas production region.

Criteria used to determine the significance of air quality impacts in Class I areas have been developed for new source review as part of the NMAQB Construction and PSD permitting processes (NMAQB Regulations 20NMAC2.72 and 20NMAC2.74). Regulation 20NMAC2.72 requires proposed stationary sources that emit more than 25 tons per year or 10 pounds per hour to demonstrate compliance with the Class I increments, in addition to the ambient air quality standards. In addition to these requirements, Regulation 20NMAC2.74 requires that proposed major sources that emit more than 100 or 250 tons per year of a pollutant (depending on the source type) to determine the potential for these sources to affect (1) visibility and (2) atmospheric deposition of pollutants in Class I areas. The National Park Service, USFWS, and USFS, as part of their Federal Land Managers' Air Quality Related Values Work Group process, have developed new source review guidelines for the evaluation of impacts in Class I areas. However, the criteria to evaluate impacts to Class I areas as part of the NEPA process under these guidelines are not well defined.

The following presents analyses to evaluate the impact of proposed gas production emissions to Class I areas in proximity to the project region. These analyses include (1) a quantitative analysis to estimate impacts to PSD NO_2 increment levels and (2) a qualitative analysis to estimate visibility impacts.

PSD Increment Analysis

The ISCST3 model was used to predict the maximum annual concentrations of NO_2 within nearby Class I areas from the same emissions module analyzed for project near-field impacts. These estimated NO_2 impacts were then compared to the PSD Class I increment for NO_2 (2.5 $\mu g/m^3$) to determine compliance with this standard. To minimize the transport distance of emissions from the module to each Class I area considered in the analysis, a module was placed within the nearest projected high density well development area (greater than 6 wells per square mile) in proximity to each Class I area (See Figure 9.1-1 in the RFDS [Engler et al. 2001)]). The transport distances between each emissions module and Class I area include the following:

1. Mesa Verde - 19 miles to the northwest.

2. Weminuche NWA - 29 miles to the north.

3. San Pedro NWA 1 - 42 miles to the south-southeast.

4. San Pedro NWA 2 - 42 miles to the southeast.

5. San Pedro NWA 3 - 50 miles to the east-southeast.

The analysis evaluated the impact of an emissions module to the San Pedro NWA from the three closest projected high density well development areas to ensure identification of maximum impacts.

The results of the analysis determined that the maximum annual NO_2 impact within each of the three Class I areas would be (1) 0.12 $\mu g/m^3$ within Mesa Verde, (2) 0.05 $\mu g/m^3$ within Weminuche NWA, and (3) 0.10 $\mu g/m^3$ within San Pedro NWA. On the average, the wellhead compressors produced about 74 percent of the total impact at these locations, compared to the central compressors. Existing and approved emission sources within the project area have consumed a portion of the PSD Class I increment within each of these areas and therefore the amount of increment available to new sources is something less than 2.5 $\mu g/m^3$. However, since the NO_2 impact from the emissions module within any Class I area is a maximum of 5 percent of the Class I increment, these impacts would not be expected to contribute to an exceedance of the PSD Class I increment for NO_2. Modeling result printouts for maximum annual impact case within Mesa Verde is provided as Attachment 6 of this Technical Report.

The above analysis provides a relative sense of the impact of proposed emission sources to Class I areas. The analysis evaluated a very conservative scenario of emissions of which the majority of the sources would be exempt from a Class I increment analysis under NMAQB regulatory requirements. Nevertheless, at some point in the future the combined impact of all proposed RMP gas production sources to Class I increment levels would be somewhat greater than the levels estimated for the emissions module. As a result, emissions from proposed RMP sources in future years would consume some of the allowable NO_x increment within nearby Class I areas. Given the magnitude of emissions estimated for Alternative B in future years and the sensitivity of the air quality resource in Class I Areas, the impact of NO_x emissions from proposed RMP sources to nearby Class I areas would be potentially significant.

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Attachment 1
ISCST3 Modeling Results – Maximum NO_x Annual Impact

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CO STARTING
CO TITLEONE FARMINGTON RMP EIS - FULL EMISSION SOURCE MODULE
CO TITLETWO NOX EMISSIONS - FULL MET - 100M GRID - 280 DEGREE WIND ROTATION
CO MODELOPT CONC   RURAL                      DFAULT
CO AVERTIME 1 24 PERIOD
CO POLLUTID OTHER
CO DCAYCOEF 0.000000E+00
CO TERRHGTS FLAT
CO RUNORNOT RUN
CO ERRORFIL ERRORS.OUT
CO FINISHED

SO STARTING

** Source Location Cards:
**               SRCID      SRCTYP              XS        YS       ZS

SO LOCATION      CC1      POINT             0.00     18.29     0.00
SO LOCATION      CC2      POINT             0.00      0.00     0.00
SO LOCATION      CC3      POINT             0.00    -18.29     0.00
SO LOCATION      WC1      POINT          -804.67   -201.17     0.00
SO LOCATION      WC2      POINT          -804.67   -603.50     0.00
SO LOCATION      WC3      POINT          -804.67  -1005.84     0.00
SO LOCATION      WC4      POINT          -804.67  -1408.18     0.00
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SO LOCATION      WC8      POINT          -804.67  -3017.55     0.00
SO LOCATION      WC9      POINT             0.00   -201.17     0.00
SO LOCATION     WC10      POINT             0.00   -603.50     0.00
SO LOCATION     WC11      POINT             0.00  -1005.84     0.00
SO LOCATION     WC12      POINT             0.00  -1408.18     0.00
SO LOCATION     WC13      POINT             0.00  -1810.53     0.00
SO LOCATION     WC14      POINT             0.00  -2212.87     0.00
SO LOCATION     WC15      POINT             0.00  -2615.21     0.00
SO LOCATION     WC16      POINT             0.00  -3017.55     0.00
SO LOCATION     WC17      POINT           804.67   -201.17     0.00
SO LOCATION     WC18      POINT           804.67   -603.50     0.00
SO LOCATION     WC19      POINT           804.67  -1005.84     0.00
SO LOCATION     WC20      POINT           804.67  -1408.18     0.00
SO LOCATION     WC21      POINT           804.67  -1810.53     0.00
SO LOCATION     WC22      POINT           804.67  -2212.87     0.00
SO LOCATION     WC23      POINT           804.67  -2615.21     0.00
SO LOCATION     WC24      POINT           804.67  -3017.55     0.00
SO LOCATION     WC25      POINT          1609.34   -201.17     0.00
SO LOCATION     WC26      POINT          1609.34   -603.50     0.00
SO LOCATION     WC27      POINT          1609.34  -1005.84     0.00
SO LOCATION     WC28      POINT          1609.34  -1408.18     0.00
SO LOCATION     WC29      POINT          1609.34  -1810.53     0.00
SO LOCATION     WC30      POINT          1609.34  -2212.87     0.00
SO LOCATION     WC31      POINT          1609.34  -2615.21     0.00
SO LOCATION     WC32      POINT          1609.34  -3017.55     0.00

** Source Parameter Cards:
** POINT:    SRCID        QS          HS          TS       VS        DS
** VOLUME:   SRCID        QS          HS        SYINIT    SZINIT
** AREA:     SRCID        QS          HS         XINIT    YINIT      ANGLE SZINIT
```

```
SO SRCPARAM    CC1      1.98         6.10       661.0    25.80      0.67
SO SRCPARAM    CC2      1.98         6.10       661.0    25.80      0.67
SO SRCPARAM    CC3      1.98         6.10       661.0    25.80      0.67
SO SRCPARAM    WC1      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC2      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC3      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC4      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC5      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC6      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC7      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC8      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC9      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC10      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC11      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC12      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC13      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC14      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC15      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC16      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC17      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC18      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC19      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC20      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC21      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC22      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC23      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC24      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC25      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC26      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC27      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC28      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC29      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC30      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC31      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC32      0.42         3.08       836.0    27.81      0.10

SO EMISUNIT   0.100000E+07 (GRAMS/SEC)          (MICROGRAMS/CUBIC-METER)

SO SRCGROUP  ALL
SO SRCGROUP   CC  CC1-CC3
SO SRCGROUP   WC  WC1-WC32

SO FINISHED

RE STARTING
RE GRIDCART GRID1 STA
RE GRIDCART GRID1 XYINC -800.00 17 100.00 -4000.00 61 100.00
RE GRIDCART GRID1 END

RE FINISHED

ME STARTING
ME INPUTFIL  BLOOM97.MET
ME ANEMHGHT  10.000 METERS
ME SURFDATA     36  1997            SURFNAME
ME UAIRDATA  23050  1997            UAIRNAME
ME WDROTATE  -80
ME WINDCATS    1.54    3.09    5.14    8.23   10.80
ME FINISHED
```

```
OU STARTING
**OU RECTABLE  ALLAVE  FIRST
OU MAXTABLE  ALLAVE  10
OU FINISHED

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

CONC RURAL FLAT DFAULT

*** MODEL SETUP OPTIONS SUMMARY ***

- -

**Intermediate Terrain Processing is Selected

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

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

**Model Uses RURAL Dispersion.

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

**Model Assumes Receptors on FLAT Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates 2 Short Term Average(s) of: 1-HR 24-HR
    and Calculates PERIOD Averages

**This Run Includes: 35 Source(s); 3 Source Group(s); and 1037 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 PERIOD Averages by Receptor
         Model Outputs Tables of Overall Maximum Short Term Values (MAXTABLE Keyword)

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

**Misc. Inputs: Anem. Hgt. (m) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = -80.0
                 Emission Units = (GRAMS/SEC) ; Emission Rate Unit Factor = 0.10000E+07
                 Output Units   = (MICROGRAMS/CUBIC-METER)

**Approximate Storage Requirements of Model = 1.3 MB of RAM.

```
**Input Runstream File:          mod280.inp
**Output Print File:             mod280.out
**Detailed Error/Message File:   ERRORS.OUT
```

CONC RURAL FLAT DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
CC1	0	0.19800E+01	0.0	18.3	0.0	6.10	661.00	25.80	0.67	NO	
CC2	0	0.19800E+01	0.0	0.0	0.0	6.10	661.00	25.80	0.67	NO	
CC3	0	0.19800E+01	0.0	-18.3	0.0	6.10	661.00	25.80	0.67	NO	
WC1	0	0.42000E+00	-804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC2	0	0.42000E+00	-804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC3	0	0.42000E+00	-804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC4	0	0.42000E+00	-804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC5	0	0.42000E+00	-804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC6	0	0.42000E+00	-804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC7	0	0.42000E+00	-804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC8	0	0.42000E+00	-804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC9	0	0.42000E+00	0.0	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC10	0	0.42000E+00	0.0	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC11	0	0.42000E+00	0.0	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC12	0	0.42000E+00	0.0	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC13	0	0.42000E+00	0.0	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC14	0	0.42000E+00	0.0	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC15	0	0.42000E+00	0.0	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC16	0	0.42000E+00	0.0	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC17	0	0.42000E+00	804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC18	0	0.42000E+00	804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC19	0	0.42000E+00	804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC20	0	0.42000E+00	804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC21	0	0.42000E+00	804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC22	0	0.42000E+00	804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC23	0	0.42000E+00	804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC24	0	0.42000E+00	804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC25	0	0.42000E+00	1609.3	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC26	0	0.42000E+00	1609.3	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC27	0	0.42000E+00	1609.3	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC28	0	0.42000E+00	1609.3	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC29	0	0.42000E+00	1609.3	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC30	0	0.42000E+00	1609.3	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC31	0	0.42000E+00	1609.3	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC32	0	0.42000E+00	1609.3	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	

CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,
CC	CC1 , CC2 , CC3 ,
WC	WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,

CONC RURAL FLAT DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

-800.0, -700.0, -600.0, -500.0, -400.0, -300.0, -200.0, -100.0, 0.0, 100.0,
200.0, 300.0, 400.0, 500.0, 600.0, 700.0, 800.0,

*** Y-COORDINATES OF GRID ***
(METERS)

-4000.0, -3900.0, -3800.0, -3700.0, -3600.0, -3500.0, -3400.0, -3300.0, -3200.0, -3100.0,
-3000.0, -2900.0, -2800.0, -2700.0, -2600.0, -2500.0, -2400.0, -2300.0, -2200.0, -2100.0,
-2000.0, -1900.0, -1800.0, -1700.0, -1600.0, -1500.0, -1400.0, -1300.0, -1200.0, -1100.0,
-1000.0, -900.0, -800.0, -700.0, -600.0, -500.0, -400.0, -300.0, -200.0, -100.0,
0.0, 100.0, 200.0, 300.0, 400.0, 500.0, 600.0, 700.0, 800.0, 900.0,
1000.0, 1100.0, 1200.0, 1300.0, 1400.0, 1500.0, 1600.0, 1700.0, 1800.0, 1900.0,
2000.0,

CONC RURAL FLAT DFAULT

* 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)
CC2	0.0	0.0	0.00

*** 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	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
B	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
C	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00
D	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
E	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00
F	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00

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

STABILITY	WIND SPEED CATEGORY					
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 RURAL FLAT DFAULT

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

FILE: BLOOM97.MET
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 36 UPPER AIR STATION NO.: 23050
NAME: SURFNAME NAME: UAIRNAME
YEAR: 1997 YEAR: 1997

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)
97	01	01	01	72.1	1.00	272.9	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	02	83.7	1.00	272.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	03	162.7	1.00	271.9	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	04	175.1	1.30	271.6	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	05	128.0	1.10	271.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	06	129.5	1.00	271.3	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	07	175.6	1.00	271.3	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	08	120.4	1.00	271.0	5	78.3	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	09	204.9	1.00	273.0	4	231.9	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	10	14.0	1.60	275.1	3	385.6	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	11	32.7	1.00	277.4	2	539.2	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	12	349.7	1.80	279.5	2	692.8	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	13	355.1	1.30	281.4	2	846.4	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	14	46.8	1.40	282.6	2	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	15	79.5	2.80	283.4	3	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	16	93.8	2.10	283.6	4	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	17	80.0	1.00	282.8	4	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	18	192.7	1.80	279.5	5	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	19	197.4	1.60	277.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	20	182.2	1.00	276.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	21	178.8	1.20	275.5	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	22	184.3	1.10	274.5	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	23	93.5	1.00	273.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	24	163.8	1.00	273.1	6	1000.0	1000.0	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.

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
2000.00	3.22257	3.22344	3.25965	3.32747	3.38238	3.41496	3.42245	3.34969	3.17687
1900.00	3.35247	3.35304	3.38535	3.46732	3.54485	3.58145	3.59961	3.52917	3.33455
1800.00	3.48566	3.48710	3.51467	3.60926	3.71436	3.75836	3.79386	3.72355	3.50909
1700.00	3.62076	3.63474	3.65071	3.75026	3.88207	3.95134	4.00163	3.93636	3.70244
1600.00	3.74313	3.79386	3.80771	3.89927	4.03745	4.15090	4.22621	4.16687	3.91914
1500.00	3.85206	3.94503	3.98410	4.07456	4.19711	4.33627	4.46009	4.41809	4.16056
1400.00	3.97697	4.08335	4.16398	4.26659	4.39067	4.52546	4.67464	4.68775	4.42541
1300.00	4.11416	4.22636	4.34702	4.46330	4.60138	4.75919	4.88519	4.95469	4.69545
1200.00	4.23511	4.37148	4.53610	4.67865	4.81578	5.01322	5.14810	5.22434	4.95612
1100.00	4.36542	4.47979	4.70716	4.91187	5.05956	5.25955	5.46391	5.53351	5.24007
1000.00	4.52676	4.60235	4.81499	5.11287	5.34034	5.52403	5.78927	5.91728	5.56323
900.00	4.77693	4.78348	4.93193	5.20893	5.57381	5.83291	6.08895	6.34900	5.95071
800.00	5.10423	5.04197	5.15432	5.32536	5.65674	6.08956	6.42485	6.78356	6.41150
700.00	5.40015	5.37253	5.40866	5.54970	5.78418	6.20056	6.73543	7.22858	6.84091
600.00	5.70384	5.67530	5.68158	5.80424	6.01910	6.35294	6.98153	7.56023	7.27526
500.00	6.21506	6.07378	5.99785	5.98848	6.25190	6.61731	7.16344	7.82474	7.66770
400.00	6.89204	6.64442	6.56792	6.41205	6.41722	6.92058	7.33464	8.05432	7.97621
300.00	7.97939	7.40445	7.11169	7.11269	7.05513	7.13608	7.65612	8.46902	8.30223
200.00	9.36856	8.55373	7.95592	7.88157	8.00298	7.86410	8.51341	8.96188	8.55122
100.00	11.83963	10.26712	9.34947	8.92340	8.89277	9.36980	9.51212	10.56066	10.33914
0.00	15.74153	12.50871	11.77056	11.40196	10.91390	10.89167	11.38202	13.19711	13.82597
-100.00	23.71239	15.84678	14.98132	13.88248	13.15069	13.12944	13.14866	14.83737	22.48450
-200.00	15.75184	22.59198	18.51016	17.17080	16.76301	16.47557	17.36884	18.31874	14.95701
-300.00	34.63876	23.32789	19.19193	17.04174	16.31972	16.57770	17.27188	21.57487	35.32363
-400.00	26.94364	21.41852	18.73670	17.56476	16.97633	16.91237	18.39920	22.81137	28.58996
-500.00	30.49692	22.31692	20.51030	19.08715	18.19179	18.45502	19.52033	23.34545	32.82751
-600.00	20.93998	27.88820	23.32278	21.62213	21.15268	21.19515	22.62974	24.89018	22.05272
-700.00	39.18412	27.64384	23.30834	20.81984	20.05877	20.52783	21.78296	26.14415	39.58596
-800.00	30.42474	24.90766	22.03443	20.78900	20.15064	20.23708	21.95985	25.97898	31.05210
-900.00	33.10168	25.12267	23.30579	21.84012	20.91371	21.28017	22.12999	25.56468	34.24044
-1000.00	23.26732	30.46689	25.71114	23.92922	23.48317	23.42208	24.70862	26.33451	23.22957
-1100.00	41.61306	29.81212	25.32932	22.75616	22.13924	22.42581	23.48131	27.31243	40.92524
-1200.00	32.20847	26.70200	23.68440	22.48673	21.84367	21.80164	23.32729	27.03778	31.94289
-1300.00	34.31190	26.55076	24.70054	23.27586	22.24371	22.60247	23.25968	26.47180	34.71060
-1400.00	24.39844	31.75236	26.99474	25.18037	24.55393	24.55099	25.60147	26.88529	23.76761
-1500.00	42.89137	30.95118	26.53927	23.87267	23.15269	23.41648	24.23343	27.84364	41.67700
-1600.00	33.02143	27.71727	24.74287	23.37674	22.65985	22.54630	23.94441	27.49158	32.29306
-1700.00	34.77535	27.33573	25.49507	23.95376	22.92958	23.19942	23.65961	26.81171	34.73322
-1800.00	24.85985	32.41788	27.65088	25.72539	25.09632	24.98920	25.83999	26.96240	23.87073
-1900.00	43.61290	31.51475	27.03083	24.33947	23.65112	23.80874	24.46577	27.89122	42.06109

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
-2000.00	33.42011	28.07614	24.99494	23.65623	22.94716	22.73243	24.07694	27.56354	32.40580
-2100.00	34.85140	27.41841	25.47151	24.03002	23.01560	23.18368	23.65294	26.87805	34.56419
-2200.00	24.95437	32.38292	27.55790	25.62091	24.95419	24.78225	25.66128	26.79219	23.80684
-2300.00	43.87990	31.47813	26.90087	24.17358	23.44456	23.54995	24.18428	27.59085	42.20564
-2400.00	33.16896	27.90436	24.75249	23.34436	22.60003	22.27174	23.56383	27.12094	32.08992
-2500.00	34.07220	26.90773	25.01828	23.54389	22.50724	22.61678	22.91624	26.23136	33.77858
-2600.00	24.10621	31.57852	26.96150	24.97360	24.18688	24.01347	24.74690	25.82033	23.01535
-2700.00	43.03333	30.51836	26.08672	23.46432	22.59263	22.59559	23.12980	26.46329	41.40273
-2800.00	31.82725	26.61878	23.56249	22.30450	21.53756	20.92042	22.21016	25.68350	30.81180
-2900.00	31.98157	25.27970	23.47448	22.04273	21.03573	20.99985	21.07228	24.17795	31.76113
-3000.00	21.41920	29.27996	25.14679	23.12666	22.12603	21.91626	22.09835	22.76213	20.54175
-3100.00	38.93172	27.40192	23.53253	21.15254	20.26515	19.74005	19.82952	22.04931	37.52731
-3200.00	24.95451	22.15634	19.57634	18.52799	17.88527	17.39148	17.92539	19.69242	24.17204
-3300.00	18.71677	18.28061	17.08611	16.42116	15.71740	15.62374	15.94978	16.88031	18.28182
-3400.00	15.44489	15.77118	15.18623	14.58357	14.20945	14.25715	14.26584	14.63414	15.24105
-3500.00	13.51266	13.81038	13.66446	13.14302	13.02946	12.96079	13.03325	13.26206	13.45796
-3600.00	11.99485	12.39968	12.24243	12.20041	12.08760	11.88669	12.15567	12.25081	12.07456
-3700.00	10.82614	11.21965	11.38629	11.38867	11.20252	11.20582	11.19732	11.19992	11.02727
-3800.00	9.95605	10.47454	10.60019	10.60714	10.45682	10.48075	10.42334	10.20770	10.22268
-3900.00	9.31145	9.75456	9.90901	9.79078	9.81431	9.78649	9.69094	9.56950	9.57287
-4000.00	8.70178	9.13716	9.18217	9.20211	9.25170	9.15582	9.16768	9.03771	8.96671

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
2000.00	3.03089	2.91010	2.83719	2.75514	2.66636	2.60979	2.55114	2.42433
1900.00	3.16265	3.02659	2.95257	2.87179	2.76923	2.72627	2.66193	2.52609
1800.00	3.31320	3.15800	3.06829	2.99163	2.88177	2.84775	2.78150	2.63764
1700.00	3.48291	3.30346	3.19888	3.10901	3.00721	2.97542	2.90878	2.74985
1600.00	3.67135	3.46196	3.35240	3.23022	3.14263	3.11230	3.03131	2.86546
1500.00	3.87954	3.64069	3.51950	3.37382	3.28966	3.24364	3.15068	2.99761
1400.00	4.10890	3.85071	3.68867	3.55295	3.45006	3.35522	3.28876	3.14862
1300.00	4.36770	4.08864	3.87814	3.74735	3.62296	3.47968	3.44676	3.29910
1200.00	4.63788	4.35113	4.10775	3.93076	3.81277	3.66416	3.59386	3.46207
1100.00	4.87836	4.62739	4.34961	4.13764	4.02910	3.88247	3.75326	3.66460
1000.00	5.14309	4.85302	4.57753	4.41311	4.26161	4.10222	4.00451	3.88947
900.00	5.42000	5.05363	4.80299	4.67594	4.51009	4.37285	4.33675	4.11363
800.00	5.69678	5.30442	5.07092	4.86142	4.78376	4.75985	4.62831	4.37221
700.00	6.05855	5.57047	5.34526	5.12666	5.07846	5.11257	4.91516	4.66434
600.00	6.41837	5.86375	5.60834	5.56314	5.43174	5.35331	5.24149	5.11296
500.00	6.74912	6.19064	5.87730	5.97930	5.87562	5.73961	5.73463	5.62525
400.00	6.95818	6.59808	6.42200	6.17644	6.43037	6.46268	6.52066	6.21312
300.00	7.13203	6.84393	6.89669	6.87331	7.00980	7.37466	7.54246	7.05656
200.00	7.58575	7.17472	7.32704	7.78577	7.78628	8.39134	8.77570	8.29770
100.00	8.79058	8.14175	8.24624	8.49399	9.10748	9.32077	10.32231	10.12590
0.00	10.51411	10.09828	10.44789	10.20215	10.20229	10.66564	12.26383	13.27157
-100.00	13.92043	13.75278	13.15273	12.45973	12.37115	12.35915	13.67615	22.08709
-200.00	22.09057	18.12183	16.72966	16.05110	15.28681	15.63005	16.24667	11.97297
-300.00	24.38941	19.24552	16.61830	15.36650	14.97561	14.94176	17.74666	29.43295
-400.00	22.78841	18.98547	17.01497	15.77781	15.05719	15.50938	18.27199	22.87391
-500.00	23.54535	20.73194	18.35253	16.69029	16.24313	16.30828	18.47081	27.81991
-600.00	28.84604	23.19391	20.45124	19.25688	18.46178	18.85149	19.98130	16.28472
-700.00	28.33052	22.99941	19.57863	17.92932	17.44227	17.66328	20.82173	33.04882
-800.00	25.24886	21.58391	19.49873	17.97189	17.09022	17.76068	20.79910	25.42450
-900.00	25.22870	22.68674	20.43224	18.55445	18.06389	18.09120	20.59285	29.60460
-1000.00	30.35832	24.80207	22.16858	20.86115	20.06005	20.44072	21.56804	17.91893
-1100.00	29.59000	24.34556	20.96221	19.43569	18.93091	19.14377	22.21630	34.78975
-1200.00	26.26727	22.55648	20.67525	19.26965	18.36711	19.08564	22.11383	26.74689
-1300.00	25.96423	23.42099	21.34441	19.62656	19.19304	19.29994	21.80114	30.52428
-1400.00	30.99876	25.45601	22.93445	21.74442	21.08401	21.54540	22.48360	18.91128
-1500.00	30.13521	24.96054	21.67803	20.29017	19.91998	20.15215	23.07561	35.92848
-1600.00	26.70480	23.10399	21.25682	19.97659	19.16553	19.92284	22.90264	27.53297
-1700.00	26.22383	23.84666	21.78359	20.16600	19.87565	19.93510	22.48670	30.95568
-1800.00	31.23663	25.83994	23.26149	22.13678	21.62548	22.05564	22.89744	19.42257
-1900.00	30.37746	25.23278	21.94439	20.66971	20.41112	20.63964	23.42734	36.61585

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
-2000.00	26.82987	23.20730	21.37429	20.20401	19.45041	20.27970	23.20181	27.92113
-2100.00	26.17298	23.73473	21.75339	20.25554	19.96700	20.10982	22.73423	30.99872
-2200.00	31.12196	25.69885	23.13591	22.04059	21.53831	22.05162	22.90379	19.56568
-2300.00	30.28620	25.08560	21.80354	20.51769	20.28995	20.53154	23.34012	36.87524
-2400.00	26.66260	22.96759	21.10767	19.93181	19.14339	19.94713	22.98493	27.77588
-2500.00	25.70345	23.31307	21.36220	19.85903	19.55337	19.54210	22.32638	30.41849
-2600.00	30.34683	25.15268	22.60878	21.43818	20.98340	21.34777	22.15382	19.04055
-2700.00	29.35037	24.29906	21.20158	19.85486	19.57786	19.72893	22.49430	36.34824
-2800.00	25.39352	21.82518	20.20690	19.08252	18.03617	18.88077	21.85481	26.87783
-2900.00	24.15548	21.88660	20.06047	18.65240	18.24822	18.04004	20.63835	28.79043
-3000.00	28.25331	23.63490	21.16035	19.82878	19.35694	19.21493	19.60781	17.08442
-3100.00	26.57176	22.21108	19.44241	18.21299	17.44550	17.23228	18.93311	33.14917
-3200.00	21.34464	18.37851	17.07978	16.20403	15.37958	15.58162	17.03368	21.18527
-3300.00	17.65572	16.16895	15.22433	14.28919	13.92022	14.06008	14.79316	16.04879
-3400.00	15.32704	14.52806	13.66808	13.14821	13.07404	12.89975	13.10389	13.55497
-3500.00	13.57119	13.24813	12.56345	12.28789	12.12622	12.06055	12.12148	12.09919
-3600.00	12.30239	11.98403	11.86117	11.64984	11.24174	11.32749	11.30595	10.94500
-3700.00	11.24994	11.27811	11.15468	10.84919	10.67332	10.54864	10.45928	10.17333
-3800.00	10.58090	10.58248	10.42703	10.20205	10.14528	9.95739	9.64672	9.52036
-3900.00	9.90838	9.94455	9.74528	9.66428	9.58295	9.38324	9.11720	8.93014
-4000.00	9.28488	9.25509	9.26091	9.24876	9.00641	8.88562	8.67544	8.45297

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
2000.00	0.85968	0.87039	0.91166	0.97646	1.03102	1.05540	1.05791	1.00466	0.90343
1900.00	0.89264	0.90510	0.94020	1.00686	1.07458	1.11146	1.12067	1.06709	0.95647
1800.00	0.91568	0.94160	0.97149	1.03719	1.11722	1.17048	1.18899	1.13640	1.01516
1700.00	0.92058	0.97592	1.00636	1.06900	1.15899	1.23190	1.26332	1.21364	1.08035
1600.00	0.90294	0.99991	1.04359	1.10312	1.19979	1.29458	1.34382	1.29988	1.15295
1500.00	0.86429	1.00302	1.07911	1.13974	1.23992	1.35700	1.43038	1.39624	1.23392
1400.00	0.81577	0.97724	1.10355	1.17765	1.27998	1.41745	1.52232	1.50385	1.32432
1300.00	0.76312	0.92445	1.10240	1.21266	1.32017	1.47433	1.61805	1.62368	1.42515
1200.00	0.71323	0.85912	1.06312	1.23441	1.35892	1.52637	1.71451	1.75622	1.53728
1100.00	0.68575	0.79037	0.98777	1.22368	1.39086	1.57246	1.80654	1.90090	1.66102
1000.00	0.66734	0.73579	0.89641	1.16043	1.40334	1.61022	1.88652	2.05430	1.79488
900.00	0.63710	0.70017	0.80762	1.04677	1.36761	1.62223	1.93095	2.19731	1.92709
800.00	0.59635	0.65236	0.74134	0.90567	1.24014	1.58701	1.93313	2.31874	2.05346
700.00	0.51608	0.59306	0.65990	0.77796	1.04036	1.47469	1.88055	2.38810	2.15572
600.00	0.43256	0.49275	0.57012	0.65869	0.83134	1.24214	1.74682	2.35426	2.19947
500.00	0.43030	0.41116	0.45828	0.53749	0.65118	0.91703	1.48356	2.14828	2.12715
400.00	0.48959	0.42587	0.38935	0.41390	0.48543	0.62311	1.04214	1.71385	1.85847
300.00	0.63656	0.53739	0.42907	0.36281	0.35043	0.39304	0.55148	1.09564	1.34832
200.00	0.70003	0.62842	0.55886	0.46248	0.33858	0.25795	0.24475	0.28718	0.35360
100.00	0.94635	0.81132	0.67759	0.55824	0.44786	0.32866	0.13406	0.04293	0.01993
0.00	1.35721	1.20336	1.03975	0.88628	0.73718	0.59438	0.39872	0.30411	0.00000
-100.00	1.27777	1.10281	0.92179	0.75085	0.59239	0.46390	0.28164	0.12463	0.09556
-200.00	0.91488	0.78236	0.67765	0.60582	0.57149	0.63601	0.69051	0.72362	1.36698
-300.00	0.73174	0.67959	0.66530	0.72057	0.83367	0.97464	1.14161	1.96688	3.25018
-400.00	0.72144	0.74345	0.80796	0.89911	1.06083	1.20998	1.70007	2.73552	3.79009
-500.00	0.78972	0.83348	0.90634	1.05959	1.20027	1.43877	2.06321	3.05845	3.83688
-600.00	0.83546	0.89085	1.02571	1.15565	1.28013	1.66361	2.23236	3.06078	3.65218
-700.00	0.86245	0.98324	1.09988	1.18317	1.38053	1.79341	2.31847	2.93069	3.39852
-800.00	0.92903	1.03798	1.10818	1.21774	1.47025	1.84004	2.33784	2.76093	3.14075
-900.00	0.97625	1.03086	1.11382	1.24915	1.53264	1.84619	2.29954	2.58900	2.90103
-1000.00	0.96806	1.03630	1.10718	1.27968	1.55429	1.83475	2.22165	2.42610	2.68424
-1100.00	0.97370	1.02155	1.11013	1.31074	1.54465	1.81067	2.11640	2.26398	2.47776
-1200.00	0.96465	1.00414	1.12509	1.33397	1.52124	1.77925	2.01076	2.12001	2.29759
-1300.00	0.93872	0.99986	1.14792	1.33808	1.49779	1.73906	1.90957	1.99259	2.14075
-1400.00	0.91850	1.00792	1.17230	1.32373	1.47718	1.69136	1.81438	1.87915	2.00329
-1500.00	0.91209	1.02573	1.18599	1.30114	1.45721	1.63899	1.72560	1.77749	1.88195
-1600.00	0.91687	1.04917	1.18294	1.27935	1.43595	1.58490	1.64320	1.68586	1.77414
-1700.00	0.93131	1.06792	1.16679	1.26108	1.41213	1.53100	1.56703	1.60287	1.67782
-1800.00	0.95285	1.07377	1.14547	1.24530	1.38511	1.47818	1.49678	1.52737	1.59132
-1900.00	0.97181	1.06526	1.12535	1.23075	1.35524	1.42670	1.43207	1.45842	1.51327

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
-2000.00	0.98074	1.04566	1.10655	1.21474	1.32227	1.37597	1.37214	1.39506	1.44241
-2100.00	0.97772	1.02325	1.09038	1.19688	1.28664	1.32440	1.31470	1.33485	1.37605
-2200.00	0.96457	1.00260	1.07611	1.17738	1.25111	1.27482	1.26163	1.27918	1.31522
-2300.00	0.94539	0.98528	1.06311	1.15597	1.21599	1.22739	1.21257	1.22769	1.25940
-2400.00	0.92474	0.97079	1.05076	1.13295	1.18137	1.18222	1.16709	1.17993	1.20801
-2500.00	0.90591	0.95826	1.03827	1.10895	1.14723	1.13940	1.12480	1.13553	1.16054
-2600.00	0.89005	0.94719	1.02487	1.08454	1.11358	1.09893	1.08537	1.09415	1.11657
-2700.00	0.87683	0.93724	1.01012	1.06013	1.08046	1.06079	1.04850	1.05550	1.07572
-2800.00	0.86550	0.92800	0.99400	1.03589	1.04798	1.02489	1.01394	1.01931	1.03768
-2900.00	0.85547	0.91883	0.97683	1.01185	1.01624	0.99113	0.98146	0.98538	1.00215
-3000.00	0.84592	0.90836	0.95841	0.98758	0.98516	0.95929	0.95080	0.95346	0.96887
-3100.00	0.83733	0.89676	0.93937	0.96294	0.95449	0.92881	0.92138	0.92294	0.93716
-3200.00	0.82937	0.88409	0.92037	0.93852	0.92501	0.90014	0.89355	0.89415	0.90732
-3300.00	0.82157	0.87048	0.90154	0.91433	0.89676	0.87315	0.86721	0.86698	0.87925
-3400.00	0.81347	0.85619	0.88290	0.89044	0.86976	0.84770	0.84223	0.84130	0.85278
-3500.00	0.80469	0.84152	0.86442	0.86690	0.84402	0.82365	0.81852	0.81699	0.82779
-3600.00	0.79507	0.82671	0.84607	0.84381	0.81953	0.80090	0.79598	0.79395	0.80415
-3700.00	0.78462	0.81193	0.82781	0.82123	0.79624	0.77933	0.77453	0.77209	0.78175
-3800.00	0.77350	0.79728	0.80963	0.79924	0.77412	0.75886	0.75408	0.75131	0.76051
-3900.00	0.76190	0.78277	0.79154	0.77789	0.75312	0.73938	0.73458	0.73154	0.74033
-4000.00	0.74990	0.76826	0.77348	0.75717	0.73314	0.72080	0.71594	0.71271	0.72113

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
2000.00	0.80669	0.71877	0.66387	0.60934	0.53038	0.48207	0.45637	0.41466
1900.00	0.84869	0.75337	0.69166	0.62535	0.53980	0.50037	0.46373	0.42115
1800.00	0.89447	0.79070	0.72030	0.63918	0.55261	0.51668	0.47027	0.42913
1700.00	0.94451	0.83086	0.74954	0.65164	0.57028	0.52949	0.47807	0.43936
1600.00	0.99919	0.87376	0.77859	0.66414	0.59147	0.53988	0.48744	0.44979
1500.00	1.05887	0.91915	0.80624	0.67906	0.61241	0.55060	0.49899	0.45526
1400.00	1.12382	0.96654	0.83127	0.69882	0.62999	0.56245	0.51062	0.45952
1300.00	1.19403	1.01510	0.85310	0.72347	0.64517	0.57546	0.51704	0.47499
1200.00	1.26904	1.06329	0.87273	0.74884	0.65985	0.58766	0.52486	0.50850
1100.00	1.34752	1.10835	0.89287	0.77001	0.67350	0.59419	0.55067	0.55448
1000.00	1.42618	1.14576	0.91539	0.78621	0.68371	0.60719	0.59835	0.59166
900.00	1.49288	1.16470	0.93345	0.79564	0.68747	0.64849	0.64804	0.57709
800.00	1.54146	1.16352	0.93763	0.79194	0.70693	0.70849	0.64360	0.55180
700.00	1.55520	1.14074	0.92204	0.78108	0.76516	0.71681	0.60819	0.55427
600.00	1.50746	1.08791	0.87883	0.81071	0.79073	0.66635	0.60989	0.62024
500.00	1.36286	0.98445	0.83178	0.84939	0.72253	0.67238	0.70686	0.75972
400.00	1.09166	0.81462	0.84373	0.75658	0.74030	0.81605	0.87630	0.88322
300.00	0.73059	0.67704	0.70550	0.79324	0.94239	0.99838	0.98957	0.96720
200.00	0.24822	0.47633	0.74830	1.00075	1.10209	1.13565	1.12403	1.08238
100.00	0.03700	0.33581	0.87411	1.18016	1.30746	1.29513	1.22747	1.14378
0.00	0.02115	0.35097	1.03140	1.27527	1.33344	1.27329	1.17786	1.08166
-100.00	0.21675	0.93261	1.40375	1.45981	1.41743	1.30847	1.19000	1.08210
-200.00	1.51732	1.92547	2.10998	1.96111	1.71082	1.44963	1.24475	1.09598
-300.00	3.09876	2.54892	2.41444	2.26355	1.98505	1.69735	1.45425	1.24554
-400.00	3.67361	2.99891	2.53551	2.29201	2.04582	1.80686	1.57403	1.37804
-500.00	3.75198	3.14364	2.60089	2.24089	2.00247	1.78624	1.60157	1.43529
-600.00	3.60035	3.12082	2.58591	2.20006	1.93327	1.73757	1.56668	1.42203
-700.00	3.38265	3.01870	2.51880	2.14877	1.87964	1.67796	1.52397	1.38781
-800.00	3.15512	2.86827	2.43983	2.09051	1.82769	1.63014	1.47093	1.34707
-900.00	2.93732	2.70304	2.36440	2.02448	1.77193	1.58321	1.42708	1.30311
-1000.00	2.73421	2.53929	2.28062	1.95357	1.71681	1.53037	1.39005	1.26922
-1100.00	2.53549	2.37499	2.17937	1.88724	1.66106	1.48536	1.35309	1.23737
-1200.00	2.35909	2.22910	2.07432	1.83191	1.61161	1.44752	1.31106	1.21356
-1300.00	2.20329	2.10052	1.97304	1.78141	1.56440	1.40809	1.28096	1.18097
-1400.00	2.06523	1.98692	1.87837	1.72671	1.52251	1.37397	1.25484	1.14912
-1500.00	1.94236	1.88565	1.79016	1.66666	1.48967	1.34063	1.22573	1.13006
-1600.00	1.83254	1.79443	1.70814	1.60561	1.46109	1.30674	1.20110	1.11190
-1700.00	1.73399	1.71146	1.63256	1.54726	1.42986	1.27851	1.17789	1.08974
-1800.00	1.64521	1.63540	1.56365	1.49251	1.39337	1.25806	1.15141	1.07115
-1900.00	1.56492	1.56526	1.50129	1.44060	1.35359	1.24133	1.12512	1.05348

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
-2000.00	1.49184	1.49993	1.44437	1.38978	1.31250	1.22105	1.10335	1.03169
-2100.00	1.42306	1.43679	1.39058	1.33945	1.27286	1.19595	1.08817	1.00735
-2200.00	1.35999	1.37793	1.34128	1.29155	1.23580	1.16687	1.07618	0.98553
-2300.00	1.30208	1.32308	1.29567	1.24656	1.20057	1.13621	1.06323	0.96950
-2400.00	1.24874	1.27192	1.25308	1.20480	1.16631	1.10631	1.04667	0.95888
-2500.00	1.19947	1.22412	1.21300	1.16633	1.13259	1.07839	1.02618	0.95097
-2600.00	1.15382	1.17944	1.17504	1.13101	1.09944	1.05252	1.00312	0.94258
-2700.00	1.11140	1.13762	1.13890	1.09854	1.06719	1.02807	0.97945	0.93143
-2800.00	1.07190	1.09841	1.10442	1.06852	1.03622	1.00430	0.95674	0.91675
-2900.00	1.03500	1.06161	1.07144	1.04059	1.00689	0.98069	0.93575	0.89909
-3000.00	1.00043	1.02693	1.03971	1.01412	0.97911	0.95660	0.91594	0.87932
-3100.00	0.96737	0.99354	1.00852	0.98840	0.95284	0.93229	0.89729	0.85961
-3200.00	0.93629	0.96206	0.97868	0.96383	0.92849	0.90830	0.87932	0.84101
-3300.00	0.90705	0.93238	0.95016	0.94023	0.90590	0.88493	0.86151	0.82396
-3400.00	0.87949	0.90435	0.92291	0.91745	0.88489	0.86247	0.84357	0.80843
-3500.00	0.85347	0.87784	0.89688	0.89539	0.86525	0.84111	0.82541	0.79402
-3600.00	0.82886	0.85274	0.87202	0.87399	0.84676	0.82099	0.80713	0.78028
-3700.00	0.80556	0.82894	0.84828	0.85319	0.82922	0.80216	0.78890	0.76677
-3800.00	0.78345	0.80634	0.82561	0.83298	0.81247	0.78459	0.77094	0.75317
-3900.00	0.76246	0.78486	0.80395	0.81335	0.79635	0.76820	0.75347	0.73933
-4000.00	0.74250	0.76441	0.78325	0.79426	0.78072	0.75283	0.73656	0.72507

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
2000.00	2.36291	2.35306	2.34801	2.35103	2.35137	2.35959	2.36456	2.34505	2.27345
1900.00	2.45984	2.44795	2.44516	2.46047	2.47029	2.47001	2.47896	2.46209	2.37811
1800.00	2.57001	2.54551	2.54318	2.57208	2.59715	2.58787	2.60488	2.58716	2.49395
1700.00	2.70019	2.65883	2.64436	2.68128	2.72309	2.71945	2.73835	2.72274	2.62210
1600.00	2.84021	2.79397	2.76412	2.79618	2.83768	2.85634	2.88242	2.86702	2.76621
1500.00	2.98778	2.94203	2.90501	2.93485	2.95720	2.97931	3.02973	3.02188	2.92667
1400.00	3.16122	3.10614	3.06044	3.08896	3.11069	3.10803	3.15233	3.18391	3.10114
1300.00	3.35106	3.30192	3.24464	3.25066	3.28124	3.28490	3.26717	3.33103	3.27031
1200.00	3.52189	3.51238	3.47302	3.44425	3.45687	3.48689	3.43362	3.46816	3.41888
1100.00	3.67971	3.68944	3.71945	3.68823	3.66874	3.68713	3.65742	3.63269	3.57909
1000.00	3.85943	3.86659	3.91861	3.95248	3.93702	3.91385	3.90280	3.86303	3.76839
900.00	4.13985	4.08332	4.12433	4.16221	4.20622	4.21070	4.15806	4.15174	4.02368
800.00	4.50789	4.38962	4.41302	4.41972	4.41664	4.50259	4.49174	4.46487	4.35808
700.00	4.88408	4.77947	4.74876	4.77177	4.74386	4.72588	4.85490	4.84051	4.68521
600.00	5.27129	5.18256	5.11147	5.14558	5.18778	5.11082	5.23474	5.20602	5.07584
500.00	5.78478	5.66263	5.53959	5.45100	5.60073	5.70029	5.67993	5.67646	5.54058
400.00	6.40245	6.21857	6.17858	5.99816	5.93181	6.29750	6.29250	6.34049	6.11776
300.00	7.34285	6.86707	6.68264	6.74989	6.70471	6.74306	7.10468	7.37339	6.95392
200.00	8.66856	7.92533	7.39708	7.41912	7.66440	7.60616	8.26868	8.67473	8.19766
100.00	10.89334	9.45583	8.67194	8.36524	8.44496	9.04117	9.37810	10.51778	10.31924
0.00	14.38436	11.30542	10.73087	10.51572	10.17676	10.29731	10.98334	12.89304	13.82597
-100.00	22.43473	14.74407	14.05957	13.13168	12.55834	12.66560	12.86705	14.71281	22.38906
-200.00	14.83705	21.80971	17.83255	16.56506	16.19158	15.83966	16.67838	17.59520	13.59008
-300.00	33.90706	22.64838	18.52669	16.32124	15.48611	15.60310	16.13039	19.60805	32.07370
-400.00	26.22228	20.67514	17.92877	16.66575	15.91557	15.70248	16.69922	20.07596	24.80003
-500.00	29.70728	21.48352	19.60400	18.02762	16.99161	17.01630	17.45727	20.28708	28.99081
-600.00	20.10457	26.99738	22.29719	20.46655	19.87267	19.53160	20.39741	21.82948	18.40060
-700.00	38.32176	26.66062	22.20853	19.63670	18.67833	18.73453	19.46458	23.21360	36.18762
-800.00	29.49580	23.86975	20.92634	19.57133	18.68045	18.39714	19.62210	23.21812	27.91144
-900.00	32.12549	24.09189	22.19206	20.59111	19.38115	19.43408	19.83054	22.97585	31.33955
-1000.00	22.29928	29.43061	24.60403	22.64967	21.92896	21.58739	22.48705	23.90850	20.54541
-1100.00	40.63950	28.79062	24.21926	21.44555	20.59468	20.61524	21.36499	25.04858	38.44762
-1200.00	31.24396	25.69790	22.55942	21.15284	20.32254	20.02243	21.31667	24.91783	29.64541
-1300.00	33.37319	25.55096	23.55273	21.93786	20.74601	20.86350	21.35027	24.47938	32.56998
-1400.00	23.48001	30.74458	25.82251	23.85678	23.07688	22.85975	23.78717	25.00623	21.76437
-1500.00	41.97940	29.92552	25.35334	22.57156	21.69551	21.77760	22.50795	26.06623	39.79505
-1600.00	32.10468	26.66822	23.56000	22.09748	21.22395	20.96146	22.30130	25.80576	30.51908
-1700.00	33.84416	26.26793	24.32834	22.69275	21.51751	21.66853	22.09265	25.20896	33.05552
-1800.00	23.90708	31.34422	26.50551	24.48016	23.71131	23.51113	24.34330	25.43513	22.27951
-1900.00	42.64116	30.44960	25.90560	23.10879	22.29599	22.38211	23.03377	26.43282	40.54795

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
-2000.00	32.43948	27.03059	23.88841	22.44155	21.62503	21.35649	22.70491	26.16856	30.96348
-2100.00	33.87374	26.39524	24.38122	22.83323	21.72911	21.85936	22.33834	25.54329	33.18829
-2200.00	23.98984	31.38044	26.48197	24.44359	23.70320	23.50753	24.39974	25.51306	22.49166
-2300.00	42.93460	30.49298	25.83785	23.01768	22.22864	22.32269	22.97178	26.36323	40.94635
-2400.00	32.24431	26.93372	23.70179	22.21152	21.41876	21.08961	22.39689	25.94111	30.88199
-2500.00	33.16639	25.94950	23.98002	22.43505	21.36012	21.47749	21.79151	25.09592	32.61815
-2600.00	23.21624	30.63142	25.93676	23.88913	23.07335	22.91466	23.66161	24.72624	21.89886
-2700.00	42.15671	29.58114	25.07670	22.40427	21.51220	21.53492	22.08138	25.40792	40.32713
-2800.00	30.96185	25.69088	22.56855	21.26874	20.48969	19.89560	21.19633	24.66432	29.77424
-2900.00	31.12630	24.36097	22.49774	21.03095	20.01952	20.00882	20.09097	23.19265	30.75909
-3000.00	20.57332	28.37173	24.18846	22.13913	21.14097	20.95706	21.14760	21.80876	19.57295
-3100.00	38.09452	26.50524	22.59326	20.18977	19.31074	18.81132	18.90819	21.12648	36.59029
-3200.00	24.12522	21.27233	18.65601	17.58959	16.96031	16.49137	17.03192	18.79834	23.26478
-3300.00	17.89528	17.41020	16.18461	15.50694	14.82068	14.75068	15.08272	16.01339	17.40265
-3400.00	14.63148	14.91507	14.30338	13.69318	13.33975	13.40953	13.42366	13.79289	14.38832
-3500.00	12.70801	12.96894	12.80007	12.27614	12.18548	12.13718	12.21473	12.44513	12.63022
-3600.00	11.19981	11.57302	11.39641	11.35665	11.26812	11.08585	11.35975	11.45692	11.27048
-3700.00	10.04157	10.40771	10.55855	10.56749	10.40632	10.42650	10.42285	10.42788	10.24557
-3800.00	9.18260	9.67733	9.79060	9.80793	9.68274	9.72194	9.66930	9.45644	9.46224
-3900.00	8.54960	8.97180	9.11755	9.01293	9.06125	9.04714	8.95639	8.83800	8.83257
-4000.00	7.95191	8.36896	8.40876	8.44498	8.51858	8.43507	8.45179	8.32504	8.24568

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
2000.00	2.22421	2.19135	2.17334	2.14582	2.13598	2.12773	2.09479	2.00968
1900.00	2.31398	2.27324	2.26092	2.24647	2.22944	2.22592	2.19821	2.10495
1800.00	2.41874	2.36732	2.34799	2.35248	2.32917	2.33106	2.31125	2.20853
1700.00	2.53842	2.47261	2.44935	2.45739	2.43695	2.44595	2.43072	2.31050
1600.00	2.67218	2.58821	2.57384	2.56610	2.55117	2.57243	2.54388	2.41568
1500.00	2.82068	2.72156	2.71328	2.69478	2.67726	2.69306	2.65169	2.54237
1400.00	2.98511	2.88419	2.85742	2.85413	2.82007	2.79278	2.77815	2.68912
1300.00	3.17369	3.07356	3.02507	3.02390	2.97780	2.90424	2.92973	2.82413
1200.00	3.36885	3.28787	3.23504	3.18193	3.15293	3.07652	3.06901	2.95359
1100.00	3.53088	3.51907	3.45676	3.36763	3.35562	3.28829	3.20260	3.11014
1000.00	3.71693	3.70730	3.66215	3.62693	3.57793	3.49505	3.40618	3.29782
900.00	3.92713	3.88897	3.86956	3.88034	3.82264	3.72439	3.68872	3.53656
800.00	4.15534	4.14092	4.13331	4.06949	4.07684	4.05138	3.98471	3.82041
700.00	4.50339	4.42978	4.42325	4.34560	4.31332	4.39579	4.30700	4.11009
600.00	4.91093	4.77587	4.72952	4.75246	4.64105	4.68699	4.63162	4.49275
500.00	5.38629	5.20621	5.04555	5.12993	5.15312	5.06725	5.02779	4.86554
400.00	5.86654	5.78349	5.57829	5.41989	5.69008	5.64664	5.64437	5.32990
300.00	6.40146	6.16690	6.19121	6.08008	6.06743	6.37632	6.55291	6.08936
200.00	7.33753	6.69841	6.57877	6.78503	6.68421	7.25574	7.65170	7.21538
100.00	8.75360	7.80596	7.37216	7.31387	7.80010	8.02570	9.09488	8.98214
0.00	10.49300	9.74733	9.41654	8.92693	8.86887	9.39242	11.08600	12.18993
-100.00	13.70374	12.82021	11.74901	10.99997	10.95374	11.05072	12.48620	21.00500
-200.00	20.57341	16.19648	14.61983	14.09009	13.57603	14.18051	15.00202	10.87703
-300.00	21.29078	16.69680	14.20394	13.10297	12.99060	13.24444	16.29253	28.18743
-400.00	19.11498	15.98671	14.47960	13.48588	13.01139	13.70258	16.69802	21.49596
-500.00	19.79356	17.58849	15.75178	14.44954	14.24074	14.52216	16.86928	26.38471
-600.00	25.24574	20.07326	17.86546	17.05684	16.52858	17.11395	18.41470	14.86276
-700.00	24.94789	19.98083	17.05998	15.78062	15.56271	15.98536	19.29779	31.66112
-800.00	22.09381	18.71580	17.05905	15.88146	15.26258	16.13063	19.32827	24.07749
-900.00	22.29147	19.98384	18.06795	16.53008	16.29207	16.50805	19.16582	28.30161
-1000.00	27.62422	22.26294	19.88802	18.90775	18.34331	18.91050	20.17809	16.64977
-1100.00	27.05453	21.97063	18.78294	17.54857	17.26993	17.65849	20.86326	33.55252
-1200.00	23.90830	20.32743	18.60107	17.43785	16.75563	17.63821	20.80288	25.53340
-1300.00	23.76104	21.32066	19.37146	17.84527	17.62876	17.89191	20.52028	29.34339
-1400.00	28.93371	23.46921	21.05620	20.01784	19.56156	20.17154	21.22883	17.76218
-1500.00	28.19302	23.07496	19.88794	18.62366	18.43037	18.81157	21.84994	34.79845
-1600.00	24.87234	21.30964	19.54877	18.37108	17.70453	18.61619	21.70165	26.42111
-1700.00	24.48999	22.13531	20.15111	18.61881	18.44585	18.65674	21.30889	29.86607
-1800.00	29.59161	24.20459	21.69790	20.64435	20.23219	20.79767	21.74610	18.35150
-1900.00	28.81267	23.66761	20.44315	19.22916	19.05760	19.39839	22.30227	35.56247

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
-2000.00	25.33815	21.70746	19.93000	18.81430	18.13802	19.05878	22.09856	26.88952
-2100.00	24.75004	22.29807	20.36285	18.91615	18.69424	18.91396	21.64616	29.99141
-2200.00	29.76224	24.32105	21.79469	20.74916	20.30256	20.88480	21.82776	18.58021
-2300.00	28.98419	23.76264	20.50796	19.27124	19.08947	19.39540	22.27697	35.90596
-2400.00	25.41398	21.69580	19.85465	18.72709	17.97720	18.84092	21.93836	26.81712
-2500.00	24.50406	22.08903	20.14930	18.69280	18.42091	18.46383	21.30029	29.46760
-2600.00	29.19310	23.97335	21.43383	20.30723	19.88399	20.29533	21.15079	18.09800
-2700.00	28.23909	23.16153	20.06276	18.75647	18.51076	18.70091	21.51488	35.41693
-2800.00	24.32170	20.72686	19.10252	18.01409	17.00009	17.87659	20.89818	25.96117
-2900.00	23.12056	20.82509	18.98911	17.61184	17.24141	17.05944	19.70267	27.89142
-3000.00	27.25297	22.60800	20.12078	18.81480	18.37790	18.25837	18.69202	16.20519
-3100.00	25.60449	21.21766	18.43394	17.22469	16.49276	16.30009	18.03592	32.28973
-3200.00	20.40846	17.41659	16.10121	15.24027	14.45120	14.67337	16.15447	20.34437
-3300.00	16.74872	15.23664	14.27423	13.34901	13.01437	13.17521	13.93172	15.22492
-3400.00	14.44764	13.62376	12.74522	12.23082	12.18921	12.03734	12.26039	12.74660
-3500.00	12.71778	12.37034	11.66663	11.39253	11.26104	11.21951	11.29610	11.30522
-3600.00	11.47361	11.13132	10.98918	10.77590	10.39504	10.50657	10.49886	10.16476
-3700.00	10.44442	10.44921	10.30645	9.99603	9.84410	9.74654	9.67042	9.40662
-3800.00	9.79751	9.77620	9.60147	9.36911	9.33287	9.17287	8.87584	8.76722
-3900.00	9.14594	9.15974	8.94137	8.85097	8.78664	8.61510	8.36377	8.19089
-4000.00	8.54242	8.49071	8.47772	8.45456	8.22577	8.13285	7.93894	7.72796

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	545.24286	(97062501)	AT (	0.00, -3600.00)	GC	6.	540.95923	(97053119)	AT (	0.00, -2300.00)	GC
2.	544.57794	(97062501)	AT (	0.00, -3500.00)	GC	7.	540.89362	(97041805)	AT (	0.00, -3500.00)	GC
3.	543.82904	(97053119)	AT (	0.00, -1900.00)	GC	8.	540.41309	(97051819)	AT (	0.00, -1500.00)	GC
4.	543.76959	(97053119)	AT (	0.00, -1500.00)	GC	9.	539.99353	(97062501)	AT (	0.00, -3700.00)	GC
5.	541.23712	(97041805)	AT (	0.00, -3600.00)	GC	10.	539.51453	(97051819)	AT (	0.00, -1900.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	138.65611	(97042114)	AT	(-100.00, -400.00)	GC	6.	128.42654	(97070515)	AT	(-300.00, 0.00)	GC
2.	137.38986	(97032717)	AT	(-100.00, -300.00)	GC	7.	128.13858	(97032716)	AT	(-100.00, -500.00)	GC
3.	136.15353	(97101115)	AT	(-100.00, -400.00)	GC	8.	128.12584	(97040210)	AT	(300.00, 200.00)	GC
4.	131.97479	(97110115)	AT	(-100.00, -300.00)	GC	9.	128.10188	(97032912)	AT	(-100.00, -300.00)	GC
5.	129.18817	(97041114)	AT	(0.00, -300.00)	GC	10.	127.53363	(97050111)	AT	(-300.00, -300.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	508.62128	(97072808)	AT	(0.00, -100.00)	GC	6.	499.40955	(97053119)	AT	(0.00, -2300.00)	GC
2.	503.74509	(97072808)	AT	(0.00, -500.00)	GC	7.	498.75708	(97051819)	AT	(0.00, -2700.00)	GC
3.	500.64032	(97053119)	AT	(0.00, -2700.00)	GC	8.	498.66956	(97050603)	AT	(-800.00, -100.00)	GC
4.	499.87396	(97053119)	AT	(0.00, -3100.00)	GC	9.	497.39575	(97072808)	AT	(0.00, -900.00)	GC
5.	499.68182	(97051819)	AT	(0.00, -3100.00)	GC	10.	496.63791	(97100918)	AT	(0.00, -3200.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	254.59126	(97011324)	AT (	800.00, -100.00)	GC	6.	248.05455	(97111524)	AT (	0.00, -1900.00)	GC
2.	251.44994	(97111524)	AT (	0.00, -3100.00)	GC	7.	247.44218	(97111524)	AT (	0.00, -1500.00)	GC
3.	249.99323	(97111524)	AT (	0.00, -2700.00)	GC	8.	246.45245	(97111524)	AT (	0.00, -1100.00)	GC
4.	248.69310	(97111524)	AT (	0.00, -2300.00)	GC	9.	241.43391	(97011324)	AT (	800.00, -900.00)	GC
5.	248.05992	(97011324)	AT (	800.00, -500.00)	GC	10.	240.99635	(97111524)	AT (	0.00, -700.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	63.77265	(97011324)	AT	(-100.00, 800.00)	GC	6.	52.44122	(97011324)	AT	(-100.00, 1100.00)	GC
2.	62.56604	(97011324)	AT	(-100.00, 700.00)	GC	7.	49.60826	(97011324)	AT	(0.00, 600.00)	GC
3.	61.32962	(97011324)	AT	(-100.00, 900.00)	GC	8.	49.21632	(97011324)	AT	(0.00, 500.00)	GC
4.	57.14398	(97011324)	AT	(-100.00, 1000.00)	GC	9.	47.82855	(97011324)	AT	(-100.00, 1200.00)	GC
5.	55.04664	(97011324)	AT	(-100.00, 600.00)	GC	10.	47.36082	(97011324)	AT	(0.00, 700.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	254.59126	(97011324)	AT	(800.00, -100.00)	GC	6.	234.60553	(97011324)	AT	(800.00, -1300.00)	GC
2.	248.05992	(97011324)	AT	(800.00, -500.00)	GC	7.	233.48891	(97111524)	AT	(0.00, -2300.00)	GC
3.	241.43391	(97011324)	AT	(800.00, -900.00)	GC	8.	229.41551	(97111524)	AT	(0.00, -1900.00)	GC
4.	240.76605	(97111524)	AT	(0.00, -3100.00)	GC	9.	227.32135	(97011324)	AT	(800.00, -1700.00)	GC
5.	237.35567	(97111524)	AT	(0.00, -2700.00)	GC	10.	224.13676	(97111524)	AT	(0.00, -1500.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

GROUP ID		AVERAGE CONC		RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	43.87990	AT (	-800.00,	-2300.00,	0.00,	0.00)	GC	GRID1
	2ND HIGHEST VALUE IS	43.61290	AT (	-800.00,	-1900.00,	0.00,	0.00)	GC	GRID1
	3RD HIGHEST VALUE IS	43.03333	AT (	-800.00,	-2700.00,	0.00,	0.00)	GC	GRID1
	4TH HIGHEST VALUE IS	42.89137	AT (	-800.00,	-1500.00,	0.00,	0.00)	GC	GRID1
	5TH HIGHEST VALUE IS	42.20564	AT (	0.00,	-2300.00,	0.00,	0.00)	GC	GRID1
	6TH HIGHEST VALUE IS	42.06109	AT (	0.00,	-1900.00,	0.00,	0.00)	GC	GRID1
	7TH HIGHEST VALUE IS	41.67700	AT (	0.00,	-1500.00,	0.00,	0.00)	GC	GRID1
	8TH HIGHEST VALUE IS	41.61306	AT (	-800.00,	-1100.00,	0.00,	0.00)	GC	GRID1
	9TH HIGHEST VALUE IS	41.40273	AT (	0.00,	-2700.00,	0.00,	0.00)	GC	GRID1
	10TH HIGHEST VALUE IS	40.92524	AT (	0.00,	-1100.00,	0.00,	0.00)	GC	GRID1
CC	1ST HIGHEST VALUE IS	3.83688	AT (	0.00,	-500.00,	0.00,	0.00)	GC	GRID1
	2ND HIGHEST VALUE IS	3.79009	AT (	0.00,	-400.00,	0.00,	0.00)	GC	GRID1
	3RD HIGHEST VALUE IS	3.75198	AT (	100.00,	-500.00,	0.00,	0.00)	GC	GRID1
	4TH HIGHEST VALUE IS	3.67361	AT (	100.00,	-400.00,	0.00,	0.00)	GC	GRID1
	5TH HIGHEST VALUE IS	3.65218	AT (	0.00,	-600.00,	0.00,	0.00)	GC	GRID1
	6TH HIGHEST VALUE IS	3.60035	AT (	100.00,	-600.00,	0.00,	0.00)	GC	GRID1
	7TH HIGHEST VALUE IS	3.39852	AT (	0.00,	-700.00,	0.00,	0.00)	GC	GRID1
	8TH HIGHEST VALUE IS	3.38265	AT (	100.00,	-700.00,	0.00,	0.00)	GC	GRID1
	9TH HIGHEST VALUE IS	3.25018	AT (	0.00,	-300.00,	0.00,	0.00)	GC	GRID1
	10TH HIGHEST VALUE IS	3.15512	AT (	100.00,	-800.00,	0.00,	0.00)	GC	GRID1
WC	1ST HIGHEST VALUE IS	42.93460	AT (	-800.00,	-2300.00,	0.00,	0.00)	GC	GRID1
	2ND HIGHEST VALUE IS	42.64116	AT (	-800.00,	-1900.00,	0.00,	0.00)	GC	GRID1
	3RD HIGHEST VALUE IS	42.15671	AT (	-800.00,	-2700.00,	0.00,	0.00)	GC	GRID1
	4TH HIGHEST VALUE IS	41.97940	AT (	-800.00,	-1500.00,	0.00,	0.00)	GC	GRID1
	5TH HIGHEST VALUE IS	40.94635	AT (	0.00,	-2300.00,	0.00,	0.00)	GC	GRID1
	6TH HIGHEST VALUE IS	40.63950	AT (	-800.00,	-1100.00,	0.00,	0.00)	GC	GRID1
	7TH HIGHEST VALUE IS	40.54795	AT (	0.00,	-1900.00,	0.00,	0.00)	GC	GRID1
	8TH HIGHEST VALUE IS	40.32713	AT (	0.00,	-2700.00,	0.00,	0.00)	GC	GRID1
	9TH HIGHEST VALUE IS	39.79505	AT (	0.00,	-1500.00,	0.00,	0.00)	GC	GRID1
	10TH HIGHEST VALUE IS	38.44762	AT (	0.00,	-1100.00,	0.00,	0.00)	GC	GRID1

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

CONC RURAL FLAT DFAULT

*** 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 62 Informational Message(s)

A Total of 62 Calm Hours Identified

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

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

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

Attachment 2
ISCST3 Modeling Results – Maximum NO_x 24-Hour Impact

```
CO STARTING
CO TITLEONE FARMINGTON RMP EIS - FULL EMISSION SOURCE MODULE
CO TITLETWO NOX EMISSIONS - FULL MET - 100M GRID - 100 DEGREE WIND ROTATION
CO MODELOPT CONC   RURAL                      DFAULT
CO AVERTIME 1 24 PERIOD
CO POLLUTID OTHER
CO DCAYCOEF 0.000000E+00
CO TERRHGTS FLAT
CO RUNORNOT RUN
CO ERRORFIL ERRORS.OUT
CO FINISHED

SO STARTING

** Source Location Cards:
**               SRCID      SRCTYP              XS        YS       ZS

SO LOCATION      CC1      POINT             0.00     18.29     0.00
SO LOCATION      CC2      POINT             0.00      0.00     0.00
SO LOCATION      CC3      POINT             0.00    -18.29     0.00
SO LOCATION      WC1      POINT          -804.67   -201.17     0.00
SO LOCATION      WC2      POINT          -804.67   -603.50     0.00
SO LOCATION      WC3      POINT          -804.67  -1005.84     0.00
SO LOCATION      WC4      POINT          -804.67  -1408.18     0.00
SO LOCATION      WC5      POINT          -804.67  -1810.53     0.00
SO LOCATION      WC6      POINT          -804.67  -2212.87     0.00
SO LOCATION      WC7      POINT          -804.67  -2615.21     0.00
SO LOCATION      WC8      POINT          -804.67  -3017.55     0.00
SO LOCATION      WC9      POINT             0.00   -201.17     0.00
SO LOCATION     WC10      POINT             0.00   -603.50     0.00
SO LOCATION     WC11      POINT             0.00  -1005.84     0.00
SO LOCATION     WC12      POINT             0.00  -1408.18     0.00
SO LOCATION     WC13      POINT             0.00  -1810.53     0.00
SO LOCATION     WC14      POINT             0.00  -2212.87     0.00
SO LOCATION     WC15      POINT             0.00  -2615.21     0.00
SO LOCATION     WC16      POINT             0.00  -3017.55     0.00
SO LOCATION     WC17      POINT           804.67   -201.17     0.00
SO LOCATION     WC18      POINT           804.67   -603.50     0.00
SO LOCATION     WC19      POINT           804.67  -1005.84     0.00
SO LOCATION     WC20      POINT           804.67  -1408.18     0.00
SO LOCATION     WC21      POINT           804.67  -1810.53     0.00
SO LOCATION     WC22      POINT           804.67  -2212.87     0.00
SO LOCATION     WC23      POINT           804.67  -2615.21     0.00
SO LOCATION     WC24      POINT           804.67  -3017.55     0.00
SO LOCATION     WC25      POINT          1609.34   -201.17     0.00
SO LOCATION     WC26      POINT          1609.34   -603.50     0.00
SO LOCATION     WC27      POINT          1609.34  -1005.84     0.00
SO LOCATION     WC28      POINT          1609.34  -1408.18     0.00
SO LOCATION     WC29      POINT          1609.34  -1810.53     0.00
SO LOCATION     WC30      POINT          1609.34  -2212.87     0.00
SO LOCATION     WC31      POINT          1609.34  -2615.21     0.00
SO LOCATION     WC32      POINT          1609.34  -3017.55     0.00

** Source Parameter Cards:
** POINT:    SRCID        QS          HS          TS       VS        DS
** VOLUME:   SRCID        QS          HS        SYINIT    SZINIT
** AREA:     SRCID        QS          HS         XINIT    YINIT      ANGLE SZINIT
```

```
SO SRCPARAM    CC1      1.98         6.10       661.0    25.80      0.67
SO SRCPARAM    CC2      1.98         6.10       661.0    25.80      0.67
SO SRCPARAM    CC3      1.98         6.10       661.0    25.80      0.67
SO SRCPARAM    WC1      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC2      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC3      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC4      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC5      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC6      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC7      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC8      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC9      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC10      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC11      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC12      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC13      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC14      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC15      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC16      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC17      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC18      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC19      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC20      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC21      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC22      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC23      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC24      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC25      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC26      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC27      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC28      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC29      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC30      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC31      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC32      0.42         3.08       836.0    27.81      0.10

SO EMISUNIT   0.100000E+07 (GRAMS/SEC)          (MICROGRAMS/CUBIC-METER)

SO SRCGROUP  ALL
SO SRCGROUP   CC  CC1-CC3
SO SRCGROUP   WC  WC1-WC32

SO FINISHED

RE STARTING
RE GRIDCART GRID1 STA
RE GRIDCART GRID1 XYINC -800.00 17 100.00 -4000.00 61 100.00
RE GRIDCART GRID1 END

RE FINISHED

ME STARTING
ME INPUTFIL  BLOOM97.MET
ME ANEMHGHT  10.000 METERS
ME SURFDATA     36  1997            SURFNAME
ME UAIRDATA  23050  1997            UAIRNAME
ME WDROTATE  100
ME WINDCATS    1.54    3.09    5.14    8.23   10.80
ME FINISHED
```

```
OU STARTING
**OU RECTABLE  ALLAVE  FIRST
OU MAXTABLE  ALLAVE  10
OU FINISHED

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

CONC RURAL FLAT DFAULT

*** MODEL SETUP OPTIONS SUMMARY ***

**Intermediate Terrain Processing is Selected

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

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

**Model Uses RURAL Dispersion.

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

**Model Assumes Receptors on FLAT Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates 2 Short Term Average(s) of: 1-HR 24-HR
and Calculates PERIOD Averages

**This Run Includes: 35 Source(s); 3 Source Group(s); and 1037 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 PERIOD Averages by Receptor
Model Outputs Tables of Overall Maximum Short Term Values (MAXTABLE Keyword)

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

**Misc. Inputs: Anem. Hgt. (m) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 100.0
Emission Units = (GRAMS/SEC) ; Emission Rate Unit Factor = 0.10000E+07
Output Units = (MICROGRAMS/CUBIC-METER)

**Approximate Storage Requirements of Model = 1.3 MB of RAM.

```
**Input Runstream File:          mod100.inp
**Output Print File:             mod100.out
**Detailed Error/Message File:   ERRORS.OUT
```

**MODELOPTs:
CONC RURAL FLAT DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
CC1	0	0.19800E+01	0.0	18.3	0.0	6.10	661.00	25.80	0.67	NO	
CC2	0	0.19800E+01	0.0	0.0	0.0	6.10	661.00	25.80	0.67	NO	
CC3	0	0.19800E+01	0.0	-18.3	0.0	6.10	661.00	25.80	0.67	NO	
WC1	0	0.42000E+00	-804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC2	0	0.42000E+00	-804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC3	0	0.42000E+00	-804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC4	0	0.42000E+00	-804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC5	0	0.42000E+00	-804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC6	0	0.42000E+00	-804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC7	0	0.42000E+00	-804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC8	0	0.42000E+00	-804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC9	0	0.42000E+00	0.0	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC10	0	0.42000E+00	0.0	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC11	0	0.42000E+00	0.0	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC12	0	0.42000E+00	0.0	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC13	0	0.42000E+00	0.0	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC14	0	0.42000E+00	0.0	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC15	0	0.42000E+00	0.0	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC16	0	0.42000E+00	0.0	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC17	0	0.42000E+00	804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC18	0	0.42000E+00	804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC19	0	0.42000E+00	804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC20	0	0.42000E+00	804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC21	0	0.42000E+00	804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC22	0	0.42000E+00	804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC23	0	0.42000E+00	804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC24	0	0.42000E+00	804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC25	0	0.42000E+00	1609.3	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC26	0	0.42000E+00	1609.3	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC27	0	0.42000E+00	1609.3	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC28	0	0.42000E+00	1609.3	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC29	0	0.42000E+00	1609.3	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC30	0	0.42000E+00	1609.3	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC31	0	0.42000E+00	1609.3	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC32	0	0.42000E+00	1609.3	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	

**MODELOPTs:
CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,
CC	CC1 , CC2 , CC3 ,
WC	WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,

CONC RURAL FLAT DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

-800.0, -700.0, -600.0, -500.0, -400.0, -300.0, -200.0, -100.0, 0.0, 100.0,
200.0, 300.0, 400.0, 500.0, 600.0, 700.0, 800.0,

*** Y-COORDINATES OF GRID ***
(METERS)

-4000.0, -3900.0, -3800.0, -3700.0, -3600.0, -3500.0, -3400.0, -3300.0, -3200.0, -3100.0,
-3000.0, -2900.0, -2800.0, -2700.0, -2600.0, -2500.0, -2400.0, -2300.0, -2200.0, -2100.0,
-2000.0, -1900.0, -1800.0, -1700.0, -1600.0, -1500.0, -1400.0, -1300.0, -1200.0, -1100.0,
-1000.0, -900.0, -800.0, -700.0, -600.0, -500.0, -400.0, -300.0, -200.0, -100.0,
0.0, 100.0, 200.0, 300.0, 400.0, 500.0, 600.0, 700.0, 800.0, 900.0,
1000.0, 1100.0, 1200.0, 1300.0, 1400.0, 1500.0, 1600.0, 1700.0, 1800.0, 1900.0,
2000.0,

CONC RURAL FLAT DFAULT

* 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)
CC2	0.0	0.0	0.00

**MODELOPTs:
CONC   RURAL FLAT   DFAULT

*** 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	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
B	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
C	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00
D	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
E	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00
F	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00

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

STABILITY	WIND SPEED CATEGORY					
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 RURAL FLAT DFAULT

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

FILE: BLOOM97.MET
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 36 UPPER AIR STATION NO.: 23050
NAME: SURFNAME NAME: UAIRNAME
YEAR: 1997 YEAR: 1997

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)
97	01	01	01	72.1	1.00	272.9	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	02	83.7	1.00	272.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	03	162.7	1.00	271.9	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	04	175.1	1.30	271.6	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	05	128.0	1.10	271.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	06	129.5	1.00	271.3	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	07	175.6	1.00	271.3	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	08	120.4	1.00	271.0	5	78.3	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	09	204.9	1.00	273.0	4	231.9	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	10	14.0	1.60	275.1	3	385.6	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	11	32.7	1.00	277.4	2	539.2	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	12	349.7	1.80	279.5	2	692.8	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	13	355.1	1.30	281.4	2	846.4	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	14	46.8	1.40	282.6	2	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	15	79.5	2.80	283.4	3	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	16	93.8	2.10	283.6	4	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	17	80.0	1.00	282.8	4	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	18	192.7	1.80	279.5	5	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	19	197.4	1.60	277.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	20	182.2	1.00	276.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	21	178.8	1.20	275.5	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	22	184.3	1.10	274.5	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	23	93.5	1.00	273.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	24	163.8	1.00	273.1	6	1000.0	1000.0	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.

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
2000.00	4.96855	5.13868	5.40880	5.66759	5.91769	6.09701	6.14534	6.05159	5.92962
1900.00	5.12888	5.29310	5.58672	5.88753	6.13933	6.31981	6.39385	6.30812	6.17763
1800.00	5.30211	5.46509	5.75984	6.11243	6.38806	6.55507	6.65367	6.58579	6.44853
1700.00	5.48446	5.65999	5.94615	6.33321	6.64785	6.82227	6.93060	6.88474	6.73376
1600.00	5.66706	5.87060	6.16263	6.55955	6.90086	7.11545	7.23767	7.21254	7.02662
1500.00	5.85833	6.08207	6.40822	6.80772	7.15595	7.41344	7.57743	7.56802	7.35133
1400.00	6.09567	6.30191	6.66108	7.07676	7.43842	7.71536	7.93891	7.93321	7.73457
1300.00	6.35447	6.57193	6.93168	7.34567	7.74753	8.05371	8.30562	8.32292	8.13928
1200.00	6.57731	6.87817	7.26372	7.63281	8.04855	8.44174	8.68430	8.76243	8.54925
1100.00	6.81528	7.15703	7.61190	7.99437	8.35362	8.84251	9.09882	9.24526	9.03650
1000.00	7.13468	7.42923	7.95603	8.37752	8.73166	9.22582	9.58287	9.75776	9.62261
900.00	7.44365	7.79981	8.30839	8.72302	9.17501	9.62467	10.08347	10.36015	10.18576
800.00	7.76640	8.20118	8.70016	9.09739	9.61267	10.07986	10.63804	11.01434	10.78662
700.00	8.12780	8.59773	9.13850	9.51508	9.98295	10.54200	11.27828	11.69347	11.50770
600.00	8.63781	9.03595	9.53561	10.00680	10.38296	11.04725	11.84794	12.46980	12.30431
500.00	9.16803	9.63244	10.00704	10.41322	10.86373	11.59466	12.39160	13.14691	13.12120
400.00	9.61477	10.18904	10.53273	10.82011	11.48286	12.05184	12.79407	13.78821	13.81240
300.00	10.21192	10.62569	10.98580	11.26611	11.83414	12.36806	13.15835	14.14704	14.34598
200.00	11.20199	11.10533	11.11666	11.64152	11.99402	12.70512	13.43883	13.93794	13.80325
100.00	13.02302	12.11550	11.63655	11.70170	12.09884	12.96221	13.54612	14.29367	14.75675
0.00	16.65211	13.38251	12.22422	12.14353	12.93043	13.55889	14.38276	16.80663	19.14343
-100.00	25.89507	14.57817	12.83513	12.92038	13.82215	15.11314	17.41047	21.31848	30.48328
-200.00	11.33871	15.08634	14.63020	15.01949	15.60206	16.81093	19.07394	23.59767	16.13125
-300.00	25.61198	15.42424	13.77448	13.93229	14.27141	15.85281	18.10876	20.35945	29.98275
-400.00	21.86614	17.02761	13.91261	13.06795	14.23239	15.54991	17.19414	20.93372	27.24451
-500.00	28.20257	17.06173	14.05826	13.82835	14.48102	16.18581	19.40212	24.74151	35.89413
-600.00	12.70712	16.69120	15.74655	15.77492	16.45446	17.77894	20.61559	26.29624	20.22738
-700.00	26.62826	16.41103	14.70049	14.63336	15.06816	16.88729	19.42797	22.26171	32.45976
-800.00	22.32334	17.74843	14.61908	13.81948	14.77605	16.20427	18.28323	22.21944	28.39098
-900.00	28.28252	17.68751	14.68213	14.32405	14.81827	16.59480	20.02097	25.47847	36.14023
-1000.00	12.99737	17.11751	16.16669	16.00636	16.77215	18.04475	20.89532	26.59761	20.42543
-1100.00	27.01867	16.52769	14.92364	14.71904	15.26441	17.05185	19.55771	22.29633	32.51385
-1200.00	22.34468	17.70477	14.58546	13.81292	14.76326	16.19085	18.20022	21.90593	28.02341
-1300.00	27.86564	17.53744	14.53942	14.15679	14.61480	16.41908	19.73405	25.01395	35.28054
-1400.00	12.66428	16.84907	15.91711	15.74428	16.45092	17.75601	20.55091	26.07049	19.75953
-1500.00	26.81535	16.12625	14.62708	14.34036	14.85060	16.72670	19.15958	21.73102	31.97102
-1600.00	21.86885	17.28799	14.11068	13.32808	14.23936	15.70578	17.57652	21.15398	27.22509
-1700.00	27.09550	17.04186	13.97196	13.54567	13.99671	15.76741	18.90853	24.10609	34.14870
-1800.00	12.05704	16.20152	15.24357	15.05164	15.78520	16.99225	19.62757	25.13108	18.88932
-1900.00	26.29695	15.32617	13.92652	13.54201	14.14288	15.92463	18.20394	20.79497	31.17926

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
-2000.00	21.06845	16.45258	13.18777	12.43726	13.40134	14.76381	16.48332	20.03189	26.15066
-2100.00	25.99695	16.15099	12.90058	12.50611	13.02509	14.68075	17.70783	22.83528	32.67688
-2200.00	11.19936	15.17130	14.03436	13.91091	14.68837	15.79099	18.39729	23.82434	17.70631
-2300.00	25.49559	14.12863	12.70208	12.31011	12.93296	14.68840	16.95070	19.42823	29.94947
-2400.00	19.96059	15.20660	11.81555	11.09608	11.99441	13.38215	15.03140	18.38434	24.60245
-2500.00	24.49911	14.79365	11.44577	11.04513	11.48303	13.16202	15.95957	20.98030	30.63819
-2600.00	10.02975	13.57154	12.50144	12.34902	13.09239	14.09029	16.49738	21.75468	16.24475
-2700.00	23.94915	12.26436	11.13866	10.67367	11.29974	12.79278	14.93542	17.30851	27.93580
-2800.00	17.97779	13.15203	10.02117	9.41072	10.12364	11.27593	12.75966	15.91602	22.01088
-2900.00	21.87784	12.54554	9.44351	9.19847	9.46554	10.91825	13.34817	17.95234	27.19346
-3000.00	7.66819	10.96625	10.40286	10.21963	10.94222	11.66581	13.47021	18.01024	13.25341
-3100.00	19.99452	9.16794	8.89516	8.50115	9.01454	10.01629	11.37144	12.63794	22.80410
-3200.00	11.20361	9.41019	7.45388	7.08212	7.40518	8.05200	8.38682	9.29268	13.54573
-3300.00	7.76062	7.99301	6.89445	6.65715	6.23326	6.42326	6.99609	8.00914	9.79706
-3400.00	6.18124	6.67924	6.31183	5.88170	5.94269	5.77593	6.07801	6.87060	7.93300
-3500.00	5.20177	5.74661	5.60314	5.33485	5.43660	5.54210	5.57404	6.01391	6.70516
-3600.00	4.57834	4.97971	4.99006	5.01134	4.88916	5.13066	5.36411	5.47057	5.88345
-3700.00	4.10621	4.44000	4.54191	4.64842	4.60136	4.65631	4.92190	5.15641	5.35917
-3800.00	3.76334	4.01312	4.20640	4.24765	4.34790	4.34317	4.50510	4.74263	4.99273
-3900.00	3.44516	3.72251	3.87429	3.91957	4.03212	4.13034	4.18907	4.34939	4.57455
-4000.00	3.22859	3.45593	3.58127	3.64603	3.75873	3.89582	3.94692	3.99174	4.26537

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
2000.00	5.91179	5.96462	6.06201	6.10809	6.06373	5.90852	5.72677	5.53947
1900.00	6.13411	6.19461	6.29878	6.32862	6.27411	6.13620	5.94755	5.71921
1800.00	6.37373	6.43675	6.54653	6.57049	6.48930	6.37798	6.16631	5.91138
1700.00	6.64169	6.69656	6.80998	6.82688	6.72436	6.61838	6.39672	6.12140
1600.00	6.93939	6.98395	7.09815	7.08519	6.97967	6.86216	6.64758	6.33439
1500.00	7.25363	7.31126	7.41306	7.34457	7.24158	7.14225	6.88870	6.55119
1400.00	7.59233	7.67723	7.74603	7.61356	7.52454	7.43968	7.10582	6.80966
1300.00	8.00317	8.07886	8.06934	7.92801	7.83623	7.69271	7.36406	7.11540
1200.00	8.47628	8.52400	8.40200	8.28298	8.14793	7.92250	7.70893	7.43485
1100.00	8.94568	8.98480	8.82674	8.60672	8.44757	8.23032	8.07629	7.81204
1000.00	9.40482	9.49186	9.25148	8.94817	8.76403	8.63597	8.47103	8.21281
900.00	9.97210	9.96063	9.59366	9.37386	9.16036	9.07588	8.90328	8.62353
800.00	10.60644	10.38376	9.97399	9.82332	9.61554	9.49339	9.47034	9.07647
700.00	11.19369	10.83417	10.45198	10.17081	10.00587	10.12456	10.02011	9.59898
600.00	11.80686	11.29155	10.90194	10.51587	10.62501	10.68345	10.57688	10.18265
500.00	12.56564	11.67926	11.18998	11.06037	11.23439	11.22622	11.13816	10.87811
400.00	13.05133	12.05801	11.49002	11.67872	11.74336	11.77179	11.97200	11.80923
300.00	13.11294	12.24593	12.01267	12.09331	12.20053	12.74480	13.13663	13.11460
200.00	12.78527	12.54503	12.67922	12.60876	13.09938	13.97007	14.87351	14.93322
100.00	13.77072	13.21282	13.30277	13.67606	14.69453	15.79101	17.25463	17.98756
0.00	16.09095	14.84867	14.73217	15.61272	16.48165	17.89481	20.60207	23.23717
-100.00	18.39694	16.17813	16.19155	17.09571	18.45367	21.17461	25.15899	34.93506
-200.00	19.43225	18.74093	18.86999	19.31134	20.59092	22.89858	27.32445	19.87174
-300.00	20.46844	17.82746	17.75647	17.95856	19.45238	21.57808	23.59098	31.75157
-400.00	22.70684	18.88325	17.50438	18.39573	19.40092	20.75897	23.94718	29.50999
-500.00	24.23957	20.07446	18.93736	18.96247	20.23137	23.03528	27.58825	38.42729
-600.00	24.14769	22.37735	21.42291	21.32610	22.11459	24.30810	29.07706	22.30628
-700.00	23.45914	20.68331	20.07436	19.84154	21.09453	23.06002	25.08739	33.58712
-800.00	24.44224	20.81455	19.49339	19.90423	20.71370	22.14409	25.31495	30.83096
-900.00	25.07550	21.26433	20.30399	20.25020	21.22771	24.00095	28.68006	39.26568
-1000.00	24.48937	23.10320	22.21054	22.34474	22.97582	24.99012	29.82994	23.25671
-1100.00	23.33681	21.11870	20.45057	20.46687	21.79514	23.60617	25.60267	34.34463
-1200.00	24.08524	20.84498	19.62550	20.12607	21.14529	22.50476	25.48902	31.11087
-1300.00	24.52732	20.98705	20.17438	20.19833	21.36224	24.18061	28.73522	39.01193
-1400.00	23.80211	22.62888	21.93335	22.11473	22.87933	25.06564	29.85699	23.22224
-1500.00	22.48454	20.54591	19.99979	20.07006	21.52854	23.55097	25.60019	34.38361
-1600.00	23.26017	20.05015	18.99274	19.54879	20.65852	22.12317	25.20907	30.90570
-1700.00	23.64439	20.07217	19.34709	19.47373	20.69833	23.49779	28.17655	38.42015
-1800.00	22.84139	21.63709	20.99791	21.30294	22.09200	24.20701	29.14374	22.85603
-1900.00	21.36999	19.53367	18.94293	19.17424	20.65698	22.60755	24.82245	33.91967

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
-2000.00	22.10469	18.81053	17.83322	18.47220	19.61386	21.02891	24.15744	30.06001
-2100.00	22.36779	18.68775	18.00250	18.26514	19.50637	22.26617	26.92183	37.02358
-2200.00	21.46382	20.11103	19.52821	20.00973	20.78623	22.90218	27.74845	21.75891
-2300.00	19.81566	17.97340	17.40212	17.74598	19.27128	21.19728	23.31984	32.55334
-2400.00	20.46922	17.10427	16.18173	16.79402	17.98123	19.37581	22.32059	28.29271
-2500.00	20.60151	16.85001	16.18349	16.36867	17.71581	20.24237	24.76982	34.69812
-2600.00	19.47791	18.11501	17.53198	18.01574	18.67663	20.63943	25.36432	20.20178
-2700.00	17.43226	15.89274	15.22729	15.58027	16.89126	18.76211	20.85353	30.14615
-2800.00	17.79589	14.58806	13.82680	14.33548	15.34904	16.61544	19.40691	25.24244
-2900.00	17.46280	13.99848	13.58320	13.64777	14.80744	17.00556	21.16378	30.70028
-3000.00	15.89307	15.04529	14.47296	14.94776	15.40978	16.83535	20.88732	16.76265
-3100.00	13.05556	12.43484	11.87982	12.16584	13.00250	14.11976	15.17556	23.89942
-3200.00	12.25287	10.25825	9.77062	9.91476	10.47661	10.69214	11.39656	15.26691
-3300.00	10.03084	8.81904	8.59583	8.14530	8.22663	8.73816	9.65192	11.30426
-3400.00	8.44744	7.99939	7.43306	7.47953	7.25869	7.42054	8.09038	9.04586
-3500.00	7.25017	7.06224	6.73689	6.77284	6.84449	6.78234	7.09622	7.68958
-3600.00	6.26845	6.31146	6.28893	6.03952	6.22974	6.43202	6.49085	6.78565
-3700.00	5.60019	5.64722	5.78007	5.71250	5.64201	5.82559	6.02254	6.15838
-3800.00	5.14199	5.24492	5.21501	5.33391	5.28850	5.35234	5.50644	5.67834
-3900.00	4.81667	4.91609	4.84988	4.90183	4.96677	4.97720	5.07696	5.24946
-4000.00	4.46844	4.57417	4.58978	4.58228	4.66073	4.67320	4.69218	4.90512

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
2000.00	1.03169	1.10335	1.22105	1.31250	1.38978	1.44437	1.49993	1.49184	1.44241
1900.00	1.05348	1.12512	1.24133	1.35359	1.44060	1.50129	1.56526	1.56492	1.51327
1800.00	1.07115	1.15141	1.25806	1.39337	1.49251	1.56365	1.63540	1.64521	1.59132
1700.00	1.08974	1.17789	1.27851	1.42986	1.54726	1.63256	1.71146	1.73399	1.67782
1600.00	1.11190	1.20110	1.30674	1.46109	1.60561	1.70814	1.79443	1.83254	1.77414
1500.00	1.13006	1.22573	1.34063	1.48967	1.66666	1.79016	1.88565	1.94236	1.88195
1400.00	1.14912	1.25484	1.37397	1.52251	1.72671	1.87837	1.98692	2.06523	2.00329
1300.00	1.18097	1.28095	1.40809	1.56440	1.78141	1.97304	2.10052	2.20329	2.14075
1200.00	1.21356	1.31106	1.44752	1.61162	1.83191	2.07432	2.22910	2.35909	2.29759
1100.00	1.23737	1.35309	1.48536	1.66107	1.88724	2.17937	2.37499	2.53549	2.47776
1000.00	1.26922	1.39006	1.53037	1.71681	1.95357	2.28062	2.53929	2.73421	2.68424
900.00	1.30311	1.42708	1.58321	1.77193	2.02448	2.36440	2.70304	2.93732	2.90103
800.00	1.34707	1.47093	1.63014	1.82769	2.09051	2.43983	2.86827	3.15512	3.14074
700.00	1.38781	1.52397	1.67796	1.87964	2.14877	2.51880	3.01870	3.38265	3.39852
600.00	1.42203	1.56668	1.73757	1.93327	2.20005	2.58591	3.12082	3.60035	3.65218
500.00	1.43529	1.60157	1.78624	2.00247	2.24089	2.60089	3.14364	3.75198	3.83688
400.00	1.37804	1.57403	1.80686	2.04582	2.29201	2.53551	2.99891	3.67361	3.79009
300.00	1.24554	1.45425	1.69735	1.98505	2.26355	2.41444	2.54892	3.09876	3.25017
200.00	1.09598	1.24475	1.44963	1.71082	1.96111	2.10998	1.92547	1.51732	1.36698
100.00	1.08210	1.19000	1.30847	1.41743	1.45981	1.40375	0.93261	0.21675	0.09556
0.00	1.08166	1.17786	1.27329	1.33344	1.27527	1.03140	0.35097	0.02115	0.00000
-100.00	1.14378	1.22747	1.29513	1.30746	1.18016	0.87411	0.33581	0.03700	0.01993
-200.00	1.08238	1.12403	1.13565	1.10209	1.00074	0.74830	0.47633	0.24822	0.35360
-300.00	0.96720	0.98957	0.99838	0.94239	0.79324	0.70550	0.67704	0.73059	1.34832
-400.00	0.88322	0.87631	0.81605	0.74030	0.75658	0.84373	0.81462	1.09166	1.85847
-500.00	0.75972	0.70686	0.67238	0.72253	0.84939	0.83178	0.98445	1.36286	2.12715
-600.00	0.62024	0.60989	0.66635	0.79073	0.81071	0.87883	1.08791	1.50746	2.19947
-700.00	0.55427	0.60819	0.71681	0.76516	0.78108	0.92204	1.14074	1.55520	2.15572
-800.00	0.55180	0.64360	0.70849	0.70693	0.79194	0.93763	1.16352	1.54146	2.05346
-900.00	0.57709	0.64804	0.64849	0.68747	0.79564	0.93345	1.16470	1.49289	1.92709
-1000.00	0.59166	0.59835	0.60719	0.68371	0.78621	0.91539	1.14576	1.42618	1.79488
-1100.00	0.55448	0.55067	0.59419	0.67350	0.77001	0.89287	1.10835	1.34752	1.66102
-1200.00	0.50850	0.52486	0.58766	0.65985	0.74884	0.87273	1.06329	1.26904	1.53728
-1300.00	0.47499	0.51704	0.57546	0.64517	0.72347	0.85310	1.01510	1.19403	1.42515
-1400.00	0.45952	0.51062	0.56245	0.62999	0.69882	0.83127	0.96654	1.12382	1.32431
-1500.00	0.45526	0.49899	0.55060	0.61241	0.67906	0.80624	0.91915	1.05887	1.23392
-1600.00	0.44979	0.48744	0.53988	0.59148	0.66414	0.77859	0.87376	0.99919	1.15295
-1700.00	0.43936	0.47807	0.52949	0.57028	0.65164	0.74954	0.83086	0.94451	1.08035
-1800.00	0.42913	0.47027	0.51668	0.55261	0.63918	0.72030	0.79070	0.89447	1.01516
-1900.00	0.42115	0.46373	0.50037	0.53980	0.62535	0.69166	0.75337	0.84869	0.95647

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
-2000.00	0.41466	0.45637	0.48207	0.53038	0.60934	0.66387	0.71877	0.80669	0.90343
-2100.00	0.40962	0.44629	0.46574	0.52266	0.59128	0.63668	0.68632	0.76749	0.85465
-2200.00	0.40562	0.43284	0.45329	0.51526	0.57238	0.61080	0.65643	0.73143	0.81028
-2300.00	0.40084	0.41770	0.44470	0.50709	0.55331	0.58623	0.62891	0.69822	0.76986
-2400.00	0.39332	0.40342	0.43890	0.49761	0.53454	0.56297	0.60354	0.66758	0.73294
-2500.00	0.38263	0.39185	0.43455	0.48676	0.51638	0.54102	0.58010	0.63927	0.69911
-2600.00	0.37003	0.38355	0.43052	0.47481	0.49893	0.52036	0.55840	0.61304	0.66803
-2700.00	0.35750	0.37810	0.42601	0.46214	0.48222	0.50099	0.53824	0.58870	0.63941
-2800.00	0.34672	0.37462	0.42056	0.44916	0.46622	0.48288	0.51947	0.56607	0.61298
-2900.00	0.33849	0.37220	0.41400	0.43622	0.45087	0.46598	0.50195	0.54498	0.58850
-3000.00	0.33264	0.36983	0.40619	0.42348	0.43611	0.45022	0.48553	0.52529	0.56579
-3100.00	0.32890	0.36711	0.39741	0.41105	0.42185	0.43545	0.46998	0.50671	0.54448
-3200.00	0.32659	0.36372	0.38806	0.39911	0.40822	0.42169	0.45535	0.48930	0.52462
-3300.00	0.32505	0.35948	0.37842	0.38766	0.39522	0.40887	0.44155	0.47297	0.50608
-3400.00	0.32372	0.35435	0.36874	0.37666	0.38286	0.39691	0.42852	0.45764	0.48874
-3500.00	0.32220	0.34841	0.35920	0.36607	0.37113	0.38572	0.41620	0.44321	0.47248
-3600.00	0.32021	0.34181	0.34992	0.35584	0.36003	0.37523	0.40452	0.42961	0.45723
-3700.00	0.31757	0.33473	0.34096	0.34596	0.34956	0.36538	0.39343	0.41678	0.44288
-3800.00	0.31423	0.32737	0.33234	0.33641	0.33969	0.35610	0.38289	0.40465	0.42936
-3900.00	0.31018	0.31991	0.32405	0.32719	0.33040	0.34733	0.37286	0.39317	0.41661
-4000.00	0.30543	0.31244	0.31602	0.31827	0.32166	0.33903	0.36331	0.38230	0.40457

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
2000.00	1.39506	1.37214	1.37597	1.32227	1.21474	1.10655	1.04566	0.98074
1900.00	1.45842	1.43207	1.42671	1.35524	1.23075	1.12535	1.06527	0.97181
1800.00	1.52737	1.49678	1.47818	1.38511	1.24530	1.14547	1.07377	0.95285
1700.00	1.60287	1.56703	1.53100	1.41213	1.26108	1.16679	1.06792	0.93131
1600.00	1.68586	1.64320	1.58490	1.43595	1.27935	1.18294	1.04917	0.91687
1500.00	1.77749	1.72560	1.63899	1.45721	1.30114	1.18599	1.02573	0.91209
1400.00	1.87915	1.81438	1.69136	1.47718	1.32373	1.17230	1.00792	0.91850
1300.00	1.99259	1.90957	1.73906	1.49779	1.33808	1.14792	0.99986	0.93872
1200.00	2.12001	2.01076	1.77925	1.52124	1.33397	1.12509	1.00414	0.96465
1100.00	2.26398	2.11640	1.81067	1.54465	1.31074	1.11013	1.02155	0.97370
1000.00	2.42610	2.22165	1.83475	1.55429	1.27968	1.10718	1.03630	0.96806
900.00	2.58900	2.29954	1.84619	1.53264	1.24915	1.11382	1.03086	0.97625
800.00	2.76093	2.33784	1.84004	1.47025	1.21774	1.10818	1.03798	0.92903
700.00	2.93068	2.31847	1.79341	1.38053	1.18317	1.09988	0.98324	0.86245
600.00	3.06078	2.23236	1.66361	1.28013	1.15565	1.02571	0.89086	0.83546
500.00	3.05845	2.06321	1.43877	1.20027	1.05959	0.90634	0.83348	0.78972
400.00	2.73552	1.70007	1.20998	1.06083	0.89911	0.80796	0.74345	0.72144
300.00	1.96688	1.14160	0.97464	0.83367	0.72057	0.66530	0.67959	0.73174
200.00	0.72362	0.69051	0.63601	0.57149	0.60582	0.67765	0.78236	0.91488
100.00	0.12463	0.28164	0.46390	0.59239	0.75085	0.92179	1.10281	1.27777
0.00	0.30411	0.39872	0.59438	0.73718	0.88628	1.03975	1.20336	1.35721
-100.00	0.04293	0.13406	0.32866	0.44786	0.55824	0.67759	0.81132	0.94635
-200.00	0.28718	0.24475	0.25795	0.33858	0.46248	0.55886	0.62842	0.70003
-300.00	1.09564	0.55148	0.39304	0.35043	0.36281	0.42907	0.53739	0.63656
-400.00	1.71385	1.04214	0.62311	0.48543	0.41390	0.38935	0.42587	0.48959
-500.00	2.14828	1.48356	0.91703	0.65118	0.53749	0.45828	0.41116	0.43030
-600.00	2.35426	1.74682	1.24214	0.83134	0.65869	0.57012	0.49275	0.43256
-700.00	2.38810	1.88055	1.47469	1.04036	0.77796	0.65990	0.59306	0.51608
-800.00	2.31874	1.93313	1.58701	1.24014	0.90567	0.74135	0.65236	0.59635
-900.00	2.19731	1.93095	1.62223	1.36761	1.04677	0.80762	0.70017	0.63710
-1000.00	2.05430	1.88652	1.61022	1.40333	1.16043	0.89641	0.73579	0.66734
-1100.00	1.90090	1.80654	1.57246	1.39086	1.22368	0.98777	0.79037	0.68575
-1200.00	1.75622	1.71451	1.52637	1.35892	1.23441	1.06312	0.85912	0.71323
-1300.00	1.62368	1.61805	1.47433	1.32017	1.21266	1.10240	0.92445	0.76312
-1400.00	1.50385	1.52232	1.41745	1.27998	1.17765	1.10355	0.97724	0.81577
-1500.00	1.39624	1.43037	1.35700	1.23993	1.13974	1.07911	1.00302	0.86429
-1600.00	1.29988	1.34382	1.29458	1.19979	1.10311	1.04359	0.99991	0.90294
-1700.00	1.21364	1.26332	1.23190	1.15899	1.06900	1.00636	0.97592	0.92058
-1800.00	1.13640	1.18899	1.17048	1.11722	1.03719	0.97149	0.94160	0.91568
-1900.00	1.06709	1.12067	1.11146	1.07458	1.00686	0.94020	0.90510	0.89264

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
-2000.00	1.00466	1.05791	1.05540	1.03102	0.97646	0.91166	0.87039	0.85967
-2100.00	0.94747	0.99967	1.00224	0.98698	0.94561	0.88573	0.83966	0.82436
-2200.00	0.89565	0.94630	0.95275	0.94376	0.91443	0.86164	0.81293	0.79093
-2300.00	0.84861	0.89738	0.90681	0.90190	0.88293	0.83858	0.78962	0.76109
-2400.00	0.80578	0.85251	0.86420	0.86184	0.85125	0.81590	0.76892	0.73523
-2500.00	0.76667	0.81131	0.82468	0.82385	0.81965	0.79317	0.75006	0.71305
-2600.00	0.73086	0.77341	0.78800	0.78812	0.78842	0.77018	0.73235	0.69392
-2700.00	0.69797	0.73851	0.75391	0.75468	0.75784	0.74692	0.71522	0.67714
-2800.00	0.66770	0.70629	0.72220	0.72348	0.72816	0.72345	0.69825	0.66206
-2900.00	0.63975	0.67651	0.69267	0.69441	0.69962	0.69993	0.68114	0.64810
-3000.00	0.61387	0.64890	0.66511	0.66732	0.67232	0.67636	0.66353	0.63459
-3100.00	0.58965	0.62309	0.63930	0.64201	0.64638	0.65302	0.64560	0.62136
-3200.00	0.56714	0.59909	0.61517	0.61839	0.62197	0.63019	0.62748	0.60814
-3300.00	0.54617	0.57672	0.59258	0.59630	0.59907	0.60802	0.60927	0.59475
-3400.00	0.52660	0.55583	0.57142	0.57559	0.57763	0.58662	0.59107	0.58111
-3500.00	0.50830	0.53630	0.55158	0.55614	0.55759	0.56611	0.57302	0.56722
-3600.00	0.49116	0.51800	0.53294	0.53784	0.53884	0.54654	0.55521	0.55311
-3700.00	0.47507	0.50082	0.51541	0.52060	0.52130	0.52796	0.53775	0.53885
-3800.00	0.45995	0.48468	0.49892	0.50432	0.50485	0.51039	0.52073	0.52454
-3900.00	0.44571	0.46948	0.48337	0.48893	0.48941	0.49383	0.50422	0.51025
-4000.00	0.43228	0.45514	0.46868	0.47436	0.47486	0.47822	0.48824	0.49600

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
2000.00	3.93691	4.03538	4.18779	4.35516	4.52794	4.65269	4.64544	4.55981	4.48726
1900.00	4.07545	4.16802	4.34543	4.53401	4.69878	4.81860	4.82863	4.74327	4.66442
1800.00	4.23102	4.31374	4.50183	4.71912	4.89561	4.99147	5.01835	4.94063	4.85730
1700.00	4.39476	4.48216	4.66771	4.90341	5.10062	5.18974	5.21922	5.15080	5.05598
1600.00	4.55521	4.66955	4.85594	5.09853	5.29530	5.40736	5.44330	5.38006	5.25253
1500.00	4.72828	4.85642	5.06767	5.31813	5.48934	5.62333	5.69184	5.62573	5.46946
1400.00	4.94658	5.04712	5.28715	5.55433	5.71177	5.83707	5.95209	5.86806	5.73137
1300.00	5.17355	5.29104	5.52364	5.78135	5.96620	6.08081	6.20518	6.11974	5.99862
1200.00	5.36379	5.56714	5.81626	6.02125	6.21671	6.36752	6.45530	6.40345	6.25179
1100.00	5.57796	5.80399	6.12659	6.33340	6.46646	6.66325	6.72400	6.70993	6.55884
1000.00	5.86553	6.03922	6.42574	6.66077	6.77823	6.94531	7.04367	7.02366	6.93851
900.00	6.14062	6.37283	6.72528	6.95120	7.15065	7.26039	7.38054	7.42297	7.28488
800.00	6.41939	6.73034	7.07012	7.26979	7.52224	7.64016	7.76987	7.85929	7.64597
700.00	6.74004	7.07384	7.46063	7.63549	7.83425	8.02333	8.25974	8.31091	8.10934
600.00	7.21586	7.46933	7.79814	8.07364	8.18301	8.46140	8.72720	8.86959	8.65226
500.00	7.73281	8.03095	8.22083	8.41085	8.62295	8.99392	9.24803	9.39501	9.28445
400.00	8.23683	8.61508	8.72594	8.77437	9.19093	9.51642	9.79526	10.11471	10.02240
300.00	8.96640	9.17152	9.28852	9.28115	9.57066	9.95373	10.60956	11.04836	11.09592
200.00	10.10604	9.86059	9.66706	9.93080	10.03303	10.59525	11.51341	12.42073	12.43635
100.00	11.94095	10.92555	10.32816	10.28432	10.63909	11.55850	12.61360	14.07700	14.66128
0.00	15.57049	12.20469	10.95102	10.81010	11.65524	12.52754	14.03186	16.78554	19.14343
-100.00	24.75142	13.35074	11.54005	11.61298	12.64206	14.23906	17.07471	21.28156	30.46343
-200.00	10.25636	13.96238	13.49460	13.91745	14.60137	16.06271	18.59766	23.34954	15.77771
-300.00	24.64484	14.43473	12.77613	12.98997	13.47820	15.14739	17.43180	19.62891	28.63453
-400.00	20.98300	16.15138	13.09658	12.32768	13.47584	14.70623	16.37961	19.84210	25.38612
-500.00	27.44293	16.35490	13.38592	13.10585	13.63166	15.35407	18.41773	23.37868	33.76712
-600.00	12.08693	16.08135	15.08026	14.98424	15.64382	16.90013	19.52773	24.78885	18.02798
-700.00	26.07400	15.80291	13.98372	13.86826	14.28713	15.96534	18.28725	20.70664	30.30419
-800.00	21.77159	17.10486	13.91061	13.11256	13.98412	15.26671	17.11982	20.67803	26.33757
-900.00	27.70547	17.03951	14.03370	13.63660	14.02268	15.66138	18.85633	23.98568	34.21330
-1000.00	12.40572	16.51918	15.55955	15.32267	15.98593	17.12941	19.74965	25.17145	18.63062
-1100.00	26.46422	15.97706	14.32950	14.04557	14.49445	16.15908	18.44934	20.94889	30.85294
-1200.00	21.83624	17.17994	13.99782	13.15310	14.01444	15.31818	17.13701	20.63689	26.48614
-1300.00	27.39070	17.02045	13.96399	13.51164	13.89136	15.56603	18.71899	23.81998	33.85547
-1400.00	12.20479	16.33851	15.35468	15.11432	15.75217	16.92480	19.58443	24.94672	18.43529
-1500.00	26.36012	15.62731	14.07650	13.72799	14.17158	15.92051	18.24048	20.67218	30.73727
-1600.00	21.41911	16.80059	13.57081	12.73662	13.57523	14.92727	16.70276	20.15483	26.07215
-1700.00	26.65621	16.56384	13.44250	12.97540	13.34511	15.01792	18.07773	23.16165	33.06834
-1800.00	11.62793	15.73128	14.72693	14.49905	15.14604	16.27202	18.83688	24.23664	17.87420
-1900.00	25.87582	14.86249	13.42617	13.00224	13.51754	15.23297	17.45064	19.94632	30.22289

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
-2000.00	20.65380	15.99622	12.70573	11.90692	12.79200	14.09995	15.76454	19.22524	25.24724
-2100.00	25.58737	15.70473	12.43486	11.98348	12.43386	14.04412	17.02155	22.06780	31.82227
-2200.00	10.79375	14.73847	13.58108	13.39565	14.11600	15.18017	17.74090	23.09298	16.89608
-2300.00	25.09480	13.71096	12.25739	11.80305	12.37968	14.10219	16.32179	18.73005	29.17967
-2400.00	19.56730	14.80322	11.37667	10.59853	11.45987	12.81920	14.42787	17.71680	23.86956
-2500.00	24.11654	14.40185	11.01127	10.55837	10.96667	12.62104	15.37950	20.34108	29.93919
-2600.00	9.65977	13.18803	12.07095	11.87424	12.59349	13.56997	15.93902	21.14166	15.57673
-2700.00	23.59170	11.88627	10.71267	10.21154	10.81756	12.29180	14.39721	16.71986	27.29643
-2800.00	17.63111	12.77744	9.60064	8.96156	9.65745	10.79308	12.24023	15.34999	21.39796
-2900.00	21.53940	12.17336	9.02953	8.76227	9.01468	10.45229	12.84623	17.40738	26.60503
-3000.00	7.33557	10.59645	9.99671	9.79616	10.50614	11.21564	12.98471	17.48496	12.68764
-3100.00	19.66563	8.80086	8.49777	8.09011	8.59271	9.58088	10.90149	12.13127	22.25963
-3200.00	10.87702	9.04649	7.06583	6.68301	6.99697	7.63033	7.93147	8.80340	13.02114
-3300.00	7.43558	7.63355	6.51605	6.26950	5.83805	6.01440	6.55456	7.53620	9.29099
-3400.00	5.85752	6.32491	5.94310	5.50506	5.55983	5.37904	5.64951	6.41298	7.44426
-3500.00	4.87958	5.39821	5.24395	4.96880	5.06548	5.15639	5.15785	5.57072	6.23268
-3600.00	4.25813	4.63791	4.64016	4.65551	4.52916	4.75544	4.95961	5.04097	5.42623
-3700.00	3.78865	4.10528	4.20096	4.30248	4.25181	4.29095	4.52848	4.73964	4.91629
-3800.00	3.44912	3.68576	3.87408	3.91124	4.00822	3.98708	4.12222	4.33799	4.56337
-3900.00	3.13499	3.40261	3.55025	3.59240	3.70173	3.78303	3.81622	3.95624	4.15795
-4000.00	2.92317	3.14350	3.26526	3.32776	3.43707	3.55680	3.58361	3.60946	3.86083

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
2000.00	4.51678	4.59252	4.68608	4.78586	4.84904	4.80204	4.68116	4.55879
1900.00	4.67581	4.76259	4.87212	4.97341	5.04342	5.01087	4.88232	4.74744
1800.00	4.84641	4.94002	5.06841	5.18545	5.24405	5.23256	5.09259	4.95857
1700.00	5.03889	5.12960	5.27903	5.41482	5.46333	5.45166	5.32886	5.19009
1600.00	5.25358	5.34079	5.51331	5.64930	5.70037	5.67926	5.59843	5.41755
1500.00	5.47625	5.58574	5.77413	5.88743	5.94049	5.95630	5.86302	5.63915
1400.00	5.71325	5.86292	6.05475	6.13643	6.20083	6.26744	6.09794	5.89120
1300.00	6.01066	6.16939	6.33035	6.43028	6.49820	6.54486	6.36425	6.17671
1200.00	6.35632	6.51334	6.62289	6.76182	6.81399	6.79747	6.70482	6.47021
1100.00	6.68184	6.86847	7.01615	7.06213	7.13692	7.12027	7.05478	6.83837
1000.00	6.97883	7.27034	7.41682	7.39400	7.48444	7.52886	7.43479	7.24480
900.00	7.38321	7.66121	7.74756	7.84130	7.91127	7.96211	7.87248	7.64732
800.00	7.84559	8.04602	8.13405	8.35313	8.39791	8.38528	8.43244	8.14751
700.00	8.26311	8.51582	8.65869	8.79040	8.82273	9.02472	9.03690	8.73658
600.00	8.74619	9.05928	9.23842	9.23582	9.46940	9.65778	9.68607	9.34721
500.00	9.50734	9.61615	9.75130	9.86015	10.17485	10.31990	10.30469	10.08844
400.00	10.31594	10.35800	10.28009	10.61790	10.84432	10.96388	11.22858	11.08783
300.00	11.14615	11.10437	11.03809	11.25971	11.48002	12.07955	12.45706	12.38291
200.00	12.06168	11.85461	12.04328	12.03733	12.49362	13.29245	14.09124	14.01841
100.00	13.64616	12.93124	12.83894	13.08368	13.94376	14.86927	16.15188	16.70987
0.00	15.78689	14.44998	14.13785	14.87555	15.59537	16.85513	19.39886	21.88007
-100.00	18.35409	16.04413	15.86296	16.64788	17.89550	20.49712	24.34779	33.98886
-200.00	19.14512	18.49623	18.61208	18.97280	20.12853	22.33979	26.69609	19.17179
-300.00	19.37288	17.27604	17.36349	17.60816	19.08960	21.14907	23.05364	31.11507
-400.00	20.99308	17.84110	16.88132	17.91033	18.98705	20.36968	23.52139	29.02041
-500.00	22.09138	18.59102	18.02039	18.31131	19.69393	22.57700	27.17713	37.99706
-600.00	21.79354	20.63061	20.18082	20.49480	21.45596	23.73803	28.58434	21.87377
-700.00	21.07106	18.80290	18.59977	18.80125	20.31664	22.40016	24.49437	33.07103
-800.00	22.12354	18.88147	17.90646	18.66410	19.80808	21.40284	24.66265	30.23465
-900.00	22.87825	19.33349	18.68181	18.88267	20.18105	23.19340	27.97996	38.62857
-1000.00	22.43517	21.21676	20.60031	20.94144	21.81548	24.09379	29.09426	22.58944
-1100.00	21.43600	19.31225	18.87824	19.07606	20.57150	22.61844	24.81239	33.65897
-1200.00	22.32908	19.13053	18.09921	18.76719	19.91095	21.44170	24.62999	30.39772
-1300.00	22.90376	19.36907	18.70010	18.87821	20.14966	23.07827	27.81082	38.24891
-1400.00	22.29831	21.10669	20.51591	20.83476	21.70172	23.96217	28.87982	22.40652
-1500.00	21.08840	19.11559	18.64285	18.83014	20.38889	22.47191	24.59723	33.51944
-1600.00	21.96035	18.70640	17.69825	18.34911	19.55545	21.07967	24.20921	30.00286
-1700.00	22.43081	18.80900	18.11522	18.31485	19.62940	22.49149	27.20067	37.49958
-1800.00	21.70508	20.44813	19.82750	20.18577	21.05492	23.23558	28.20217	21.94045
-1900.00	20.30295	18.41301	17.83148	18.09970	19.65017	21.66742	23.91736	33.02711

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS) 100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
-2000.00	21.10009	17.75269	16.77784	17.44122	18.63746	20.11735	23.28712	29.20036
-2100.00	21.42036	17.68817	17.00031	17.27824	18.56085	21.38056	26.08221	36.19929
-2200.00	20.56822	19.16476	18.57552	19.06597	19.87185	22.04058	26.93556	20.96799
-2300.00	18.96713	17.07607	16.49534	16.84413	18.38845	20.35869	22.53030	31.79241
-2400.00	19.66351	16.25181	15.31757	15.93225	17.12999	18.55991	21.55176	27.55753
-2500.00	19.83491	16.03880	15.35882	15.54485	16.89623	19.44926	24.01984	33.98513
-2600.00	18.74710	17.34161	16.74397	17.22765	17.88824	19.86934	24.63201	19.50790
-2700.00	16.73435	15.15433	14.47341	14.82559	16.13348	18.01524	20.13834	29.46905
-2800.00	17.12820	13.88179	13.10463	13.61204	14.62092	15.89202	18.70868	24.58043
-2900.00	16.82306	13.32203	12.89057	12.95341	14.10786	16.30565	20.48273	30.05232
-3000.00	15.27923	14.39645	13.80787	14.28050	14.73749	16.15903	20.22380	16.12809
-3100.00	12.46593	11.81177	11.24052	11.52384	12.35616	13.46676	14.52997	23.27814
-3200.00	11.68576	9.65921	9.15549	9.29642	9.85468	10.06198	10.76907	14.65881
-3300.00	9.48470	8.24235	8.00326	7.54904	7.62760	8.13019	9.04266	10.70955
-3400.00	7.92085	7.44358	6.86166	6.90395	6.68109	6.83391	7.49931	8.46475
-3500.00	6.74187	6.52595	6.18531	6.21672	6.28691	6.21624	6.52320	7.12237
-3600.00	5.77730	5.79347	5.75601	5.50170	5.69093	5.88551	5.93564	6.23254
-3700.00	5.12513	5.14641	5.26469	5.19190	5.12073	5.29763	5.48480	5.61955
-3800.00	4.68205	4.76028	4.71611	4.82959	4.78366	4.84197	4.98572	5.15379
-3900.00	4.37099	4.44663	4.36653	4.41291	4.47737	4.48340	4.57276	4.73924
-4000.00	4.03618	4.11905	4.12111	4.10794	4.18589	4.19500	4.20397	4.40914

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	535.77869	(97072808)	AT	(0.00, -1900.00)	GC	6.	525.37213	(97020420)	AT	(0.00, -1900.00)	GC
2.	534.91968	(97072808)	AT	(0.00, -1500.00)	GC	7.	525.26471	(97071420)	AT	(0.00, -100.00)	GC
3.	533.09277	(97072808)	AT	(0.00, -2300.00)	GC	8.	525.21509	(97020420)	AT	(0.00, -1500.00)	GC
4.	528.54364	(97072808)	AT	(0.00, -2700.00)	GC	9.	522.88684	(97020420)	AT	(0.00, -2300.00)	GC
5.	525.68872	(97072808)	AT	(0.00, -1100.00)	GC	10.	522.71674	(97072808)	AT	(0.00, -3100.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	138.65607	(97042114)	AT (	100.00, 400.00)	GC	6.	128.42651	(97070515)	AT (	300.00, 0.00)	GC
2.	137.38988	(97032717)	AT (	100.00, 300.00)	GC	7.	128.13860	(97032716)	AT (	100.00, 500.00)	GC
3.	136.15356	(97101115)	AT (	100.00, 400.00)	GC	8.	128.12584	(97040210)	AT (	-300.00, -200.00)	GC
4.	131.97479	(97110115)	AT (	100.00, 300.00)	GC	9.	128.10187	(97032912)	AT (	100.00, 300.00)	GC
5.	129.18823	(97041114)	AT (	0.00, 300.00)	GC	10.	127.53366	(97050111)	AT (	300.00, 300.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	525.26471	(97071420)	AT	(0.00, -100.00)	GC	6.	507.51862	(97110717)	AT	(0.00, -100.00)	GC
2.	521.63348	(97071420)	AT	(0.00, -500.00)	GC	7.	505.83575	(97110717)	AT	(0.00, -500.00)	GC
3.	516.29236	(97071420)	AT	(0.00, -900.00)	GC	8.	505.06067	(97053119)	AT	(0.00, -500.00)	GC
4.	510.49500	(97053119)	AT	(0.00, -100.00)	GC	9.	503.51559	(97122017)	AT	(0.00, -100.00)	GC
5.	508.72095	(97071420)	AT	(0.00, -1300.00)	GC	10.	503.48624	(97111305)	AT	(0.00, -100.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	300.05359	(97011324)	AT (	-800.00, -3100.00)	GC	6.	263.80331	(97011324)	AT (	-800.00, -1100.00)	GC
2.	293.90524	(97011324)	AT (	-800.00, -2700.00)	GC	7.	252.40681	(97011324)	AT (	-800.00, -700.00)	GC
3.	287.34097	(97011324)	AT (	-800.00, -2300.00)	GC	8.	240.25067	(97011324)	AT (	0.00, -700.00)	GC
4.	280.30319	(97011324)	AT (	-800.00, -1900.00)	GC	9.	235.84271	(97011324)	AT (	0.00, -3100.00)	GC
5.	272.59549	(97011324)	AT (	-800.00, -1500.00)	GC	10.	235.11464	(97011324)	AT (	0.00, -1100.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	63.77264	(97011324)	AT (	100.00, -800.00)	GC	6.	52.44123	(97011324)	AT (	100.00, -1100.00)	GC
2.	62.56601	(97011324)	AT (	100.00, -700.00)	GC	7.	49.60832	(97011324)	AT (	0.00, -600.00)	GC
3.	61.32962	(97011324)	AT (	100.00, -900.00)	GC	8.	49.21637	(97011324)	AT (	0.00, -500.00)	GC
4.	57.14398	(97011324)	AT (	100.00, -1000.00)	GC	9.	47.82855	(97011324)	AT (	100.00, -1200.00)	GC
5.	55.04660	(97011324)	AT (	100.00, -600.00)	GC	10.	47.36089	(97011324)	AT (	0.00, -700.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	300.05200	(97011324)	AT (	-800.00, -3100.00)	GC	6.	263.80331	(97011324)	AT (	-800.00, -1100.00)	GC
2.	293.90503	(97011324)	AT (	-800.00, -2700.00)	GC	7.	252.40681	(97011324)	AT (	-800.00, -700.00)	GC
3.	287.34097	(97011324)	AT (	-800.00, -2300.00)	GC	8.	230.37859	(97011324)	AT (	-800.00, -300.00)	GC
4.	280.30319	(97011324)	AT (	-800.00, -1900.00)	GC	9.	227.22643	(97011324)	AT (	0.00, -3100.00)	GC
5.	272.59549	(97011324)	AT (	-800.00, -1500.00)	GC	10.	223.16783	(97011324)	AT (	0.00, -2700.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

GROUP ID		AVERAGE CONC		RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	39.26568	AT (	800.00,	-900.00,	0.00,	0.00)	GC	GRID1
	2ND HIGHEST VALUE IS	39.01193	AT (	800.00,	-1300.00,	0.00,	0.00)	GC	GRID1
	3RD HIGHEST VALUE IS	38.42729	AT (	800.00,	-500.00,	0.00,	0.00)	GC	GRID1
	4TH HIGHEST VALUE IS	38.42015	AT (	800.00,	-1700.00,	0.00,	0.00)	GC	GRID1
	5TH HIGHEST VALUE IS	37.02358	AT (	800.00,	-2100.00,	0.00,	0.00)	GC	GRID1
	6TH HIGHEST VALUE IS	36.14023	AT (	0.00,	-900.00,	0.00,	0.00)	GC	GRID1
	7TH HIGHEST VALUE IS	35.89413	AT (	0.00,	-500.00,	0.00,	0.00)	GC	GRID1
	8TH HIGHEST VALUE IS	35.28054	AT (	0.00,	-1300.00,	0.00,	0.00)	GC	GRID1
	9TH HIGHEST VALUE IS	34.93506	AT (	800.00,	-100.00,	0.00,	0.00)	GC	GRID1
	10TH HIGHEST VALUE IS	34.69812	AT (	800.00,	-2500.00,	0.00,	0.00)	GC	GRID1
CC	1ST HIGHEST VALUE IS	3.83688	AT (	0.00,	500.00,	0.00,	0.00)	GC	GRID1
	2ND HIGHEST VALUE IS	3.79009	AT (	0.00,	400.00,	0.00,	0.00)	GC	GRID1
	3RD HIGHEST VALUE IS	3.75198	AT (	-100.00,	500.00,	0.00,	0.00)	GC	GRID1
	4TH HIGHEST VALUE IS	3.67361	AT (	-100.00,	400.00,	0.00,	0.00)	GC	GRID1
	5TH HIGHEST VALUE IS	3.65218	AT (	0.00,	600.00,	0.00,	0.00)	GC	GRID1
	6TH HIGHEST VALUE IS	3.60035	AT (	-100.00,	600.00,	0.00,	0.00)	GC	GRID1
	7TH HIGHEST VALUE IS	3.39852	AT (	0.00,	700.00,	0.00,	0.00)	GC	GRID1
	8TH HIGHEST VALUE IS	3.38265	AT (	-100.00,	700.00,	0.00,	0.00)	GC	GRID1
	9TH HIGHEST VALUE IS	3.25017	AT (	0.00,	300.00,	0.00,	0.00)	GC	GRID1
	10TH HIGHEST VALUE IS	3.15512	AT (	-100.00,	800.00,	0.00,	0.00)	GC	GRID1
WC	1ST HIGHEST VALUE IS	38.62857	AT (	800.00,	-900.00,	0.00,	0.00)	GC	GRID1
	2ND HIGHEST VALUE IS	38.24891	AT (	800.00,	-1300.00,	0.00,	0.00)	GC	GRID1
	3RD HIGHEST VALUE IS	37.99706	AT (	800.00,	-500.00,	0.00,	0.00)	GC	GRID1
	4TH HIGHEST VALUE IS	37.49958	AT (	800.00,	-1700.00,	0.00,	0.00)	GC	GRID1
	5TH HIGHEST VALUE IS	36.19929	AT (	800.00,	-2100.00,	0.00,	0.00)	GC	GRID1
	6TH HIGHEST VALUE IS	34.21330	AT (	0.00,	-900.00,	0.00,	0.00)	GC	GRID1
	7TH HIGHEST VALUE IS	33.98886	AT (	800.00,	-100.00,	0.00,	0.00)	GC	GRID1
	8TH HIGHEST VALUE IS	33.98513	AT (	800.00,	-2500.00,	0.00,	0.00)	GC	GRID1
	9TH HIGHEST VALUE IS	33.85547	AT (	0.00,	-1300.00,	0.00,	0.00)	GC	GRID1
	10TH HIGHEST VALUE IS	33.76712	AT (	0.00,	-500.00,	0.00,	0.00)	GC	GRID1

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

CONC RURAL FLAT DFAULT

*** 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 62 Informational Message(s)

A Total of 62 Calm Hours Identified

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

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

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

Attachment 3
ISCST3 Modeling Results – Maximum CO 8-Hour Impact

```
CO STARTING
CO TITLEONE FARMINGTON RMP EIS - FULL EMISSION SOURCE MODULE
CO TITLETWO CO EMISSIONS - FULL MET - 100M GRID - 140 DEGREE WIND ROTATION
CO MODELOPT CONC   RURAL                      DFAULT
CO AVERTIME 1 8
CO POLLUTID OTHER
CO DCAYCOEF 0.000000E+00
CO TERRHGTS FLAT
CO RUNORNOT RUN
CO ERRORFIL ERRORS.OUT
CO FINISHED

SO STARTING

** Source Location Cards:
**               SRCID      SRCTYP              XS        YS       ZS

SO LOCATION      CC1      POINT             0.00     18.29     0.00
SO LOCATION      CC2      POINT             0.00      0.00     0.00
SO LOCATION      CC3      POINT             0.00    -18.29     0.00
SO LOCATION      WC1      POINT          -804.67   -201.17     0.00
SO LOCATION      WC2      POINT          -804.67   -603.50     0.00
SO LOCATION      WC3      POINT          -804.67  -1005.84     0.00
SO LOCATION      WC4      POINT          -804.67  -1408.18     0.00
SO LOCATION      WC5      POINT          -804.67  -1810.53     0.00
SO LOCATION      WC6      POINT          -804.67  -2212.87     0.00
SO LOCATION      WC7      POINT          -804.67  -2615.21     0.00
SO LOCATION      WC8      POINT          -804.67  -3017.55     0.00
SO LOCATION      WC9      POINT             0.00   -201.17     0.00
SO LOCATION     WC10      POINT             0.00   -603.50     0.00
SO LOCATION     WC11      POINT             0.00  -1005.84     0.00
SO LOCATION     WC12      POINT             0.00  -1408.18     0.00
SO LOCATION     WC13      POINT             0.00  -1810.53     0.00
SO LOCATION     WC14      POINT             0.00  -2212.87     0.00
SO LOCATION     WC15      POINT             0.00  -2615.21     0.00
SO LOCATION     WC16      POINT             0.00  -3017.55     0.00
SO LOCATION     WC17      POINT           804.67   -201.17     0.00
SO LOCATION     WC18      POINT           804.67   -603.50     0.00
SO LOCATION     WC19      POINT           804.67  -1005.84     0.00
SO LOCATION     WC20      POINT           804.67  -1408.18     0.00
SO LOCATION     WC21      POINT           804.67  -1810.53     0.00
SO LOCATION     WC22      POINT           804.67  -2212.87     0.00
SO LOCATION     WC23      POINT           804.67  -2615.21     0.00
SO LOCATION     WC24      POINT           804.67  -3017.55     0.00
SO LOCATION     WC25      POINT          1609.34   -201.17     0.00
SO LOCATION     WC26      POINT          1609.34   -603.50     0.00
SO LOCATION     WC27      POINT          1609.34  -1005.84     0.00
SO LOCATION     WC28      POINT          1609.34  -1408.18     0.00
SO LOCATION     WC29      POINT          1609.34  -1810.53     0.00
SO LOCATION     WC30      POINT          1609.34  -2212.87     0.00
SO LOCATION     WC31      POINT          1609.34  -2615.21     0.00
SO LOCATION     WC32      POINT          1609.34  -3017.55     0.00

** Source Parameter Cards:
** POINT:    SRCID        QS          HS          TS       VS        DS
** VOLUME:   SRCID        QS          HS        SYINIT    SZINIT
** AREA:     SRCID        QS          HS         XINIT    YINIT      ANGLE SZINIT

SO SRCPARAM    CC1      2.47        6.10       661.0    25.80      0.67
SO SRCPARAM    CC2      2.47        6.10       661.0    25.80      0.67
SO SRCPARAM    CC3      2.47        6.10       661.0    25.80      0.67
SO SRCPARAM    WC1      0.07        3.08       836.0    27.81      0.10
SO SRCPARAM    WC2      0.07        3.08       836.0    27.81      0.10
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SO SRCPARAM    WC3      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC4      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC5      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC6      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC7      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC8      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC9      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC10      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC11      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC12      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC13      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC14      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC15      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC16      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC17      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC18      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC19      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC20      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC21      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC22      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC23      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC24      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC25      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC26      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC27      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC28      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC29      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC30      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC31      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC32      0.07         3.08       836.0    27.81      0.10

SO EMISUNIT   0.100000E+07 (GRAMS/SEC)          (MICROGRAMS/CUBIC-METER)

SO SRCGROUP  ALL
SO SRCGROUP   CC  CC1-CC3
SO SRCGROUP   WC  WC1-WC32

SO FINISHED

RE STARTING
RE GRIDCART GRID1 STA
RE GRIDCART GRID1 XYINC -800.00 17 100.00 -4000.00 61 100.00
RE GRIDCART GRID1 END

RE FINISHED

ME STARTING
ME INPUTFIL  BLOOM97.MET
ME ANEMHGHT  10.000 METERS
ME SURFDATA     36  1997            SURFNAME
ME UAIRDATA  23050  1997            UAIRNAME
ME WDROTATE  140
ME WINDCATS    1.54    3.09    5.14    8.23   10.80
ME FINISHED

OU STARTING
**OU RECTABLE  ALLAVE  FIRST
OU MAXTABLE  ALLAVE  10
OU FINISHED

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

CONC RURAL FLAT DFAULT

*** MODEL SETUP OPTIONS SUMMARY ***

- -

**Intermediate Terrain Processing is Selected

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

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

**Model Uses RURAL Dispersion.

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

**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: 35 Source(s); 3 Source Group(s); and 1037 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 Overall Maximum Short Term Values (MAXTABLE Keyword)

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

**Misc. Inputs: Anem. Hgt. (m) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 140.0
                 Emission Units = (GRAMS/SEC) ; Emission Rate Unit Factor = 0.10000E+07
                 Output Units = (MICROGRAMS/CUBIC-METER)

**Approximate Storage Requirements of Model = 1.3 MB of RAM.

**Input Runstream File: modc140.inp
**Output Print File: modc140.out
**Detailed Error/Message File: ERRORS.OUT

CONC RURAL FLAT DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
CC1	0	0.24700E+01	0.0	18.3	0.0	6.10	661.00	25.80	0.67	NO	
CC2	0	0.24700E+01	0.0	0.0	0.0	6.10	661.00	25.80	0.67	NO	
CC3	0	0.24700E+01	0.0	-18.3	0.0	6.10	661.00	25.80	0.67	NO	
WC1	0	0.70000E-01	-804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC2	0	0.70000E-01	-804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC3	0	0.70000E-01	-804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC4	0	0.70000E-01	-804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC5	0	0.70000E-01	-804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC6	0	0.70000E-01	-804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC7	0	0.70000E-01	-804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC8	0	0.70000E-01	-804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC9	0	0.70000E-01	0.0	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC10	0	0.70000E-01	0.0	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC11	0	0.70000E-01	0.0	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC12	0	0.70000E-01	0.0	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC13	0	0.70000E-01	0.0	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC14	0	0.70000E-01	0.0	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC15	0	0.70000E-01	0.0	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC16	0	0.70000E-01	0.0	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC17	0	0.70000E-01	804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC18	0	0.70000E-01	804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC19	0	0.70000E-01	804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC20	0	0.70000E-01	804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC21	0	0.70000E-01	804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC22	0	0.70000E-01	804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC23	0	0.70000E-01	804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC24	0	0.70000E-01	804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC25	0	0.70000E-01	1609.3	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC26	0	0.70000E-01	1609.3	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC27	0	0.70000E-01	1609.3	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC28	0	0.70000E-01	1609.3	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC29	0	0.70000E-01	1609.3	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC30	0	0.70000E-01	1609.3	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC31	0	0.70000E-01	1609.3	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC32	0	0.70000E-01	1609.3	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	

**MODELOPTs:
CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,
CC	CC1 , CC2 , CC3 ,
WC	WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,

CONC RURAL FLAT DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

-800.0, -700.0, -600.0, -500.0, -400.0, -300.0, -200.0, -100.0, 0.0, 100.0,
200.0, 300.0, 400.0, 500.0, 600.0, 700.0, 800.0,

*** Y-COORDINATES OF GRID ***
(METERS)

-4000.0, -3900.0, -3800.0, -3700.0, -3600.0, -3500.0, -3400.0, -3300.0, -3200.0, -3100.0,
-3000.0, -2900.0, -2800.0, -2700.0, -2600.0, -2500.0, -2400.0, -2300.0, -2200.0, -2100.0,
-2000.0, -1900.0, -1800.0, -1700.0, -1600.0, -1500.0, -1400.0, -1300.0, -1200.0, -1100.0,
-1000.0, -900.0, -800.0, -700.0, -600.0, -500.0, -400.0, -300.0, -200.0, -100.0,
0.0, 100.0, 200.0, 300.0, 400.0, 500.0, 600.0, 700.0, 800.0, 900.0,
1000.0, 1100.0, 1200.0, 1300.0, 1400.0, 1500.0, 1600.0, 1700.0, 1800.0, 1900.0,
2000.0,

CONC RURAL FLAT DFAULT

* 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)
CC2	0.0	0.0	0.00

*** 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	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
B	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
C	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00
D	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
E	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00
F	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00

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

STABILITY	WIND SPEED CATEGORY					
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 RURAL FLAT DFAULT

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

FILE: BLOOM97.MET
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 36 UPPER AIR STATION NO.: 23050
NAME: SURFNAME NAME: UAIRNAME
YEAR: 1997 YEAR: 1997

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)
97	01	01	01	72.1	1.00	272.9	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	02	83.7	1.00	272.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	03	162.7	1.00	271.9	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	04	175.1	1.30	271.6	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	05	128.0	1.10	271.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	06	129.5	1.00	271.3	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	07	175.6	1.00	271.3	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	08	120.4	1.00	271.0	5	78.3	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	09	204.9	1.00	273.0	4	231.9	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	10	14.0	1.60	275.1	3	385.6	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	11	32.7	1.00	277.4	2	539.2	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	12	349.7	1.80	279.5	2	692.8	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	13	355.1	1.30	281.4	2	846.4	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	14	46.8	1.40	282.6	2	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	15	79.5	2.80	283.4	3	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	16	93.8	2.10	283.6	4	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	17	80.0	1.00	282.8	4	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	18	192.7	1.80	279.5	5	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	19	197.4	1.60	277.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	20	182.2	1.00	276.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	21	178.8	1.20	275.5	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	22	184.3	1.10	274.5	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	23	93.5	1.00	273.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	24	163.8	1.00	273.1	6	1000.0	1000.0	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.

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	183.28360	(97040309)	AT	(0.00, -700.00)	GC	6.	175.13716	(97040303)	AT	(0.00, -700.00)	GC
2.	183.23973	(97040314)	AT	(0.00, -700.00)	GC	7.	172.37889	(97092116)	AT	(0.00, -700.00)	GC
3.	179.07370	(97092115)	AT	(0.00, -700.00)	GC	8.	170.22153	(97042114)	AT	(-200.00, 400.00)	GC
4.	177.96423	(97040315)	AT	(0.00, -700.00)	GC	9.	166.14017	(97042212)	AT	(0.00, 300.00)	GC
5.	176.75366	(97051919)	AT	(0.00, -700.00)	GC	10.	165.48862	(97053014)	AT	(-100.00, 300.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	169.23775	(97042114)	AT	(-200.00, 400.00)	GC	6.	161.35167	(97042213)	AT	(0.00, 300.00)	GC
2.	164.77415	(97080217)	AT	(-100.00, -300.00)	GC	7.	159.23181	(97060513)	AT	(-300.00, 0.00)	GC
3.	164.11053	(97053014)	AT	(-100.00, 300.00)	GC	8.	156.60275	(97071819)	AT	(400.00, -200.00)	GC
4.	163.04224	(97042212)	AT	(0.00, 300.00)	GC	9.	156.54076	(97110114)	AT	(-200.00, 400.00)	GC
5.	162.58896	(97040215)	AT	(-300.00, -300.00)	GC	10.	156.48111	(97060514)	AT	(-300.00, 0.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	86.83888	(97080819)	AT	(0.00, -100.00)	GC	6.	84.98199	(97080819)	AT	(0.00, -900.00)	GC
2.	86.23079	(97071706)	AT	(0.00, 0.00)	GC	7.	84.92135	(97070119)	AT	(0.00, -900.00)	GC
3.	86.03852	(97080819)	AT	(0.00, -500.00)	GC	8.	84.56011	(97071706)	AT	(800.00, 0.00)	GC
4.	85.85468	(97070119)	AT	(0.00, -100.00)	GC	9.	84.49163	(97082324)	AT	(0.00, -100.00)	GC
5.	85.54868	(97070119)	AT	(0.00, -500.00)	GC	10.	84.42963	(97071706)	AT	(0.00, -400.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	147.45616	(97040316)	AT	(0.00, -700.00)	GC	6.	114.39882	(97040316)	AT	(0.00, -300.00)	GC
2.	120.01247	(97110116)	AT	(-200.00, 400.00)	GC	7.	112.95171	(97040316)	AT	(0.00, -800.00)	GC
3.	118.34989	(97040316)	AT	(0.00, -1100.00)	GC	8.	112.02455	(97040316)	AT	(0.00, -600.00)	GC
4.	116.41436	(97040316)	AT	(0.00, -500.00)	GC	9.	103.54744	(97011324)	AT	(400.00, -400.00)	GC
5.	115.41289	(97040316)	AT	(0.00, -400.00)	GC	10.	101.44374	(97111516)	AT	(-400.00, 500.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	118.69531	(97110116)	AT	(-200.00, 400.00)	GC	6.	100.37094	(97040316)	AT	(0.00, -700.00)	GC
2.	107.37251	(97040316)	AT	(0.00, -500.00)	GC	7.	99.92039	(97111516)	AT	(-400.00, 500.00)	GC
3.	106.41750	(97040316)	AT	(0.00, -600.00)	GC	8.	97.95872	(97040316)	AT	(0.00, -400.00)	GC
4.	103.54635	(97011324)	AT	(400.00, -400.00)	GC	9.	95.91154	(97110116)	AT	(-300.00, 600.00)	GC
5.	101.13464	(97011324)	AT	(500.00, -500.00)	GC	10.	93.06230	(97011308)	AT	(400.00, -400.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)		OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)		OF TYPE
1.	55.82237	(97040316)	AT (	0.00,	-3100.00)	GC	6.	50.42026	(97040316)	AT (	-800.00,	-3100.00)	GC
2.	54.80164	(97040316)	AT (	0.00,	-2700.00)	GC	7.	49.76522	(97040316)	AT (	-800.00,	-2700.00)	GC
3.	53.68568	(97040316)	AT (	0.00,	-2300.00)	GC	8.	49.38544	(97040316)	AT (	0.00,	-1100.00)	GC
4.	52.45413	(97040316)	AT (	0.00,	-1900.00)	GC	9.	48.98963	(97040316)	AT (	-800.00,	-2300.00)	GC
5.	51.05646	(97040316)	AT (	0.00,	-1500.00)	GC	10.	48.07491	(97040316)	AT (	-800.00,	-1900.00)	GC

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

CONC RURAL FLAT DFAULT

*** 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 62 Informational Message(s)

A Total of 62 Calm Hours Identified

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

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

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

Attachment 4
ISCST3 Modeling Results – Maximum CO 1-Hour Impact

```
CO STARTING
CO TITLEONE FARMINGTON RMP EIS - FULL EMISSION SOURCE MODULE
CO TITLETWO CO EMISSIONS - FULL MET - 100M GRID - 290 DEGREE WIND ROTATION
CO MODELOPT CONC   RURAL                      DFAULT
CO AVERTIME 1 8
CO POLLUTID OTHER
CO DCAYCOEF 0.000000E+00
CO TERRHGTS FLAT
CO RUNORNOT RUN
CO ERRORFIL ERRORS.OUT
CO FINISHED

SO STARTING

** Source Location Cards:
**               SRCID      SRCTYP              XS        YS       ZS

SO LOCATION      CC1      POINT             0.00     18.29     0.00
SO LOCATION      CC2      POINT             0.00      0.00     0.00
SO LOCATION      CC3      POINT             0.00    -18.29     0.00
SO LOCATION      WC1      POINT          -804.67   -201.17     0.00
SO LOCATION      WC2      POINT          -804.67   -603.50     0.00
SO LOCATION      WC3      POINT          -804.67  -1005.84     0.00
SO LOCATION      WC4      POINT          -804.67  -1408.18     0.00
SO LOCATION      WC5      POINT          -804.67  -1810.53     0.00
SO LOCATION      WC6      POINT          -804.67  -2212.87     0.00
SO LOCATION      WC7      POINT          -804.67  -2615.21     0.00
SO LOCATION      WC8      POINT          -804.67  -3017.55     0.00
SO LOCATION      WC9      POINT             0.00   -201.17     0.00
SO LOCATION     WC10      POINT             0.00   -603.50     0.00
SO LOCATION     WC11      POINT             0.00  -1005.84     0.00
SO LOCATION     WC12      POINT             0.00  -1408.18     0.00
SO LOCATION     WC13      POINT             0.00  -1810.53     0.00
SO LOCATION     WC14      POINT             0.00  -2212.87     0.00
SO LOCATION     WC15      POINT             0.00  -2615.21     0.00
SO LOCATION     WC16      POINT             0.00  -3017.55     0.00
SO LOCATION     WC17      POINT           804.67   -201.17     0.00
SO LOCATION     WC18      POINT           804.67   -603.50     0.00
SO LOCATION     WC19      POINT           804.67  -1005.84     0.00
SO LOCATION     WC20      POINT           804.67  -1408.18     0.00
SO LOCATION     WC21      POINT           804.67  -1810.53     0.00
SO LOCATION     WC22      POINT           804.67  -2212.87     0.00
SO LOCATION     WC23      POINT           804.67  -2615.21     0.00
SO LOCATION     WC24      POINT           804.67  -3017.55     0.00
SO LOCATION     WC25      POINT          1609.34   -201.17     0.00
SO LOCATION     WC26      POINT          1609.34   -603.50     0.00
SO LOCATION     WC27      POINT          1609.34  -1005.84     0.00
SO LOCATION     WC28      POINT          1609.34  -1408.18     0.00
SO LOCATION     WC29      POINT          1609.34  -1810.53     0.00
SO LOCATION     WC30      POINT          1609.34  -2212.87     0.00
SO LOCATION     WC31      POINT          1609.34  -2615.21     0.00
SO LOCATION     WC32      POINT          1609.34  -3017.55     0.00

** Source Parameter Cards:
** POINT:    SRCID        QS          HS          TS       VS        DS
** VOLUME:   SRCID        QS          HS        SYINIT    SZINIT
** AREA:     SRCID        QS          HS         XINIT    YINIT      ANGLE SZINIT

SO SRCPARAM    CC1      2.47        6.10       661.0    25.80      0.67
SO SRCPARAM    CC2      2.47        6.10       661.0    25.80      0.67
SO SRCPARAM    CC3      2.47        6.10       661.0    25.80      0.67
SO SRCPARAM    WC1      0.07        3.08       836.0    27.81      0.10
SO SRCPARAM    WC2      0.07        3.08       836.0    27.81      0.10
```

```
SO SRCPARAM    WC3      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC4      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC5      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC6      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC7      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC8      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM    WC9      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC10      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC11      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC12      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC13      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC14      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC15      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC16      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC17      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC18      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC19      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC20      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC21      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC22      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC23      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC24      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC25      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC26      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC27      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC28      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC29      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC30      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC31      0.07         3.08       836.0    27.81      0.10
SO SRCPARAM   WC32      0.07         3.08       836.0    27.81      0.10

SO EMISUNIT   0.100000E+07 (GRAMS/SEC)          (MICROGRAMS/CUBIC-METER)

SO SRCGROUP  ALL
SO SRCGROUP   CC  CC1-CC3
SO SRCGROUP   WC  WC1-WC32

SO FINISHED

RE STARTING
RE GRIDCART GRID1 STA
RE GRIDCART GRID1 XYINC -800.00 17 100.00 -4000.00 61 100.00
RE GRIDCART GRID1 END

RE FINISHED

ME STARTING
ME INPUTFIL  BLOOM97.MET
ME ANEMHGHT  10.000 METERS
ME SURFDATA     36  1997            SURFNAME
ME UAIRDATA  23050  1997            UAIRNAME
ME WDROTATE  -70
ME WINDCATS    1.54    3.09    5.14    8.23   10.80
ME FINISHED

OU STARTING
**OU RECTABLE  ALLAVE  FIRST
OU MAXTABLE  ALLAVE  10
OU FINISHED

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

CONC RURAL FLAT DFAULT

*** MODEL SETUP OPTIONS SUMMARY ***

**Intermediate Terrain Processing is Selected

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

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

**Model Uses RURAL Dispersion.

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

**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: 35 Source(s); 3 Source Group(s); and 1037 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 Overall Maximum Short Term Values (MAXTABLE Keyword)

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

**Misc. Inputs: Anem. Hgt. (m) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = -70.0
Emission Units = (GRAMS/SEC) ; Emission Rate Unit Factor = 0.10000E+07
Output Units = (MICROGRAMS/CUBIC-METER)

**Approximate Storage Requirements of Model = 1.3 MB of RAM.

**Input Runstream File: modc290.inp
**Output Print File: modc290.out
**Detailed Error/Message File: ERRORS.OUT

CONC RURAL FLAT DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
CC1	0	0.24700E+01	0.0	18.3	0.0	6.10	661.00	25.80	0.67	NO	
CC2	0	0.24700E+01	0.0	0.0	0.0	6.10	661.00	25.80	0.67	NO	
CC3	0	0.24700E+01	0.0	-18.3	0.0	6.10	661.00	25.80	0.67	NO	
WC1	0	0.70000E-01	-804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC2	0	0.70000E-01	-804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC3	0	0.70000E-01	-804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC4	0	0.70000E-01	-804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC5	0	0.70000E-01	-804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC6	0	0.70000E-01	-804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC7	0	0.70000E-01	-804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC8	0	0.70000E-01	-804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC9	0	0.70000E-01	0.0	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC10	0	0.70000E-01	0.0	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC11	0	0.70000E-01	0.0	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC12	0	0.70000E-01	0.0	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC13	0	0.70000E-01	0.0	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC14	0	0.70000E-01	0.0	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC15	0	0.70000E-01	0.0	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC16	0	0.70000E-01	0.0	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC17	0	0.70000E-01	804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC18	0	0.70000E-01	804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC19	0	0.70000E-01	804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC20	0	0.70000E-01	804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC21	0	0.70000E-01	804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC22	0	0.70000E-01	804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC23	0	0.70000E-01	804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC24	0	0.70000E-01	804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC25	0	0.70000E-01	1609.3	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC26	0	0.70000E-01	1609.3	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC27	0	0.70000E-01	1609.3	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC28	0	0.70000E-01	1609.3	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC29	0	0.70000E-01	1609.3	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC30	0	0.70000E-01	1609.3	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC31	0	0.70000E-01	1609.3	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC32	0	0.70000E-01	1609.3	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	

**MODELOPTs:
CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,
CC	CC1 , CC2 , CC3 ,
WC	WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,

CONC RURAL FLAT DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

-800.0, -700.0, -600.0, -500.0, -400.0, -300.0, -200.0, -100.0, 0.0, 100.0,
200.0, 300.0, 400.0, 500.0, 600.0, 700.0, 800.0,

*** Y-COORDINATES OF GRID ***
(METERS)

-4000.0, -3900.0, -3800.0, -3700.0, -3600.0, -3500.0, -3400.0, -3300.0, -3200.0, -3100.0,
-3000.0, -2900.0, -2800.0, -2700.0, -2600.0, -2500.0, -2400.0, -2300.0, -2200.0, -2100.0,
-2000.0, -1900.0, -1800.0, -1700.0, -1600.0, -1500.0, -1400.0, -1300.0, -1200.0, -1100.0,
-1000.0, -900.0, -800.0, -700.0, -600.0, -500.0, -400.0, -300.0, -200.0, -100.0,
0.0, 100.0, 200.0, 300.0, 400.0, 500.0, 600.0, 700.0, 800.0, 900.0,
1000.0, 1100.0, 1200.0, 1300.0, 1400.0, 1500.0, 1600.0, 1700.0, 1800.0, 1900.0,
2000.0,

CONC RURAL FLAT DFAULT

* 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)
CC2	0.0	0.0	0.00

*** 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	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
B	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
C	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00
D	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
E	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00
F	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00

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

STABILITY	WIND SPEED CATEGORY					
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 RURAL FLAT DFAULT

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

FILE: BLOOM97.MET
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 36 UPPER AIR STATION NO.: 23050
NAME: SURFNAME NAME: UAIRNAME
YEAR: 1997 YEAR: 1997

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)
97	01	01	01	72.1	1.00	272.9	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	02	83.7	1.00	272.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	03	162.7	1.00	271.9	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	04	175.1	1.30	271.6	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	05	128.0	1.10	271.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	06	129.5	1.00	271.3	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	07	175.6	1.00	271.3	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	08	120.4	1.00	271.0	5	78.3	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	09	204.9	1.00	273.0	4	231.9	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	10	14.0	1.60	275.1	3	385.6	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	11	32.7	1.00	277.4	2	539.2	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	12	349.7	1.80	279.5	2	692.8	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	13	355.1	1.30	281.4	2	846.4	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	14	46.8	1.40	282.6	2	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	15	79.5	2.80	283.4	3	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	16	93.8	2.10	283.6	4	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	17	80.0	1.00	282.8	4	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	18	192.7	1.80	279.5	5	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	19	197.4	1.60	277.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	20	182.2	1.00	276.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	21	178.8	1.20	275.5	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	22	184.3	1.10	274.5	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	23	93.5	1.00	273.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	24	163.8	1.00	273.1	6	1000.0	1000.0	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.

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)		OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)		OF TYPE
1.	214.32889	(97042115)	AT (	0.00,	-300.00)	GC	6.	186.65553	(97110114)	AT (	0.00,	-300.00)	GC
2.	196.61481	(97101116)	AT (	0.00,	-300.00)	GC	7.	186.53938	(97101116)	AT (	0.00,	-400.00)	GC
3.	194.92636	(97042115)	AT (	0.00,	-400.00)	GC	8.	185.87138	(97052614)	AT (	0.00,	-300.00)	GC
4.	194.42142	(97032716)	AT (	0.00,	-300.00)	GC	9.	183.14618	(97101816)	AT (	0.00,	-700.00)	GC
5.	189.70071	(97081515)	AT (	0.00,	-700.00)	GC	10.	182.48260	(97061518)	AT (	0.00,	-700.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	181.20786	(97042115)	AT	(0.00, -400.00)	GC	6.	162.88312	(97042115)	AT	(0.00, -500.00)	GC
2.	178.14365	(97042115)	AT	(0.00, -300.00)	GC	7.	160.68149	(97101116)	AT	(0.00, -500.00)	GC
3.	171.41150	(97101116)	AT	(0.00, -400.00)	GC	8.	159.32561	(97051915)	AT	(300.00, -100.00)	GC
4.	167.39792	(97032716)	AT	(0.00, -400.00)	GC	9.	158.86270	(97110114)	AT	(0.00, -400.00)	GC
5.	163.88007	(97071819)	AT	(-200.00, 300.00)	GC	10.	158.45279	(97040918)	AT	(300.00, -200.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	158.22813	(97022507)	AT	(800.00, 0.00)	GC	6.	143.53751	(97022507)	AT	(800.00, -800.00)	GC
2.	154.98245	(97022507)	AT	(0.00, 0.00)	GC	7.	142.22234	(97022507)	AT	(800.00, 100.00)	GC
3.	151.35323	(97022507)	AT	(800.00, -400.00)	GC	8.	140.39110	(97022507)	AT	(0.00, -800.00)	GC
4.	148.14975	(97022507)	AT	(0.00, -400.00)	GC	9.	139.70396	(97022507)	AT	(800.00, -100.00)	GC
5.	146.37367	(97022507)	AT	(-800.00, 0.00)	GC	10.	139.69121	(97022507)	AT	(-800.00, -400.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	125.25599	(97032916)	AT	(0.00, -700.00)	GC	6.	104.39751	(97110116)	AT	(0.00, -700.00)	GC
2.	114.11893	(97110116)	AT	(0.00, -300.00)	GC	7.	103.94669	(97040316)	AT	(300.00, 500.00)	GC
3.	108.24734	(97110116)	AT	(0.00, -400.00)	GC	8.	103.39349	(97111516)	AT	(100.00, -600.00)	GC
4.	108.04521	(97032916)	AT	(0.00, -300.00)	GC	9.	103.01920	(97011324)	AT	(-200.00, 700.00)	GC
5.	105.76422	(97011308)	AT	(-200.00, 600.00)	GC	10.	102.93083	(97032916)	AT	(0.00, -400.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	103.63158	(97011308)	AT	(-200.00, 600.00)	GC	6.	97.93615	(97110116)	AT	(0.00, -400.00)	GC
2.	102.32375	(97040316)	AT	(300.00, 500.00)	GC	7.	95.58765	(97011316)	AT	(-100.00, 500.00)	GC
3.	100.67261	(97011324)	AT	(-200.00, 700.00)	GC	8.	93.85230	(97110116)	AT	(0.00, -500.00)	GC
4.	100.07924	(97111516)	AT	(100.00, -600.00)	GC	9.	92.74891	(97032916)	AT	(0.00, -500.00)	GC
5.	98.44057	(97111516)	AT	(100.00, -700.00)	GC	10.	91.77654	(97011324)	AT	(-200.00, 800.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	48.69170	(97032916)	AT	(0.00, -3100.00)	GC	6.	45.55698	(97032916)	AT	(0.00, -1900.00)	GC
2.	47.72173	(97032916)	AT	(0.00, -2700.00)	GC	7.	45.22928	(97032916)	AT	(800.00, -2300.00)	GC
3.	46.92035	(97032916)	AT	(800.00, -3100.00)	GC	8.	44.33980	(97112624)	AT	(0.00, -100.00)	GC
4.	46.68269	(97032916)	AT	(0.00, -2300.00)	GC	9.	44.30014	(97032916)	AT	(0.00, -1500.00)	GC
5.	46.11539	(97032916)	AT	(800.00, -2700.00)	GC	10.	44.24466	(97032916)	AT	(800.00, -1900.00)	GC

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

CONC RURAL FLAT DFAULT

*** 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 62 Informational Message(s)

A Total of 62 Calm Hours Identified

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

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

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

Attachment 5
ISCST3 Modeling Results – Maximum Annual Formaldehyde Impact

```
CO STARTING
CO TITLEONE FARMINGTON RMP EIS - FULL EMISSION SOURCE MODULE
CO TITLETWO FORMALDEHYDE - FULL MET - 100M GRID - 290 DEGREE ROTATION
CO MODELOPT CONC   RURAL                  DFAULT
CO AVERTIME 1 PERIOD
CO POLLUTID OTHER
CO DCAYCOEF 0.000000E+00
CO TERRHGTS FLAT
CO RUNORNOT RUN
CO ERRORFIL ERRORS.OUT
CO FINISHED

SO STARTING

** Source Location Cards:
**            SRCID     SRCTYP           XS       YS       ZS

SO LOCATION     CC1     POINT          0.00     18.29     0.00
SO LOCATION     CC2     POINT          0.00      0.00     0.00
SO LOCATION     CC3     POINT          0.00    -18.29     0.00
SO LOCATION     WC1     POINT       -804.67   -201.17     0.00
SO LOCATION     WC2     POINT       -804.67   -603.50     0.00
SO LOCATION     WC3     POINT       -804.67  -1005.84     0.00
SO LOCATION     WC4     POINT       -804.67  -1408.18     0.00
SO LOCATION     WC5     POINT       -804.67  -1810.53     0.00
SO LOCATION     WC6     POINT       -804.67  -2212.87     0.00
SO LOCATION     WC7     POINT       -804.67  -2615.21     0.00
SO LOCATION     WC8     POINT       -804.67  -3017.55     0.00
SO LOCATION     WC9     POINT          0.00   -201.17     0.00
SO LOCATION    WC10     POINT          0.00   -603.50     0.00
SO LOCATION    WC11     POINT          0.00  -1005.84     0.00
SO LOCATION    WC12     POINT          0.00  -1408.18     0.00
SO LOCATION    WC13     POINT          0.00  -1810.53     0.00
SO LOCATION    WC14     POINT          0.00  -2212.87     0.00
SO LOCATION    WC15     POINT          0.00  -2615.21     0.00
SO LOCATION    WC16     POINT          0.00  -3017.55     0.00
SO LOCATION    WC17     POINT        804.67   -201.17     0.00
SO LOCATION    WC18     POINT        804.67   -603.50     0.00
SO LOCATION    WC19     POINT        804.67  -1005.84     0.00
SO LOCATION    WC20     POINT        804.67  -1408.18     0.00
SO LOCATION    WC21     POINT        804.67  -1810.53     0.00
SO LOCATION    WC22     POINT        804.67  -2212.87     0.00
SO LOCATION    WC23     POINT        804.67  -2615.21     0.00
```

```
SO LOCATION     WC24     POINT          804.67  -3017.55     0.00
SO LOCATION     WC25     POINT         1609.34   -201.17     0.00
SO LOCATION     WC26     POINT         1609.34   -603.50     0.00
SO LOCATION     WC27     POINT         1609.34  -1005.84     0.00
SO LOCATION     WC28     POINT         1609.34  -1408.18     0.00
SO LOCATION     WC29     POINT         1609.34  -1810.53     0.00
SO LOCATION     WC30     POINT         1609.34  -2212.87     0.00
SO LOCATION     WC31     POINT         1609.34  -2615.21     0.00
SO LOCATION     WC32     POINT         1609.34  -3017.55     0.00

** Source Parameter Cards:
** POINT:    SRCID       QS          HS          TS       VS       DS
** VOLUME:   SRCID       QS          HS        SYINIT    SZINIT
** AREA:     SRCID       QS          HS        XINIT    YINIT     ANGLE SZINIT

SO SRCPARAM    CC1     0.0604      6.10       661.0    25.80      0.67
SO SRCPARAM    CC2     0.0604      6.10       661.0    25.80      0.67
SO SRCPARAM    CC3     0.0604      6.10       661.0    25.80      0.67
SO SRCPARAM    WC1     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM    WC2     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM    WC3     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM    WC4     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM    WC5     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM    WC6     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM    WC7     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM    WC8     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM    WC9     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC10     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC11     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC12     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC13     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC14     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC15     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC16     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC17     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC18     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC19     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC20     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC21     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC22     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC23     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC24     0.000601    3.08        836.0    27.81     0.10
SO SRCPARAM   WC25     0.000601    3.08        836.0    27.81     0.10
```

```
SO SRCPARAM   WC26     0.000601    3.08      836.0   27.81     0.10
SO SRCPARAM   WC27     0.000601    3.08      836.0   27.81     0.10
SO SRCPARAM   WC28     0.000601    3.08      836.0   27.81     0.10
SO SRCPARAM   WC29     0.000601    3.08      836.0   27.81     0.10
SO SRCPARAM   WC30     0.000601    3.08      836.0   27.81     0.10
SO SRCPARAM   WC31     0.000601    3.08      836.0   27.81     0.10
SO SRCPARAM   WC32     0.000601    3.08      836.0   27.81     0.10

SO EMISUNIT   0.100000E+07 (GRAMS/SEC)         (MICROGRAMS/CUBIC-METER)

SO SRCGROUP  ALL
SO SRCGROUP   CC  CC1-CC3
SO SRCGROUP   WC  WC1-WC32

SO FINISHED

RE STARTING
RE GRIDCART GRID1 STA
RE GRIDCART GRID1 XYINC -800.00 17 100.00 -4000.00 61 100.00
RE GRIDCART GRID1 END

RE FINISHED

ME STARTING
ME INPUTFIL  BLOOM97.MET
ME ANEMHGHT  10.000 METERS
ME SURFDATA     36  1997           SURFNAME
ME UAIRDATA  23050  1997           UAIRNAME
ME WDROTATE  -70
ME WINDCATS    1.54    3.09    5.14    8.23   10.80
ME FINISHED

OU STARTING
**OU RECTABLE  ALLAVE  FIRST
OU MAXTABLE  ALLAVE  10
OU FINISHED

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

*** 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 RURAL Dispersion.

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

**Model Assumes Receptors on FLAT Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

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

**This Run Includes: 35 Source(s); 3 Source Group(s); and 1037 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 PERIOD Averages by Receptor
Model Outputs Tables of Overall Maximum Short Term Values (MAXTABLE Keyword)

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

**Misc. Inputs: Anem. Hgt. (m) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = -70.0
Emission Units = (GRAMS/SEC) ; Emission Rate Unit Factor = 0.10000E+07
Output Units = (MICROGRAMS/CUBIC-METER)

**Approximate Storage Requirements of Model = 1.3 MB of RAM.

**Input Runstream File: Form290.txt
**Output Print File: Form290.out
**Detailed Error/Message File: ERRORS.OUT

CONC RURAL FLAT DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
CC1	0	0.60400E-01	0.0	18.3	0.0	6.10	661.00	25.80	0.67	NO	
CC2	0	0.60400E-01	0.0	0.0	0.0	6.10	661.00	25.80	0.67	NO	
CC3	0	0.60400E-01	0.0	-18.3	0.0	6.10	661.00	25.80	0.67	NO	
WC1	0	0.60100E-03	-804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC2	0	0.60100E-03	-804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC3	0	0.60100E-03	-804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC4	0	0.60100E-03	-804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC5	0	0.60100E-03	-804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC6	0	0.60100E-03	-804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC7	0	0.60100E-03	-804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC8	0	0.60100E-03	-804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC9	0	0.60100E-03	0.0	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC10	0	0.60100E-03	0.0	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC11	0	0.60100E-03	0.0	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC12	0	0.60100E-03	0.0	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC13	0	0.60100E-03	0.0	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC14	0	0.60100E-03	0.0	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC15	0	0.60100E-03	0.0	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC16	0	0.60100E-03	0.0	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC17	0	0.60100E-03	804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC18	0	0.60100E-03	804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC19	0	0.60100E-03	804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC20	0	0.60100E-03	804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC21	0	0.60100E-03	804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC22	0	0.60100E-03	804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC23	0	0.60100E-03	804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC24	0	0.60100E-03	804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC25	0	0.60100E-03	1609.3	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC26	0	0.60100E-03	1609.3	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC27	0	0.60100E-03	1609.3	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC28	0	0.60100E-03	1609.3	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC29	0	0.60100E-03	1609.3	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC30	0	0.60100E-03	1609.3	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC31	0	0.60100E-03	1609.3	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC32	0	0.60100E-03	1609.3	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	

CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,
CC	CC1 , CC2 , CC3 ,
WC	WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,

CONC RURAL FLAT DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

*** X-COORDINATES OF GRID ***
(METERS)

-800.0, -700.0, -600.0, -500.0, -400.0, -300.0, -200.0, -100.0, 0.0, 100.0,
200.0, 300.0, 400.0, 500.0, 600.0, 700.0, 800.0,

*** Y-COORDINATES OF GRID ***
(METERS)

-4000.0, -3900.0, -3800.0, -3700.0, -3600.0, -3500.0, -3400.0, -3300.0, -3200.0, -3100.0,
-3000.0, -2900.0, -2800.0, -2700.0, -2600.0, -2500.0, -2400.0, -2300.0, -2200.0, -2100.0,
-2000.0, -1900.0, -1800.0, -1700.0, -1600.0, -1500.0, -1400.0, -1300.0, -1200.0, -1100.0,
-1000.0, -900.0, -800.0, -700.0, -600.0, -500.0, -400.0, -300.0, -200.0, -100.0,
0.0, 100.0, 200.0, 300.0, 400.0, 500.0, 600.0, 700.0, 800.0, 900.0,
1000.0, 1100.0, 1200.0, 1300.0, 1400.0, 1500.0, 1600.0, 1700.0, 1800.0, 1900.0,
2000.0,

CONC RURAL FLAT DFAULT

* 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)
CC2	0.0	0.0	0.00

*** 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	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
B	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
C	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00
D	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
E	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00
F	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00

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

STABILITY	WIND SPEED CATEGORY					
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 RURAL FLAT DFAULT

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

FILE: BLOOM97.MET

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

SURFACE STATION NO.: 36 UPPER AIR STATION NO.: 23050

NAME: SURFNAME NAME: UAIRNAME

YEAR: 1997 YEAR: 1997

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)
97	01	01	01	72.1	1	272.9	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	02	83.7	1	272.4	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	03	162.7	1	271.9	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	04	175.1	1.3	271.6	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	05	128	1.1	271.4	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	06	129.5	1	271.3	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	07	175.6	1	271.3	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	08	120.4	1	271	5	78.3	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	09	204.9	1	273	4	231.9	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	10	14	1.6	275.1	3	385.6	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	11	32.7	1	277.4	2	539.2	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	12	349.7	1.8	279.5	2	692.8	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	13	355.1	1.3	281.4	2	846.4	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	14	46.8	1.4	282.6	2	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	15	79.5	2.8	283.4	3	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	16	93.8	2.1	283.6	4	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	17	80	1	282.8	4	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	18	192.7	1.8	279.5	5	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	19	197.4	1.6	277.4	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	20	182.2	1	276.4	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	21	178.8	1.2	275.5	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	22	184.3	1.1	274.5	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	23	93.5	1	273.4	6	1000.0	1000.0	0.000	0.0	0.000	0	0.00
97	01	01	24	163.8	1	273.1	6	1000.0	1000.0	0.000	0.0	0.000	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.

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
2000.00	0.03278	0.03371	0.03417	0.03361	0.03145	0.02868	0.02610	0.02418	0.02273
1900.00	0.03380	0.03526	0.03599	0.03586	0.03383	0.03074	0.02788	0.02560	0.02392
1800.00	0.03465	0.03668	0.03783	0.03822	0.03647	0.03309	0.02987	0.02718	0.02522
1700.00	0.03536	0.03789	0.03968	0.04064	0.03939	0.03581	0.03211	0.02895	0.02667
1600.00	0.03606	0.03889	0.04144	0.04307	0.04255	0.03896	0.03468	0.03095	0.02826
1500.00	0.03687	0.03971	0.04296	0.04545	0.04592	0.04258	0.03765	0.03323	0.03001
1400.00	0.03784	0.04047	0.04415	0.04769	0.04937	0.04665	0.04110	0.03588	0.03197
1300.00	0.03882	0.04130	0.04504	0.04959	0.05276	0.05121	0.04510	0.03892	0.03421
1200.00	0.03918	0.04215	0.04579	0.05093	0.05586	0.05616	0.04978	0.04242	0.03668
1100.00	0.03795	0.04260	0.04648	0.05175	0.05830	0.06129	0.05526	0.04646	0.03937
1000.00	0.03504	0.04160	0.04684	0.05224	0.05972	0.06600	0.06159	0.05106	0.04232
900.00	0.03172	0.03832	0.04594	0.05235	0.06004	0.06932	0.06829	0.05601	0.04529
800.00	0.02910	0.03402	0.04230	0.05091	0.05904	0.07030	0.07481	0.06139	0.04807
700.00	0.02747	0.03037	0.03628	0.04631	0.05657	0.06832	0.07979	0.06703	0.05031
600.00	0.02568	0.02757	0.03095	0.03837	0.05090	0.06354	0.08024	0.07233	0.05154
500.00	0.02345	0.02478	0.02687	0.03107	0.04045	0.05547	0.07292	0.07555	0.05074
400.00	0.02102	0.02190	0.02336	0.02556	0.03018	0.04162	0.05850	0.07259	0.04606
300.00	0.02199	0.02075	0.02051	0.02156	0.02331	0.02742	0.03997	0.05709	0.03666
200.00	0.02612	0.02319	0.02139	0.01996	0.01949	0.02017	0.02217	0.02480	0.01735
100.00	0.03172	0.02847	0.02631	0.02434	0.02162	0.01859	0.01571	0.01462	0.01265
0.00	0.04009	0.03498	0.03188	0.02948	0.02677	0.02488	0.02198	0.02467	0.01567
-100.00	0.05871	0.05120	0.04747	0.04306	0.03817	0.03171	0.02426	0.02286	0.02627
-200.00	0.05811	0.06159	0.04946	0.04079	0.03507	0.03277	0.03471	0.03408	0.04651
-300.00	0.07323	0.05634	0.04546	0.04149	0.04003	0.04330	0.04887	0.06295	0.11743
-400.00	0.05784	0.05094	0.04459	0.04326	0.04588	0.05115	0.05877	0.08445	0.12611

-500.00 |	0.05697	0.05072	0.04909	0.04933	0.05179	0.05794	0.06587	0.09245	0.13133
-600.00 |	0.04650	0.05749	0.05358	0.05373	0.05825	0.06242	0.07403	0.09371	0.11546
-700.00 |	0.07106	0.06158	0.05758	0.06009	0.06315	0.06606	0.07772	0.09608	0.13201
-800.00 |	0.06281	0.06090	0.05877	0.06097	0.06175	0.06684	0.07935	0.09807	0.11849
-900.00 |	0.06440	0.06034	0.06168	0.06145	0.06289	0.06761	0.07856	0.09489	0.11470
-1000.00 |	0.05270	0.06569	0.06308	0.06235	0.06366	0.06953	0.07986	0.09052	0.09690
-1100.00 |	0.07662	0.06859	0.06437	0.06494	0.06590	0.07080	0.07887	0.08983	0.11423
-1200.00 |	0.06808	0.06651	0.06327	0.06255	0.06339	0.06962	0.07747	0.09058	0.10174
-1300.00 |	0.06904	0.06442	0.06366	0.06186	0.06350	0.06886	0.07500	0.08694	0.09935
-1400.00 |	0.05674	0.06820	0.06356	0.06192	0.06395	0.06980	0.07534	0.08247	0.08327
-1500.00 |	0.07959	0.06966	0.06417	0.06383	0.06636	0.07050	0.07436	0.08225	0.10275
-1600.00 |	0.06960	0.06681	0.06200	0.06151	0.06392	0.06852	0.07302	0.08374	0.09150
-1700.00 |	0.06954	0.06389	0.06163	0.06106	0.06395	0.06705	0.07079	0.08083	0.09008
-1800.00 |	0.05692	0.06669	0.06153	0.06144	0.06425	0.06738	0.07124	0.07668	0.07509
-1900.00 |	0.07945	0.06730	0.06248	0.06369	0.06642	0.06778	0.07044	0.07659	0.09567

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
-2000.00	0.06796	0.06430	0.06068	0.06161	0.06353	0.06543	0.06908	0.07842	0.08479
-2100.00	0.06667	0.06147	0.06060	0.06117	0.06286	0.06364	0.06691	0.07581	0.08352
-2200.00	0.05374	0.06468	0.06075	0.06138	0.06249	0.06379	0.06733	0.07169	0.06891
-2300.00	0.07672	0.06555	0.06189	0.06333	0.06410	0.06428	0.06661	0.07154	0.08995
-2400.00	0.06525	0.06275	0.06018	0.06088	0.06069	0.06179	0.06524	0.07356	0.07906
-2500.00	0.06415	0.06000	0.05999	0.05986	0.05953	0.05987	0.06308	0.07129	0.07789
-2600.00	0.05175	0.06355	0.06009	0.05944	0.05874	0.05984	0.06327	0.06706	0.06373
-2700.00	0.07509	0.06462	0.06110	0.06085	0.06015	0.06016	0.06234	0.06653	0.08495
-2800.00	0.06317	0.06172	0.05913	0.05801	0.05666	0.05755	0.06052	0.06822	0.07364
-2900.00	0.06156	0.05846	0.05818	0.05647	0.05517	0.05535	0.05798	0.06578	0.07196
-3000.00	0.04923	0.06177	0.05740	0.05536	0.05404	0.05458	0.05738	0.06065	0.05794
-3100.00	0.07170	0.06226	0.05780	0.05598	0.05476	0.05469	0.05567	0.05832	0.07805
-3200.00	0.05733	0.05795	0.05447	0.05231	0.05099	0.05126	0.05304	0.05719	0.06428
-3300.00	0.04997	0.05143	0.05020	0.04876	0.04839	0.04903	0.05067	0.05336	0.05653
-3400.00	0.04519	0.04697	0.04674	0.04596	0.04547	0.04606	0.04791	0.04945	0.05117
-3500.00	0.04234	0.04344	0.04347	0.04274	0.04258	0.04332	0.04479	0.04626	0.04786
-3600.00	0.03966	0.04040	0.04024	0.03989	0.04017	0.04103	0.04221	0.04375	0.04476
-3700.00	0.03735	0.03776	0.03775	0.03766	0.03811	0.03890	0.04006	0.04143	0.04230
-3800.00	0.03531	0.03582	0.03569	0.03569	0.03599	0.03692	0.03836	0.03941	0.04014
-3900.00	0.03391	0.03401	0.03377	0.03372	0.03435	0.03530	0.03674	0.03761	0.03860
-4000.00	0.03239	0.03236	0.03207	0.03226	0.03292	0.03393	0.03517	0.03632	0.03697

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)							
	100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
2000.00	0.02061	0.01837	0.01755	0.01625	0.01509	0.01435	0.01335	0.01279
1900.00	0.02154	0.01921	0.01827	0.01682	0.01565	0.01479	0.01374	0.01350
1800.00	0.02254	0.02014	0.01901	0.01743	0.01626	0.01517	0.01428	0.01435
1700.00	0.02364	0.02115	0.01977	0.01811	0.01690	0.01558	0.01502	0.01533
1600.00	0.02486	0.02224	0.02059	0.01887	0.01752	0.01614	0.01599	0.01645
1500.00	0.02618	0.02341	0.02147	0.01970	0.01811	0.01696	0.01715	0.01754
1400.00	0.02759	0.02464	0.02243	0.02055	0.01875	0.01810	0.01849	0.01812
1300.00	0.02911	0.02594	0.02346	0.02137	0.01962	0.01954	0.01974	0.01804
1200.00	0.03081	0.02731	0.02450	0.02216	0.02088	0.02117	0.02029	0.01798
1100.00	0.03266	0.02871	0.02557	0.02302	0.02257	0.02255	0.02016	0.01842
1000.00	0.03457	0.03010	0.02665	0.02429	0.02448	0.02293	0.02027	0.01910
900.00	0.03634	0.03130	0.02755	0.02622	0.02595	0.02274	0.02080	0.02065
800.00	0.03794	0.03230	0.02843	0.02851	0.02602	0.02303	0.02226	0.02374
700.00	0.03893	0.03278	0.03005	0.02977	0.02582	0.02436	0.02574	0.02757
600.00	0.03877	0.03240	0.03225	0.02894	0.02680	0.02830	0.03042	0.03111
500.00	0.03685	0.03198	0.03214	0.02887	0.03097	0.03394	0.03447	0.03395
400.00	0.03258	0.03195	0.02980	0.03299	0.03731	0.03834	0.03827	0.03785
300.00	0.02631	0.02778	0.03222	0.03962	0.04232	0.04375	0.04312	0.04140
200.00	0.01686	0.02574	0.03677	0.04477	0.04926	0.04923	0.04680	0.04288
100.00	0.01143	0.02205	0.04227	0.05018	0.05140	0.04993	0.04774	0.04333
0.00	0.01317	0.02422	0.04612	0.05308	0.05467	0.05309	0.05294	0.04822
-100.00	0.02423	0.04974	0.06843	0.06936	0.06535	0.05973	0.05779	0.05929
-200.00	0.07948	0.08241	0.08664	0.08566	0.07976	0.07245	0.06611	0.05472
-300.00	0.13513	0.11472	0.10085	0.09391	0.08608	0.07840	0.07364	0.08033
-400.00	0.14918	0.13221	0.11073	0.09513	0.08594	0.08005	0.07849	0.07621
-500.00	0.14698	0.13743	0.11636	0.09879	0.08656	0.07885	0.07696	0.07921
-600.00	0.14253	0.13549	0.11910	0.10098	0.08874	0.08073	0.07492	0.06482
-700.00	0.13512	0.13263	0.12005	0.10433	0.09064	0.08121	0.07682	0.08495
-800.00	0.12408	0.12543	0.11456	0.10237	0.08977	0.08177	0.07993	0.07817
-900.00	0.11453	0.11886	0.11056	0.10124	0.08957	0.08046	0.07807	0.08007
-1000.00	0.11188	0.11199	0.10697	0.09870	0.09041	0.08184	0.07585	0.06557
-1100.00	0.10800	0.10674	0.10507	0.09793	0.09051	0.08224	0.07721	0.08595
-1200.00	0.10082	0.09983	0.09876	0.09257	0.08750	0.08230	0.08031	0.07876
-1300.00	0.09455	0.09507	0.09418	0.08994	0.08482	0.08045	0.07867	0.08040
-1400.00	0.09487	0.09084	0.09031	0.08750	0.08357	0.08063	0.07658	0.06604

-1500.00 |	0.09366	0.08865	0.08885	0.08728	0.08290	0.07956	0.07746	0.08687
-1600.00 |	0.08865	0.08429	0.08355	0.08210	0.07984	0.07789	0.07991	0.07971
-1700.00 |	0.08384	0.08168	0.08011	0.07935	0.07745	0.07517	0.07728	0.08082
-1800.00 |	0.08557	0.07923	0.07745	0.07692	0.07644	0.07503	0.07380	0.06604
-1900.00 |	0.08543	0.07846	0.07730	0.07703	0.07590	0.07410	0.07359	0.08603

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)							
	100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
-2000.00	0.08131	0.07527	0.07327	0.07233	0.07253	0.07252	0.07557	0.07756
-2100.00	0.07693	0.07352	0.07080	0.07002	0.06980	0.06992	0.07282	0.07765
-2200.00	0.07913	0.07179	0.06897	0.06804	0.06862	0.06957	0.06928	0.06252
-2300.00	0.07924	0.07159	0.06952	0.06860	0.06820	0.06832	0.06910	0.08228
-2400.00	0.07537	0.06880	0.06611	0.06435	0.06487	0.06634	0.07127	0.07350
-2500.00	0.07117	0.06732	0.06404	0.06242	0.06220	0.06349	0.06853	0.07344
-2600.00	0.07377	0.06598	0.06251	0.06081	0.06110	0.06280	0.06442	0.05880
-2700.00	0.07407	0.06614	0.06340	0.06181	0.06084	0.06143	0.06343	0.07850
-2800.00	0.07016	0.06365	0.06032	0.05797	0.05774	0.05917	0.06491	0.06912
-2900.00	0.06566	0.06208	0.05838	0.05612	0.05506	0.05604	0.06178	0.06818
-3000.00	0.06829	0.06045	0.05663	0.05451	0.05361	0.05482	0.05677	0.05339
-3100.00	0.06815	0.06048	0.05715	0.05502	0.05345	0.05291	0.05410	0.07147
-3200.00	0.06326	0.05720	0.05360	0.05121	0.04992	0.05014	0.05305	0.05937
-3300.00	0.05606	0.05278	0.04996	0.04844	0.04753	0.04748	0.04908	0.05174
-3400.00	0.05112	0.04901	0.04700	0.04553	0.04451	0.04468	0.04532	0.04669
-3500.00	0.04735	0.04585	0.04402	0.04276	0.04195	0.04180	0.04244	0.04375
-3600.00	0.04440	0.04297	0.04147	0.04053	0.03991	0.03954	0.04025	0.04115
-3700.00	0.04173	0.04072	0.03948	0.03873	0.03813	0.03773	0.03831	0.03918
-3800.00	0.03987	0.03879	0.03772	0.03697	0.03648	0.03632	0.03664	0.03735
-3900.00	0.03813	0.03716	0.03605	0.03547	0.03504	0.03493	0.03504	0.03588
-4000.00	0.03666	0.03570	0.03473	0.03411	0.03373	0.03346	0.03373	0.03432

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
2000.00	0.02961	0.03056	0.03110	0.03058	0.02843	0.02568	0.02311	0.02117	0.01974
1900.00	0.03047	0.03195	0.03277	0.03269	0.03069	0.02762	0.02476	0.02246	0.02078
1800.00	0.03116	0.03321	0.03446	0.03488	0.03318	0.02985	0.02662	0.02390	0.02194
1700.00	0.03169	0.03426	0.03615	0.03712	0.03592	0.03242	0.02874	0.02554	0.02322
1600.00	0.03222	0.03506	0.03772	0.03937	0.03890	0.03538	0.03116	0.02740	0.02465
1500.00	0.03285	0.03568	0.03903	0.04156	0.04206	0.03878	0.03394	0.02953	0.02624
1400.00	0.03362	0.03625	0.03999	0.04358	0.04531	0.04265	0.03717	0.03196	0.02802
1300.00	0.03438	0.03687	0.04065	0.04524	0.04846	0.04697	0.04093	0.03477	0.03000
1200.00	0.03449	0.03749	0.04117	0.04634	0.05128	0.05166	0.04535	0.03800	0.03221
1100.00	0.03298	0.03769	0.04159	0.04691	0.05348	0.05648	0.05054	0.04174	0.03465
1000.00	0.02974	0.03639	0.04167	0.04710	0.05468	0.06094	0.05654	0.04603	0.03727
900.00	0.02605	0.03275	0.04045	0.04686	0.05464	0.06400	0.06295	0.05069	0.03983
800.00	0.02310	0.02802	0.03642	0.04507	0.05318	0.06455	0.06920	0.05579	0.04227
700.00	0.02118	0.02404	0.02992	0.04006	0.05025	0.06203	0.07371	0.06106	0.04424
600.00	0.01900	0.02091	0.02423	0.03163	0.04409	0.05670	0.07350	0.06579	0.04503
500.00	0.01611	0.01773	0.01981	0.02381	0.03314	0.04802	0.06548	0.06823	0.04346
400.00	0.01287	0.01406	0.01585	0.01782	0.02224	0.03360	0.05030	0.06442	0.03794
300.00	0.01307	0.01210	0.01205	0.01321	0.01458	0.01838	0.03075	0.04808	0.02781
200.00	0.01636	0.01398	0.01201	0.01058	0.00986	0.00983	0.01141	0.01418	0.00757
100.00	0.01997	0.01832	0.01632	0.01380	0.01063	0.00733	0.00335	0.00118	0.00062
0.00	0.02485	0.02254	0.02003	0.01752	0.01488	0.01226	0.00819	0.00729	0.00000
-100.00	0.03621	0.03413	0.03151	0.02841	0.02404	0.01781	0.00982	0.00423	0.00277
-200.00	0.04377	0.03747	0.03029	0.02332	0.01797	0.01503	0.01598	0.01460	0.03240
-300.00	0.03436	0.02767	0.02235	0.01919	0.01840	0.02254	0.02786	0.03931	0.07973
-400.00	0.02588	0.02221	0.02034	0.02094	0.02494	0.02986	0.03590	0.05597	0.09436
-500.00	0.02256	0.02156	0.02259	0.02547	0.02909	0.03564	0.04264	0.06414	0.09663
-600.00	0.02277	0.02357	0.02527	0.02784	0.03350	0.03740	0.04783	0.06649	0.09283

-700.00 |	0.02398	0.02492	0.02668	0.03067	0.03503	0.03896	0.05052	0.06603	0.08710
-800.00 |	0.02423	0.02560	0.02825	0.03276	0.03516	0.04009	0.05128	0.06430	0.08113
-900.00 |	0.02462	0.02608	0.03000	0.03264	0.03537	0.04069	0.05092	0.06202	0.07555
-1000.00 |	0.02453	0.02740	0.03043	0.03227	0.03490	0.04073	0.04987	0.05951	0.07053
-1100.00 |	0.02539	0.02837	0.02984	0.03194	0.03430	0.04038	0.04820	0.05665	0.06570
-1200.00 |	0.02637	0.02819	0.02966	0.03118	0.03379	0.03995	0.04649	0.05399	0.06150
-1300.00 |	0.02680	0.02768	0.02940	0.03032	0.03339	0.03945	0.04481	0.05155	0.05787
-1400.00 |	0.02636	0.02764	0.02864	0.02957	0.03307	0.03882	0.04323	0.04932	0.05470
-1500.00 |	0.02598	0.02747	0.02771	0.02901	0.03285	0.03807	0.04175	0.04728	0.05192
-1600.00 |	0.02605	0.02679	0.02684	0.02860	0.03270	0.03720	0.04037	0.04542	0.04945
-1700.00 |	0.02596	0.02588	0.02614	0.02831	0.03255	0.03626	0.03909	0.04372	0.04725
-1800.00 |	0.02536	0.02498	0.02563	0.02815	0.03233	0.03529	0.03791	0.04215	0.04527
-1900.00 |	0.02445	0.02418	0.02526	0.02809	0.03201	0.03431	0.03680	0.04071	0.04348

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
-2000.00	0.02350	0.02350	0.02495	0.02804	0.03155	0.03335	0.03576	0.03937	0.04184
-2100.00	0.02263	0.02300	0.02473	0.02797	0.03093	0.03237	0.03471	0.03805	0.04027
-2200.00	0.02190	0.02261	0.02461	0.02786	0.03025	0.03145	0.03373	0.03682	0.03881
-2300.00	0.02133	0.02232	0.02457	0.02766	0.02953	0.03059	0.03280	0.03567	0.03747
-2400.00	0.02089	0.02211	0.02457	0.02738	0.02878	0.02978	0.03193	0.03459	0.03623
-2500.00	0.02055	0.02199	0.02457	0.02701	0.02804	0.02903	0.03111	0.03358	0.03507
-2600.00	0.02028	0.02194	0.02454	0.02657	0.02731	0.02831	0.03033	0.03263	0.03400
-2700.00	0.02009	0.02194	0.02445	0.02607	0.02661	0.02764	0.02960	0.03173	0.03299
-2800.00	0.01996	0.02198	0.02429	0.02554	0.02595	0.02701	0.02890	0.03089	0.03204
-2900.00	0.01988	0.02201	0.02406	0.02497	0.02532	0.02640	0.02824	0.03009	0.03116
-3000.00	0.01984	0.02199	0.02374	0.02439	0.02472	0.02582	0.02760	0.02933	0.03032
-3100.00	0.01984	0.02192	0.02337	0.02380	0.02414	0.02525	0.02697	0.02858	0.02950
-3200.00	0.01985	0.02179	0.02295	0.02321	0.02360	0.02471	0.02637	0.02787	0.02872
-3300.00	0.01987	0.02162	0.02251	0.02265	0.02309	0.02419	0.02579	0.02719	0.02798
-3400.00	0.01986	0.02139	0.02204	0.02212	0.02260	0.02369	0.02524	0.02654	0.02729
-3500.00	0.01982	0.02112	0.02157	0.02161	0.02213	0.02322	0.02471	0.02592	0.02662
-3600.00	0.01975	0.02081	0.02109	0.02113	0.02169	0.02276	0.02420	0.02533	0.02599
-3700.00	0.01963	0.02048	0.02062	0.02067	0.02127	0.02232	0.02371	0.02477	0.02538
-3800.00	0.01946	0.02012	0.02015	0.02024	0.02086	0.02191	0.02324	0.02423	0.02481
-3900.00	0.01926	0.01974	0.01970	0.01984	0.02047	0.02150	0.02278	0.02371	0.02426
-4000.00	0.01903	0.01935	0.01927	0.01945	0.02010	0.02112	0.02234	0.02321	0.02373

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)							
	100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
2000.00	0.01769	0.01557	0.01482	0.01357	0.01247	0.01178	0.01078	0.01026
1900.00	0.01847	0.01627	0.01538	0.01401	0.01292	0.01210	0.01106	0.01085
1800.00	0.01932	0.01704	0.01596	0.01448	0.01340	0.01236	0.01148	0.01158
1700.00	0.02025	0.01788	0.01656	0.01501	0.01389	0.01264	0.01211	0.01242
1600.00	0.02128	0.01880	0.01721	0.01558	0.01434	0.01306	0.01293	0.01338
1500.00	0.02241	0.01979	0.01792	0.01622	0.01474	0.01371	0.01394	0.01431
1400.00	0.02365	0.02083	0.01868	0.01687	0.01518	0.01465	0.01509	0.01470
1300.00	0.02500	0.02192	0.01949	0.01750	0.01583	0.01586	0.01612	0.01440
1200.00	0.02646	0.02304	0.02033	0.01805	0.01685	0.01724	0.01642	0.01411
1100.00	0.02802	0.02417	0.02115	0.01867	0.01827	0.01837	0.01600	0.01430
1000.00	0.02963	0.02527	0.02188	0.01965	0.01993	0.01846	0.01585	0.01467
900.00	0.03105	0.02614	0.02240	0.02121	0.02109	0.01793	0.01611	0.01588
800.00	0.03222	0.02669	0.02295	0.02305	0.02072	0.01788	0.01724	0.01866
700.00	0.03282	0.02669	0.02415	0.02384	0.01996	0.01878	0.02032	0.02216
600.00	0.03232	0.02597	0.02582	0.02253	0.02042	0.02211	0.02447	0.02524
500.00	0.02996	0.02518	0.02519	0.02196	0.02401	0.02708	0.02783	0.02741
400.00	0.02488	0.02463	0.02241	0.02549	0.02981	0.03070	0.03077	0.03052
300.00	0.01778	0.01959	0.02426	0.03136	0.03378	0.03510	0.03475	0.03334
200.00	0.00776	0.01664	0.02774	0.03566	0.03957	0.03925	0.03696	0.03394
100.00	0.00126	0.01228	0.03212	0.03972	0.04087	0.03848	0.03532	0.03234
0.00	0.00079	0.01264	0.03466	0.04188	0.04291	0.04032	0.03684	0.03355
-100.00	0.00748	0.03416	0.05441	0.05603	0.05239	0.04646	0.04084	0.03614
-200.00	0.05545	0.06390	0.07009	0.06979	0.06353	0.05549	0.04848	0.04265
-300.00	0.10645	0.09237	0.07972	0.07371	0.06710	0.05954	0.05264	0.04649
-400.00	0.12091	0.10890	0.08978	0.07595	0.06682	0.05971	0.05309	0.04763
-500.00	0.11890	0.11225	0.09428	0.07831	0.06685	0.05875	0.05257	0.04743
-600.00	0.10977	0.10906	0.09557	0.07911	0.06709	0.05837	0.05181	0.04664

-700.00 |	0.09956	0.10377	0.09322	0.07918	0.06703	0.05801	0.05140	0.04600
-800.00 |	0.09026	0.09695	0.08894	0.07889	0.06662	0.05772	0.05074	0.04549
-900.00 |	0.08229	0.08946	0.08453	0.07697	0.06629	0.05703	0.05019	0.04490
-1000.00 |	0.07553	0.08203	0.08004	0.07356	0.06570	0.05641	0.04965	0.04434
-1100.00 |	0.06942	0.07487	0.07523	0.06989	0.06413	0.05608	0.04918	0.04402
-1200.00 |	0.06430	0.06866	0.07041	0.06653	0.06190	0.05581	0.04872	0.04362
-1300.00 |	0.05999	0.06335	0.06576	0.06350	0.05944	0.05482	0.04862	0.04327
-1400.00 |	0.05632	0.05882	0.06139	0.06054	0.05698	0.05335	0.04855	0.04293
-1500.00 |	0.05316	0.05495	0.05736	0.05754	0.05476	0.05172	0.04790	0.04298
-1600.00 |	0.05041	0.05161	0.05372	0.05455	0.05276	0.04996	0.04686	0.04303
-1700.00 |	0.04800	0.04871	0.05046	0.05166	0.05081	0.04822	0.04575	0.04258
-1800.00 |	0.04586	0.04618	0.04757	0.04893	0.04880	0.04667	0.04453	0.04181
-1900.00 |	0.04394	0.04395	0.04501	0.04637	0.04673	0.04529	0.04318	0.04096

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)							
	100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
-2000.00	0.04222	0.04196	0.04274	0.04397	0.04463	0.04388	0.04181	0.04004
-2100.00	0.04058	0.04013	0.04067	0.04171	0.04257	0.04239	0.04061	0.03900
-2200.00	0.03907	0.03848	0.03883	0.03966	0.04062	0.04083	0.03955	0.03788
-2300.00	0.03769	0.03699	0.03716	0.03779	0.03878	0.03924	0.03853	0.03684
-2400.00	0.03642	0.03564	0.03566	0.03610	0.03705	0.03767	0.03746	0.03593
-2500.00	0.03524	0.03440	0.03429	0.03458	0.03542	0.03615	0.03630	0.03514
-2600.00	0.03415	0.03327	0.03304	0.03321	0.03391	0.03471	0.03508	0.03438
-2700.00	0.03313	0.03223	0.03189	0.03196	0.03251	0.03334	0.03385	0.03358
-2800.00	0.03217	0.03127	0.03084	0.03083	0.03122	0.03204	0.03263	0.03271
-2900.00	0.03127	0.03037	0.02986	0.02979	0.03004	0.03080	0.03146	0.03176
-3000.00	0.03043	0.02954	0.02895	0.02882	0.02895	0.02963	0.03032	0.03075
-3100.00	0.02961	0.02874	0.02809	0.02792	0.02794	0.02851	0.02923	0.02973
-3200.00	0.02883	0.02799	0.02728	0.02708	0.02702	0.02747	0.02819	0.02874
-3300.00	0.02809	0.02728	0.02654	0.02629	0.02618	0.02650	0.02720	0.02778
-3400.00	0.02739	0.02661	0.02583	0.02556	0.02540	0.02561	0.02626	0.02686
-3500.00	0.02672	0.02598	0.02518	0.02486	0.02468	0.02478	0.02536	0.02598
-3600.00	0.02609	0.02538	0.02456	0.02421	0.02400	0.02402	0.02452	0.02515
-3700.00	0.02549	0.02480	0.02397	0.02360	0.02337	0.02331	0.02372	0.02435
-3800.00	0.02491	0.02426	0.02342	0.02301	0.02278	0.02266	0.02298	0.02358
-3900.00	0.02436	0.02374	0.02290	0.02246	0.02223	0.02206	0.02228	0.02285
-4000.00	0.02383	0.02324	0.02241	0.02194	0.02170	0.02150	0.02163	0.02214

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
2000.00	0.00318	0.00316	0.00307	0.00303	0.00301	0.00300	0.00300	0.00301	0.00299
1900.00	0.00333	0.00331	0.00322	0.00318	0.00314	0.00311	0.00312	0.00314	0.00313
1800.00	0.00349	0.00346	0.00337	0.00335	0.00329	0.00324	0.00325	0.00328	0.00329
1700.00	0.00367	0.00364	0.00354	0.00352	0.00347	0.00339	0.00337	0.00341	0.00345
1600.00	0.00385	0.00383	0.00372	0.00370	0.00366	0.00358	0.00352	0.00355	0.00361
1500.00	0.00402	0.00403	0.00393	0.00390	0.00386	0.00379	0.00371	0.00371	0.00377
1400.00	0.00422	0.00422	0.00416	0.00412	0.00407	0.00401	0.00394	0.00391	0.00395
1300.00	0.00445	0.00443	0.00439	0.00435	0.00431	0.00424	0.00417	0.00415	0.00420
1200.00	0.00469	0.00466	0.00462	0.00459	0.00457	0.00450	0.00443	0.00442	0.00446
1100.00	0.00497	0.00491	0.00488	0.00484	0.00481	0.00480	0.00472	0.00472	0.00472
1000.00	0.00530	0.00521	0.00517	0.00514	0.00505	0.00506	0.00506	0.00503	0.00505
900.00	0.00567	0.00557	0.00548	0.00549	0.00541	0.00532	0.00535	0.00532	0.00547
800.00	0.00600	0.00600	0.00588	0.00584	0.00586	0.00574	0.00561	0.00560	0.00580
700.00	0.00630	0.00633	0.00636	0.00625	0.00632	0.00629	0.00608	0.00597	0.00607
600.00	0.00668	0.00665	0.00672	0.00675	0.00681	0.00684	0.00674	0.00655	0.00652
500.00	0.00734	0.00705	0.00706	0.00726	0.00731	0.00746	0.00745	0.00732	0.00728
400.00	0.00815	0.00785	0.00751	0.00774	0.00795	0.00802	0.00820	0.00817	0.00812
300.00	0.00892	0.00865	0.00846	0.00836	0.00873	0.00903	0.00922	0.00901	0.00886
200.00	0.00976	0.00921	0.00938	0.00939	0.00963	0.01034	0.01076	0.01062	0.00978
100.00	0.01175	0.01015	0.00999	0.01054	0.01099	0.01126	0.01236	0.01344	0.01203
0.00	0.01524	0.01244	0.01186	0.01195	0.01189	0.01263	0.01379	0.01738	0.01567
-100.00	0.02250	0.01707	0.01597	0.01465	0.01413	0.01390	0.01444	0.01863	0.02350
-200.00	0.01434	0.02412	0.01917	0.01747	0.01710	0.01774	0.01874	0.01948	0.01411
-300.00	0.03887	0.02867	0.02312	0.02229	0.02162	0.02076	0.02101	0.02364	0.03770
-400.00	0.03196	0.02873	0.02425	0.02232	0.02094	0.02129	0.02288	0.02848	0.03175

-500.00 |	0.03441	0.02916	0.02650	0.02386	0.02271	0.02230	0.02323	0.02831	0.03470
-600.00 |	0.02373	0.03392	0.02831	0.02589	0.02475	0.02502	0.02620	0.02722	0.02263
-700.00 |	0.04708	0.03666	0.03090	0.02942	0.02812	0.02710	0.02720	0.03004	0.04492
-800.00 |	0.03858	0.03530	0.03052	0.02821	0.02658	0.02675	0.02807	0.03377	0.03737
-900.00 |	0.03978	0.03426	0.03169	0.02881	0.02752	0.02692	0.02764	0.03287	0.03914
-1000.00 |	0.02816	0.03829	0.03265	0.03009	0.02876	0.02880	0.02999	0.03101	0.02637
-1100.00 |	0.05123	0.04022	0.03452	0.03300	0.03160	0.03042	0.03066	0.03318	0.04854
-1200.00 |	0.04171	0.03832	0.03361	0.03137	0.02959	0.02967	0.03098	0.03659	0.04024
-1300.00 |	0.04224	0.03675	0.03426	0.03154	0.03011	0.02941	0.03019	0.03540	0.04148
-1400.00 |	0.03038	0.04056	0.03492	0.03236	0.03087	0.03098	0.03212	0.03315	0.02857
-1500.00 |	0.05362	0.04219	0.03646	0.03482	0.03350	0.03243	0.03261	0.03497	0.05083
-1600.00 |	0.04355	0.04003	0.03515	0.03292	0.03122	0.03132	0.03265	0.03832	0.04205
-1700.00 |	0.04358	0.03801	0.03549	0.03275	0.03141	0.03079	0.03169	0.03711	0.04284
-1800.00 |	0.03156	0.04171	0.03589	0.03329	0.03192	0.03210	0.03334	0.03453	0.02982
-1900.00 |	0.05500	0.04312	0.03722	0.03560	0.03441	0.03347	0.03364	0.03588	0.05219

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)								
	-800.00	-700.00	-600.00	-500.00	-400.00	-300.00	-200.00	-100.00	0.00
-2000.00	0.04445	0.04080	0.03573	0.03356	0.03198	0.03208	0.03333	0.03905	0.04295
-2100.00	0.04403	0.03847	0.03587	0.03319	0.03193	0.03127	0.03220	0.03776	0.04325
-2200.00	0.03184	0.04207	0.03614	0.03353	0.03224	0.03234	0.03360	0.03487	0.03010
-2300.00	0.05539	0.04323	0.03732	0.03567	0.03458	0.03370	0.03380	0.03588	0.05248
-2400.00	0.04436	0.04064	0.03561	0.03350	0.03191	0.03201	0.03331	0.03897	0.04283
-2500.00	0.04360	0.03801	0.03542	0.03285	0.03149	0.03085	0.03197	0.03771	0.04282
-2600.00	0.03146	0.04161	0.03556	0.03287	0.03143	0.03152	0.03294	0.03443	0.02973
-2700.00	0.05501	0.04268	0.03665	0.03478	0.03354	0.03252	0.03274	0.03480	0.05197
-2800.00	0.04322	0.03975	0.03484	0.03248	0.03071	0.03054	0.03162	0.03733	0.04160
-2900.00	0.04168	0.03645	0.03412	0.03150	0.02986	0.02894	0.02975	0.03569	0.04081
-3000.00	0.02938	0.03979	0.03365	0.03097	0.02932	0.02876	0.02978	0.03133	0.02763
-3100.00	0.05186	0.04035	0.03443	0.03218	0.03062	0.02944	0.02870	0.02975	0.04855
-3200.00	0.03748	0.03616	0.03152	0.02909	0.02739	0.02656	0.02667	0.02933	0.03556
-3300.00	0.03010	0.02982	0.02769	0.02611	0.02531	0.02485	0.02488	0.02617	0.02854
-3400.00	0.02533	0.02558	0.02470	0.02385	0.02288	0.02237	0.02267	0.02291	0.02389
-3500.00	0.02252	0.02231	0.02190	0.02113	0.02045	0.02010	0.02008	0.02034	0.02124
-3600.00	0.01991	0.01959	0.01915	0.01877	0.01848	0.01827	0.01801	0.01842	0.01878
-3700.00	0.01773	0.01728	0.01713	0.01698	0.01684	0.01658	0.01636	0.01666	0.01691
-3800.00	0.01585	0.01570	0.01554	0.01544	0.01513	0.01501	0.01512	0.01518	0.01533
-3900.00	0.01464	0.01427	0.01406	0.01389	0.01388	0.01380	0.01396	0.01391	0.01435
-4000.00	0.01336	0.01301	0.01280	0.01281	0.01282	0.01281	0.01283	0.01311	0.01325

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)							
	100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
2000.00	0.00293	0.00280	0.00273	0.00268	0.00262	0.00257	0.00257	0.00253
1900.00	0.00307	0.00294	0.00289	0.00281	0.00272	0.00269	0.00268	0.00264
1800.00	0.00322	0.00310	0.00305	0.00295	0.00285	0.00281	0.00280	0.00277
1700.00	0.00339	0.00327	0.00321	0.00311	0.00300	0.00294	0.00292	0.00292
1600.00	0.00357	0.00344	0.00337	0.00329	0.00318	0.00308	0.00306	0.00307
1500.00	0.00377	0.00362	0.00355	0.00348	0.00337	0.00325	0.00321	0.00323
1400.00	0.00394	0.00381	0.00375	0.00368	0.00357	0.00345	0.00340	0.00343
1300.00	0.00411	0.00402	0.00397	0.00388	0.00379	0.00368	0.00362	0.00364
1200.00	0.00434	0.00427	0.00417	0.00411	0.00403	0.00393	0.00387	0.00387
1100.00	0.00463	0.00454	0.00442	0.00435	0.00430	0.00418	0.00415	0.00412
1000.00	0.00495	0.00482	0.00477	0.00464	0.00455	0.00447	0.00442	0.00443
900.00	0.00529	0.00516	0.00515	0.00501	0.00486	0.00481	0.00469	0.00477
800.00	0.00572	0.00561	0.00549	0.00545	0.00531	0.00514	0.00501	0.00508
700.00	0.00611	0.00609	0.00590	0.00593	0.00586	0.00559	0.00541	0.00541
600.00	0.00646	0.00643	0.00643	0.00642	0.00638	0.00618	0.00595	0.00587
500.00	0.00689	0.00680	0.00694	0.00691	0.00695	0.00686	0.00665	0.00654
400.00	0.00770	0.00732	0.00740	0.00751	0.00750	0.00764	0.00750	0.00733
300.00	0.00853	0.00819	0.00796	0.00826	0.00853	0.00865	0.00837	0.00806
200.00	0.00910	0.00910	0.00904	0.00912	0.00969	0.00998	0.00984	0.00893
100.00	0.01017	0.00977	0.01015	0.01046	0.01053	0.01145	0.01243	0.01099
0.00	0.01237	0.01158	0.01146	0.01120	0.01176	0.01278	0.01610	0.01468
-100.00	0.01675	0.01558	0.01402	0.01333	0.01297	0.01327	0.01696	0.02315
-200.00	0.02403	0.01851	0.01655	0.01587	0.01624	0.01695	0.01764	0.01207
-300.00	0.02869	0.02235	0.02114	0.02020	0.01898	0.01886	0.02101	0.03385
-400.00	0.02827	0.02331	0.02095	0.01918	0.01913	0.02034	0.02540	0.02859
-500.00	0.02808	0.02518	0.02208	0.02049	0.01971	0.02010	0.02438	0.03179
-600.00	0.03276	0.02643	0.02353	0.02187	0.02165	0.02236	0.02311	0.01818
-700.00	0.03556	0.02886	0.02684	0.02515	0.02361	0.02321	0.02542	0.03896

-800.00 |	0.03382	0.02848	0.02562	0.02348	0.02315	0.02405	0.02919	0.03268
-900.00 |	0.03224	0.02940	0.02604	0.02427	0.02328	0.02342	0.02788	0.03517
-1000.00 |	0.03636	0.02996	0.02693	0.02514	0.02471	0.02543	0.02620	0.02122
-1100.00 |	0.03859	0.03187	0.02984	0.02804	0.02638	0.02616	0.02803	0.04194
-1200.00 |	0.03652	0.03117	0.02835	0.02604	0.02560	0.02649	0.03158	0.03514
-1300.00 |	0.03456	0.03172	0.02842	0.02645	0.02538	0.02563	0.03005	0.03714
-1400.00 |	0.03855	0.03202	0.02892	0.02696	0.02659	0.02728	0.02803	0.02311
-1500.00 |	0.04049	0.03370	0.03148	0.02975	0.02815	0.02784	0.02956	0.04388
-1600.00 |	0.03823	0.03268	0.02983	0.02755	0.02709	0.02793	0.03305	0.03668
-1700.00 |	0.03584	0.03297	0.02965	0.02769	0.02664	0.02695	0.03153	0.03824
-1800.00 |	0.03972	0.03306	0.02989	0.02799	0.02764	0.02837	0.02927	0.02424
-1900.00 |	0.04149	0.03452	0.03229	0.03066	0.02916	0.02882	0.03042	0.04507

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** NETWORK ID: GRID1 ; NETWORK TYPE: GRIDCART ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

Y-COORD (METERS)	X-COORD (METERS)							
	100.00	200.00	300.00	400.00	500.00	600.00	700.00	800.00
-2000.00	0.03910	0.03331	0.03053	0.02836	0.02790	0.02864	0.03376	0.03752
-2100.00	0.03636	0.03339	0.03012	0.02831	0.02722	0.02753	0.03221	0.03865
-2200.00	0.04006	0.03331	0.03014	0.02838	0.02799	0.02874	0.02972	0.02463
-2300.00	0.04155	0.03461	0.03236	0.03081	0.02942	0.02908	0.03057	0.04544
-2400.00	0.03895	0.03316	0.03045	0.02825	0.02782	0.02868	0.03381	0.03757
-2500.00	0.03593	0.03292	0.02975	0.02784	0.02678	0.02734	0.03223	0.03831
-2600.00	0.03963	0.03271	0.02947	0.02760	0.02719	0.02810	0.02934	0.02442
-2700.00	0.04094	0.03391	0.03150	0.02985	0.02833	0.02810	0.02958	0.04492
-2800.00	0.03799	0.03238	0.02949	0.02715	0.02652	0.02713	0.03228	0.03641
-2900.00	0.03439	0.03171	0.02853	0.02634	0.02502	0.02523	0.03032	0.03641
-3000.00	0.03786	0.03091	0.02769	0.02569	0.02466	0.02520	0.02645	0.02264
-3100.00	0.03855	0.03175	0.02907	0.02711	0.02551	0.02439	0.02487	0.04174
-3200.00	0.03444	0.02921	0.02632	0.02413	0.02290	0.02267	0.02486	0.03064
-3300.00	0.02797	0.02550	0.02343	0.02215	0.02135	0.02098	0.02188	0.02396
-3400.00	0.02373	0.02240	0.02117	0.01997	0.01911	0.01908	0.01906	0.01983
-3500.00	0.02063	0.01987	0.01884	0.01790	0.01727	0.01702	0.01708	0.01776
-3600.00	0.01831	0.01759	0.01692	0.01632	0.01591	0.01552	0.01573	0.01601
-3700.00	0.01625	0.01591	0.01551	0.01513	0.01476	0.01442	0.01459	0.01483
-3800.00	0.01496	0.01453	0.01430	0.01395	0.01370	0.01366	0.01367	0.01377
-3900.00	0.01378	0.01342	0.01314	0.01301	0.01282	0.01287	0.01276	0.01303
-4000.00	0.01283	0.01247	0.01232	0.01217	0.01203	0.01197	0.01210	0.01217

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	4.66690	(97042115) AT	(0.00, -300.00) GC	6.	4.16813	(97032716) AT	(0.00, -300.00) GC
2.	4.54894	(97042115) AT	(0.00, -400.00) GC	7.	4.09711	(97052614) AT	(0.00, -300.00) GC
3.	4.32148	(97101116) AT	(0.00, -400.00) GC	8.	4.04340	(97042115) AT	(0.00, -500.00) GC
4.	4.21464	(97032716) AT	(0.00, -400.00) GC	9.	4.02033	(97110114) AT	(0.00, -300.00) GC
5.	4.18577	(97101116) AT	(0.00, -300.00) GC	10.	4.01564	(97071819) AT	(-200.00, 300.00) GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	4.43116	(97042115)	AT (	0.00, -400.00)	GC
2.	4.35623	(97042115)	AT (	0.00, -300.00)	GC
3.	4.19160	(97101116)	AT (	0.00, -400.00)	GC
4.	4.09345	(97032716)	AT (	0.00, -400.00)	GC
5.	4.00743	(97071819)	AT (	-200.00, 300.00)	GC
6.	3.98305	(97042115)	AT (	0.00, -500.00)	GC
7.	3.92922	(97101116)	AT (	0.00, -500.00)	GC
8.	3.89606	(97051915)	AT (	300.00, -100.00)	GC
9.	3.88474	(97110114)	AT (	0.00, -400.00)	GC
10.	3.87472	(97040918)	AT (	300.00, -200.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	1.35850	(97022507)	AT (	800.00, 0.00)	GC	6.	1.23237	(97022507)	AT (	800.00, -800.00)	GC
2.	1.33064	(97022507)	AT (	0.00, 0.00)	GC	7.	1.22108	(97022507)	AT (	800.00, 100.00)	GC
3.	1.29948	(97022507)	AT (	800.00, -400.00)	GC	8.	1.20536	(97022507)	AT (	0.00, -800.00)	GC
4.	1.27197	(97022507)	AT (	0.00, -400.00)	GC	9.	1.19946	(97022507)	AT (	800.00, -100.00)	GC
5.	1.25672	(97022507)	AT (	-800.00, 0.00)	GC	10.	1.19935	(97022507)	AT (	-800.00, -400.00)	GC

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

CONC RURAL FLAT DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

GROUP ID		AVERAGE CONC	NETWORK RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	GRID-ID
ALL	1ST HIGHEST VALUE IS	0.14918	AT (100.00, -400.00, 0.00, 0.00)	GC	GRID1
	2ND HIGHEST VALUE IS	0.14698	AT (100.00, -500.00, 0.00, 0.00)	GC	GRID1
	3RD HIGHEST VALUE IS	0.14253	AT (100.00, -600.00, 0.00, 0.00)	GC	GRID1
	4TH HIGHEST VALUE IS	0.13743	AT (200.00, -500.00, 0.00, 0.00)	GC	GRID1
	5TH HIGHEST VALUE IS	0.13549	AT (200.00, -600.00, 0.00, 0.00)	GC	GRID1
	6TH HIGHEST VALUE IS	0.13513	AT (100.00, -300.00, 0.00, 0.00)	GC	GRID1
	7TH HIGHEST VALUE IS	0.13512	AT (100.00, -700.00, 0.00, 0.00)	GC	GRID1
	8TH HIGHEST VALUE IS	0.13263	AT (200.00, -700.00, 0.00, 0.00)	GC	GRID1
	9TH HIGHEST VALUE IS	0.13221	AT (200.00, -400.00, 0.00, 0.00)	GC	GRID1
	10TH HIGHEST VALUE IS	0.13201	AT (0.00, -700.00, 0.00, 0.00)	GC	GRID1
CC	1ST HIGHEST VALUE IS	0.12091	AT (100.00, -400.00, 0.00, 0.00)	GC	GRID1
	2ND HIGHEST VALUE IS	0.11890	AT (100.00, -500.00, 0.00, 0.00)	GC	GRID1
	3RD HIGHEST VALUE IS	0.11225	AT (200.00, -500.00, 0.00, 0.00)	GC	GRID1
	4TH HIGHEST VALUE IS	0.10977	AT (100.00, -600.00, 0.00, 0.00)	GC	GRID1
	5TH HIGHEST VALUE IS	0.10906	AT (200.00, -600.00, 0.00, 0.00)	GC	GRID1
	6TH HIGHEST VALUE IS	0.10890	AT (200.00, -400.00, 0.00, 0.00)	GC	GRID1
	7TH HIGHEST VALUE IS	0.10645	AT (100.00, -300.00, 0.00, 0.00)	GC	GRID1
	8TH HIGHEST VALUE IS	0.10377	AT (200.00, -700.00, 0.00, 0.00)	GC	GRID1
	9TH HIGHEST VALUE IS	0.09956	AT (100.00, -700.00, 0.00, 0.00)	GC	GRID1
	10TH HIGHEST VALUE IS	0.09695	AT (200.00, -800.00, 0.00, 0.00)	GC	GRID1
WC	1ST HIGHEST VALUE IS	0.05539	AT (-800.00, -2300.00, 0.00, 0.00)	GC	GRID1
	2ND HIGHEST VALUE IS	0.05501	AT (-800.00, -2700.00, 0.00, 0.00)	GC	GRID1
	3RD HIGHEST VALUE IS	0.05500	AT (-800.00, -1900.00, 0.00, 0.00)	GC	GRID1
	4TH HIGHEST VALUE IS	0.05362	AT (-800.00, -1500.00, 0.00, 0.00)	GC	GRID1
	5TH HIGHEST VALUE IS	0.05248	AT (0.00, -2300.00, 0.00, 0.00)	GC	GRID1
	6TH HIGHEST VALUE IS	0.05219	AT (0.00, -1900.00, 0.00, 0.00)	GC	GRID1
	7TH HIGHEST VALUE IS	0.05197	AT (0.00, -2700.00, 0.00, 0.00)	GC	GRID1

8TH HIGHEST VALUE IS	0.05186 AT (	-800.00,	-3100.00,	0.00,	0.00)	GC	GRID1
9TH HIGHEST VALUE IS	0.05123 AT (	-800.00,	-1100.00,	0.00,	0.00)	GC	GRID1
10TH HIGHEST VALUE IS	0.05083 AT (	0.00,	-1500.00,	0.00,	0.00)	GC	GRID1

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

CONC RURAL FLAT DFAULT

*** 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 61 Informational Message(s)

A Total of 61 Calm Hours Identified

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

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

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

Attachment 6
ISCST3 Modeling Results
Maximum Annual NO_x Impact – Far-Field Analysis

```
CO STARTING
CO TITLEONE FARMINGTON RMP EIS - FULL EMISSION SOURCE MODULE
CO TITLETWO NOX EMISSIONS - FULL MET - MESA VERDE - 324 DEGREE WIND ROT
CO MODELOPT CONC   RURAL                      DFAULT
CO AVERTIME 1 24 PERIOD
CO POLLUTID OTHER
CO DCAYCOEF 0.000000E+00
CO TERRHGTS FLAT
CO RUNORNOT RUN
CO ERRORFIL ERRORS.OUT
CO FINISHED

SO STARTING

** Source Location Cards:
**               SRCID      SRCTYP              XS        YS       ZS

SO LOCATION      CC1      POINT             0.00     18.29     0.00
SO LOCATION      CC2      POINT             0.00      0.00     0.00
SO LOCATION      CC3      POINT             0.00    -18.29     0.00
SO LOCATION      WC1      POINT          -804.67   -201.17     0.00
SO LOCATION      WC2      POINT          -804.67   -603.50     0.00
SO LOCATION      WC3      POINT          -804.67  -1005.84     0.00
SO LOCATION      WC4      POINT          -804.67  -1408.18     0.00
SO LOCATION      WC5      POINT          -804.67  -1810.53     0.00
SO LOCATION      WC6      POINT          -804.67  -2212.87     0.00
SO LOCATION      WC7      POINT          -804.67  -2615.21     0.00
SO LOCATION      WC8      POINT          -804.67  -3017.55     0.00
SO LOCATION      WC9      POINT             0.00   -201.17     0.00
SO LOCATION     WC10      POINT             0.00   -603.50     0.00
SO LOCATION     WC11      POINT             0.00  -1005.84     0.00
SO LOCATION     WC12      POINT             0.00  -1408.18     0.00
SO LOCATION     WC13      POINT             0.00  -1810.53     0.00
SO LOCATION     WC14      POINT             0.00  -2212.87     0.00
SO LOCATION     WC15      POINT             0.00  -2615.21     0.00
SO LOCATION     WC16      POINT             0.00  -3017.55     0.00
SO LOCATION     WC17      POINT           804.67   -201.17     0.00
SO LOCATION     WC18      POINT           804.67   -603.50     0.00
SO LOCATION     WC19      POINT           804.67  -1005.84     0.00
SO LOCATION     WC20      POINT           804.67  -1408.18     0.00
SO LOCATION     WC21      POINT           804.67  -1810.53     0.00
SO LOCATION     WC22      POINT           804.67  -2212.87     0.00
SO LOCATION     WC23      POINT           804.67  -2615.21     0.00
SO LOCATION     WC24      POINT           804.67  -3017.55     0.00
SO LOCATION     WC25      POINT          1609.34   -201.17     0.00
SO LOCATION     WC26      POINT          1609.34   -603.50     0.00
SO LOCATION     WC27      POINT          1609.34  -1005.84     0.00
SO LOCATION     WC28      POINT          1609.34  -1408.18     0.00
SO LOCATION     WC29      POINT          1609.34  -1810.53     0.00
SO LOCATION     WC30      POINT          1609.34  -2212.87     0.00
SO LOCATION     WC31      POINT          1609.34  -2615.21     0.00
SO LOCATION     WC32      POINT          1609.34  -3017.55     0.00

** Source Parameter Cards:
** POINT:    SRCID        QS          HS          TS       VS        DS
** VOLUME:   SRCID        QS          HS        SYINIT    SZINIT
** AREA:     SRCID        QS          HS         XINIT    YINIT      ANGLE SZINIT
```

```
SO SRCPARAM    CC1      1.98         6.10       661.0    25.80      0.67
SO SRCPARAM    CC2      1.98         6.10       661.0    25.80      0.67
SO SRCPARAM    CC3      1.98         6.10       661.0    25.80      0.67
SO SRCPARAM    WC1      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC2      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC3      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC4      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC5      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC6      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC7      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC8      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM    WC9      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC10      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC11      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC12      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC13      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC14      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC15      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC16      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC17      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC18      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC19      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC20      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC21      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC22      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC23      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC24      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC25      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC26      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC27      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC28      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC29      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC30      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC31      0.42         3.08       836.0    27.81      0.10
SO SRCPARAM   WC32      0.42         3.08       836.0    27.81      0.10

SO EMISUNIT   0.100000E+07 (GRAMS/SEC)          (MICROGRAMS/CUBIC-METER)

SO SRCGROUP  ALL
SO SRCGROUP   CC  CC1-CC3
SO SRCGROUP   WC  WC1-WC32

SO FINISHED

RE STARTING
RE DISCCART  0.0   30570.0
RE FINISHED

ME STARTING
ME INPUTFIL  BLOOM97.MET
ME ANEMHGHT  10.000 METERS
ME SURFDATA     36  1997            SURFNAME
ME UAIRDATA  23050  1997            UAIRNAME
ME WDROTATE  36
ME WINDCATS    1.54    3.09    5.14    8.23   10.80
ME FINISHED

OU STARTING
**OU RECTABLE  ALLAVE  FIRST
```

```
OU MAXTABLE  ALLAVE  10
OU FINISHED

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

CONC RURAL FLAT DFAULT

*** MODEL SETUP OPTIONS SUMMARY ***

**Intermediate Terrain Processing is Selected

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

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

**Model Uses RURAL Dispersion.

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

**Model Assumes Receptors on FLAT Terrain.

**Model Assumes No FLAGPOLE Receptor Heights.

**Model Calculates 2 Short Term Average(s) of: 1-HR 24-HR
and Calculates PERIOD Averages

**This Run Includes: 35 Source(s); 3 Source Group(s); and 1 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 PERIOD Averages by Receptor
Model Outputs Tables of Overall Maximum Short Term Values (MAXTABLE Keyword)

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

**Misc. Inputs: Anem. Hgt. (m) = 10.00 ; Decay Coef. = 0.000 ; Rot. Angle = 36.0
Emission Units = (GRAMS/SEC) ; Emission Rate Unit Factor = 0.10000E+07
Output Units = (MICROGRAMS/CUBIC-METER)

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

```
**Input Runstream File:          MesaVerd.txt
**Output Print File:             MeasVerd.out
**Detailed Error/Message File:   ERRORS.OUT
```

CONC RURAL FLAT DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (USER UNITS)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	STACK HEIGHT (METERS)	STACK TEMP. (DEG.K)	STACK EXIT VEL. (M/SEC)	STACK DIAMETER (METERS)	BUILDING EXISTS	EMISSION RATE SCALAR VARY BY
CC1	0	0.19800E+01	0.0	18.3	0.0	6.10	661.00	25.80	0.67	NO	
CC2	0	0.19800E+01	0.0	0.0	0.0	6.10	661.00	25.80	0.67	NO	
CC3	0	0.19800E+01	0.0	-18.3	0.0	6.10	661.00	25.80	0.67	NO	
WC1	0	0.42000E+00	-804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC2	0	0.42000E+00	-804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC3	0	0.42000E+00	-804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC4	0	0.42000E+00	-804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC5	0	0.42000E+00	-804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC6	0	0.42000E+00	-804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC7	0	0.42000E+00	-804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC8	0	0.42000E+00	-804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC9	0	0.42000E+00	0.0	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC10	0	0.42000E+00	0.0	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC11	0	0.42000E+00	0.0	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC12	0	0.42000E+00	0.0	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC13	0	0.42000E+00	0.0	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC14	0	0.42000E+00	0.0	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC15	0	0.42000E+00	0.0	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC16	0	0.42000E+00	0.0	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC17	0	0.42000E+00	804.7	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC18	0	0.42000E+00	804.7	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC19	0	0.42000E+00	804.7	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC20	0	0.42000E+00	804.7	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC21	0	0.42000E+00	804.7	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC22	0	0.42000E+00	804.7	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC23	0	0.42000E+00	804.7	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC24	0	0.42000E+00	804.7	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	
WC25	0	0.42000E+00	1609.3	-201.2	0.0	3.08	836.00	27.81	0.10	NO	
WC26	0	0.42000E+00	1609.3	-603.5	0.0	3.08	836.00	27.81	0.10	NO	
WC27	0	0.42000E+00	1609.3	-1005.8	0.0	3.08	836.00	27.81	0.10	NO	
WC28	0	0.42000E+00	1609.3	-1408.2	0.0	3.08	836.00	27.81	0.10	NO	
WC29	0	0.42000E+00	1609.3	-1810.5	0.0	3.08	836.00	27.81	0.10	NO	
WC30	0	0.42000E+00	1609.3	-2212.9	0.0	3.08	836.00	27.81	0.10	NO	
WC31	0	0.42000E+00	1609.3	-2615.2	0.0	3.08	836.00	27.81	0.10	NO	
WC32	0	0.42000E+00	1609.3	-3017.6	0.0	3.08	836.00	27.81	0.10	NO	

**MODELOPTs:
CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID	SOURCE IDs
ALL	CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,
CC	CC1 , CC2 , CC3 ,
WC	WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , WC31 , WC32 ,

**MODELOPTs:
CONC RURAL FLAT DFAULT

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

(0.0, 30570.0, 0.0, 0.0);

*** 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	WIND SPEED CATEGORY					
CATEGORY	1	2	3	4	5	6
A	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
B	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01	.70000E-01
C	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00	.10000E+00
D	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00	.15000E+00
E	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00	.35000E+00
F	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00	.55000E+00

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

STABILITY	WIND SPEED CATEGORY					
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 RURAL FLAT DFAULT

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

FILE: BLOOM97.MET
FORMAT: (4I2,2F9.4,F6.1,I2,2F7.1,f9.4,f10.1,f8.4,i4,f7.2)
SURFACE STATION NO.: 36 UPPER AIR STATION NO.: 23050
NAME: SURFNAME NAME: UAIRNAME
YEAR: 1997 YEAR: 1997

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)
97	01	01	01	72.1	1.00	272.9	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	02	83.7	1.00	272.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	03	162.7	1.00	271.9	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	04	175.1	1.30	271.6	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	05	128.0	1.10	271.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	06	129.5	1.00	271.3	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	07	175.6	1.00	271.3	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	08	120.4	1.00	271.0	5	78.3	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	09	204.9	1.00	273.0	4	231.9	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	10	14.0	1.60	275.1	3	385.6	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	11	32.7	1.00	277.4	2	539.2	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	12	349.7	1.80	279.5	2	692.8	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	13	355.1	1.30	281.4	2	846.4	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	14	46.8	1.40	282.6	2	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	15	79.5	2.80	283.4	3	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	16	93.8	2.10	283.6	4	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	17	80.0	1.00	282.8	4	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	18	192.7	1.80	279.5	5	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	19	197.4	1.60	277.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	20	182.2	1.00	276.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	21	178.8	1.20	275.5	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	22	184.3	1.10	274.5	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	23	93.5	1.00	273.4	6	1000.0	1000.0	0.0000	0.0	0.0000	0	0.00
97	01	01	24	163.8	1.00	273.1	6	1000.0	1000.0	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.

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
0.00	30570.00	0.15959			

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
0.00	30570.00	0.03919			

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
0.00	30570.00	0.12039			

**MODELOPTs:
CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	109.20459	(97022607)	AT (	0.00, 30570.00)	DC	6.	45.61461	(97090601)	AT (	0.00, 30570.00)	DC
2.	66.31203	(97050405)	AT (	0.00, 30570.00)	DC	7.	37.19714	(97010906)	AT (	0.00, 30570.00)	DC
3.	64.25972	(97052804)	AT (	0.00, 30570.00)	DC	8.	34.79113	(97081422)	AT (	0.00, 30570.00)	DC
4.	63.50428	(97010420)	AT (	0.00, 30570.00)	DC	9.	31.39552	(97122108)	AT (	0.00, 30570.00)	DC
5.	48.02293	(97032205)	AT (	0.00, 30570.00)	DC	10.	27.88793	(97121018)	AT (	0.00, 30570.00)	DC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	22.93062	(97050405)	AT (	0.00, 30570.00)	DC	6.	11.00239	(97122108)	AT (	0.00, 30570.00)	DC
2.	20.32444	(97052804)	AT (	0.00, 30570.00)	DC	7.	9.76400	(97010906)	AT (	0.00, 30570.00)	DC
3.	19.56493	(97010420)	AT (	0.00, 30570.00)	DC	8.	8.76179	(97081422)	AT (	0.00, 30570.00)	DC
4.	16.99510	(97090601)	AT (	0.00, 30570.00)	DC	9.	7.89872	(97051307)	AT (	0.00, 30570.00)	DC
5.	16.37487	(97032205)	AT (	0.00, 30570.00)	DC	10.	6.58803	(97032208)	AT (	0.00, 30570.00)	DC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 1-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	109.20459	(97022607)	AT (	0.00, 30570.00)	DC	6.	28.61952	(97090601)	AT (	0.00, 30570.00)	DC
2.	43.93936	(97010420)	AT (	0.00, 30570.00)	DC	7.	27.43315	(97010906)	AT (	0.00, 30570.00)	DC
3.	43.93529	(97052804)	AT (	0.00, 30570.00)	DC	8.	26.02934	(97081422)	AT (	0.00, 30570.00)	DC
4.	43.38142	(97050405)	AT (	0.00, 30570.00)	DC	9.	24.41181	(97062106)	AT (	0.00, 30570.00)	DC
5.	31.64806	(97032205)	AT (	0.00, 30570.00)	DC	10.	23.96604	(97121018)	AT (	0.00, 30570.00)	DC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 , WC1 , WC2 , WC3 , WC4 ,
WC5 , WC6 , WC7 , WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 ,
WC17 , WC18 , WC19 , WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE			RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE		
1.	5.32801	(97022624) AT	(0.00,	30570.00)	DC	6.	2.02271c	(97121024) AT	(0.00,	30570.00)	DC
2.	2.81430	(97032224) AT	(0.00,	30570.00)	DC	7.	1.90061	(97090624) AT	(0.00,	30570.00)	DC
3.	2.77153	(97050424) AT	(0.00,	30570.00)	DC	8.	1.60861c	(97122124) AT	(0.00,	30570.00)	DC
4.	2.73477	(97052824) AT	(0.00,	30570.00)	DC	9.	1.54989	(97010924) AT	(0.00,	30570.00)	DC
5.	2.64601	(97010424) AT	(0.00,	30570.00)	DC	10.	1.44963	(97081424) AT	(0.00,	30570.00)	DC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: CC ***
INCLUDING SOURCE(S): CC1 , CC2 , CC3 ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	0.97645	(97032224)	AT (	0.00, 30570.00)	DC	6.	0.56032c	(97122124)	AT (	0.00, 30570.00)	DC
2.	0.95838	(97050424)	AT (	0.00, 30570.00)	DC	7.	0.40683	(97010924)	AT (	0.00, 30570.00)	DC
3.	0.86335	(97052824)	AT (	0.00, 30570.00)	DC	8.	0.36507	(97081424)	AT (	0.00, 30570.00)	DC
4.	0.81521	(97010424)	AT (	0.00, 30570.00)	DC	9.	0.32911	(97051324)	AT (	0.00, 30570.00)	DC
5.	0.70813	(97090624)	AT (	0.00, 30570.00)	DC	10.	0.32743	(97100724)	AT (	0.00, 30570.00)	DC

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

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: WC ***
INCLUDING SOURCE(S): WC1 , WC2 , WC3 , WC4 , WC5 , WC6 , WC7 ,
WC8 , WC9 , WC10 , WC11 , WC12 , WC13 , WC14 , WC15 , WC16 , WC17 , WC18 , WC19 ,
WC20 , WC21 , WC22 , WC23 , WC24 , WC25 , WC26 , WC27 , WC28 , WC29 , WC30 , . . . ,

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	5.32801	(97022624)	AT (	0.00, 30570.00)	DC	6.	1.80725c	(97121024)	AT (	0.00, 30570.00)	DC
2.	1.87142	(97052824)	AT (	0.00, 30570.00)	DC	7.	1.19248	(97090624)	AT (	0.00, 30570.00)	DC
3.	1.83786	(97032224)	AT (	0.00, 30570.00)	DC	8.	1.14306	(97010924)	AT (	0.00, 30570.00)	DC
4.	1.83081	(97010424)	AT (	0.00, 30570.00)	DC	9.	1.08456	(97081424)	AT (	0.00, 30570.00)	DC
5.	1.81315	(97050424)	AT (	0.00, 30570.00)	DC	10.	1.07667	(97062124)	AT (	0.00, 30570.00)	DC

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

CONC RURAL FLAT DFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (8760 HRS) RESULTS ***

** CONC OF OTHER IN (MICROGRAMS/CUBIC-METER) **

GROUP ID		AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)				OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	0.15959 AT	0.00,	30570.00,	0.00,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	3RD HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	4TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	5TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	6TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	7TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	8TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	9TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	10TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
CC	1ST HIGHEST VALUE IS	0.03919 AT	0.00,	30570.00,	0.00,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	3RD HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	4TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	5TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	6TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	7TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	8TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	9TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	10TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
WC	1ST HIGHEST VALUE IS	0.12039 AT	0.00,	30570.00,	0.00,	0.00)	DC	NA
	2ND HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	3RD HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	4TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	5TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	6TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	7TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	8TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	9TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		
	10TH HIGHEST VALUE IS	0.00000 AT	0.00,	0.00,	0.00,	0.00)		

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

CONC RURAL FLAT DFAULT

*** 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 61 Informational Message(s)

A Total of 61 Calm Hours Identified

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

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

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