



GLOBEX

Engineering & Development

22 October 2002

Mr. Ronald D. Blackburn
 District Air Program Administrator
 Florida Department of Environmental Protection
 2295 Victoria Avenue, Suite 364
 Ft. Myers, Florida 33902

RECEIVED

OCT 23 2002

Subject: Flare Relocation
 Naples Landfill
 Collier County, Florida

D.E.P. - South District

Dear Mr. Blackburn:

On behalf of Waste Management Inc. of Florida (WMIF), Globex Engineering and Development (Globex) is requesting authorization to relocate the existing utility flare at the Naples Landfill, located in Collier County, Florida. WMIF is requesting to relocate the existing utility flare located at the Naples Landfill to accommodate the expansion of the landfill. The existing utility flare is operating in accordance with Permit Number 0210051-003-AV (Air Permit), issued by the Florida Department of Environmental Protection (FDEP). The landfill is currently operating in accordance with Permit Number 0064489-001/002/003-SO (Solid Waste Permit), issued by the FDEP. The remainder of this letter provides: (i) brief project background; (ii) request for flare relocation; (iii) modeling; (iv) construction activities associated with the proposed relocation; and (iv) conclusion.

Project Background

The Naples Landfill is a municipal solid waste landfill located approximately two miles east of State Road (SR) 951, just north of the Interstate 75 frontage road, on White Lake Boulevard, in Naples, Florida. The general site location plan is presented in Figure 1.

The Naples Landfill is currently operating in accordance with the Solid Waste Permit. On 31 January 2002, on behalf of WMIF, Globex submitted an application for a permit for the expansion of the Naples Landfill. On 27 August 2002, the permit application was deemed complete by the FDEP. Therefore, a new permit for the expansion of the Naples Landfill will be issued within 90 days of the date that the application was deemed complete. The site plan for the existing landfill is presented in Figure 2. The proposed expansion consists of nine cells. The layout of the proposed expansion of the Naples Landfill is presented in Figure 3. The first area to be constructed includes Cells A1 and A2, which are located just south of the existing Cells 3 and 4.

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The Naples Landfill currently uses a utility flare for the disposal of the landfill gas collected at the Naples Landfill. The utility flare is currently located south of the existing Cells 3 and 4. The location of the existing utility flare is presented in Figure 4. The location of the proposed expansion of the Naples Landfill together with the location of the existing utility flare is presented in Figure 5. As shown in Figure 5, the existing utility flare is located within the footprint of the proposed expansion. Therefore, WMIF is proposing to relocate the existing utility flare to a new location, outside the footprint of the proposed landfill expansion.

Flare Relocation

As described, the existing utility flare is currently located within the proposed footprint of Cells A1 and A2. Therefore, WMIF is requesting approval from FDEP to relocate the existing utility flare. The proposed new location for the existing utility flare is presented in Figure 6. As shown in Figure 6, the new location proposed for the existing utility flare is located outside the proposed footprint of the expansion. The proposed relocation of the existing utility flare will be sequenced to minimize disruption to the gas collection system. The relocation of the flare will not require any modification to the flare operations.

Modeling

In December 2000, the results of emissions modeling using the Environmental Protection Agency (EPA) ISCST3, and performed by Grove Scientific & Engineering Company of Orlando, Florida, were submitted to FDEP. The purpose of the modeling was to address the effects of downwash on the flare performance. For purposes of the modeling, the landfill cells were modeled as buildings. The results of the modeling indicated that downwash is only significant within the influence of the buildings, where the aerodynamic wake near the building may entrain pollutants. The area of influence of the building, or landfill cell, extends in a horizontal distance to five times the height of the building. If the existing utility flare is to be located within the horizontal area of influence, the height must be greater than two and a half times the height of the building to avoid the effects of downwash. If the existing utility flare is placed outside the area of influence, the effects of downwash will be avoided.

There are two buildings located in the vicinity of the proposed location for the existing utility flare. The building to the south of the proposed flare location, the Operation and

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Maintenance building, is approximately 20 feet high. The proposed flare location is 100 ft from the maintenance building. The building to the northwest of the proposed flare location, the household hazardous waste (HHW) drop-off location, is approximately 12 feet high. The proposed flare location is a minimum of 60 feet from the HHW building. The proposed location of the flare has been selected so that the effects of downwash will be avoided.

Construction Activities

The proposed relocation of the existing utility flare will involve several activities including activities associated with the new flare location and the existing flare location. WMIF is proposing to install and operate a temporary flare, at the old flare location south of existing Cells 3 & 4, to destroy the landfill gas while the existing utility flare is being relocated. A schedule for the proposed activities is presented in Figure 7. As shown in Figure 7, the activities associated with the new flare location, prior to relocation of the existing utility flare include:

- Installation of approximately 700 feet of 24-in. diameter below ground gas header pipe to convey the collected landfill gas from the existing utility flare location to the proposed utility flare location;
- Installation of approximately 700 feet of 4-in. diameter below ground condensate drain pipe to convey the condensate from the proposed utility flare location back to the leachate forcemain;
- Installation of control valves at the south end of the new gas header and condensate drain pipes to facilitate control of the landfill gas and condensate;
- Installation of a new below ground knockout pot and connection to the 24-in. diameter below ground gas header and the 4-in. diameter below ground condensate drain pipe;
- Installation of a header pipe that will connect the below ground gas header/knockout pot to the above ground flare;
- Installation of condensate drain pipe that will convey the condensate from the knockout pot at the flare to the leachate forcemain;
- Installation of a condensate drain pipe that will convey condensate from the knockout pot located at the flare to the below ground knockout pot;
- Installation of a foundation for the utility flare and the control panel; and
- Installation of a new transformer to provide power to operate the utility flare.

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The activities associated with the existing utility flare location, prior to flare relocation include:

- Construction of a pad for the temporary flare;
- Installation of a temporary flare adjacent to the existing utility flare location (the temporary flare will be a similar utility type flare with a minimum capacity of 1500 scfm, which is the maximum recorded flow of landfill gas to the existing utility flare, and will include a knockout pot, blower, and necessary controls (i.e., valves, flamelrol, etc.));
- Installation of a temporary 18-in. diameter piping to connect the temporary flare to the existing below ground gas header pipe;
- Installation of a temporary 4-in. diameter piping to connect the knockout pot at the temporary flare to the existing below ground knock out pot;
- Installation of a temporary control panel for the temporary flare;
- Connection of temporary flare to existing below ground gas header, however, keep connection closed;
- Connection of a temporary knockout pot to existing condensate drain line; and
- Connection of the power supply.

The flow of landfill gas will be temporarily turned off during the connection of the temporary flare to the existing below ground gas header. The activities associated with the flare relocation include:

- Turn off flow of landfill gas to the existing utility flare;
- Turn on flow of landfill gas to the temporary flare;
- Operation of the temporary utility flare;
- After consistent operation of the temporary utility flare, the existing utility flare shall be disconnected from the existing below ground gas header;
- The knockout pot on the flare pad shall be disconnected from the condensate drain line;
- The existing utility flare shall be disconnected from the control panel; and
- The existing utility flare and all components on existing utility flare skid shall be relocated to the new location in the operations area.

The activities associated with the new flare location, following relocation of the existing utility flare include:

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- Connection of the existing utility flare to the new 24-in. diameter gas header pipe;
- Connection of the condensate pot on the existing utility flare skid to the below ground knockout pot/condensate drain line;
- Connection of the existing utility flare to the control panel;
- Operation of the existing utility flare at the new location; and
- Installation of fencing around new utility flare location.

The activities associated with the existing utility flare location, following relocation of the existing utility flare include:

- Disconnection (i.e., cut and cap) of the temporary flare from the below ground gas header pipe;
- Disconnection (i.e., cut and cap) of the temporary condensate drain line from the below ground condensate drain line; and
- Removal of temporary flare from the site.

Conclusion

The details for the relocation of the existing flare to the operations area will be presented to the contractor in a set of construction drawings. The relocation of the flare will not begin until all new pipes and power connections are in place. WMIF will work closely with Globex and the contractor to make sure that the relocation of the existing utility flare is as smooth as possible. Should you have any questions regarding the proposed relocation of the existing utility flare at the Naples Landfill, please contact either Mr. John Wong at (941) 455-8061 or the undersigned at (954) 571-9200.

Sincerely,

22 October 2002

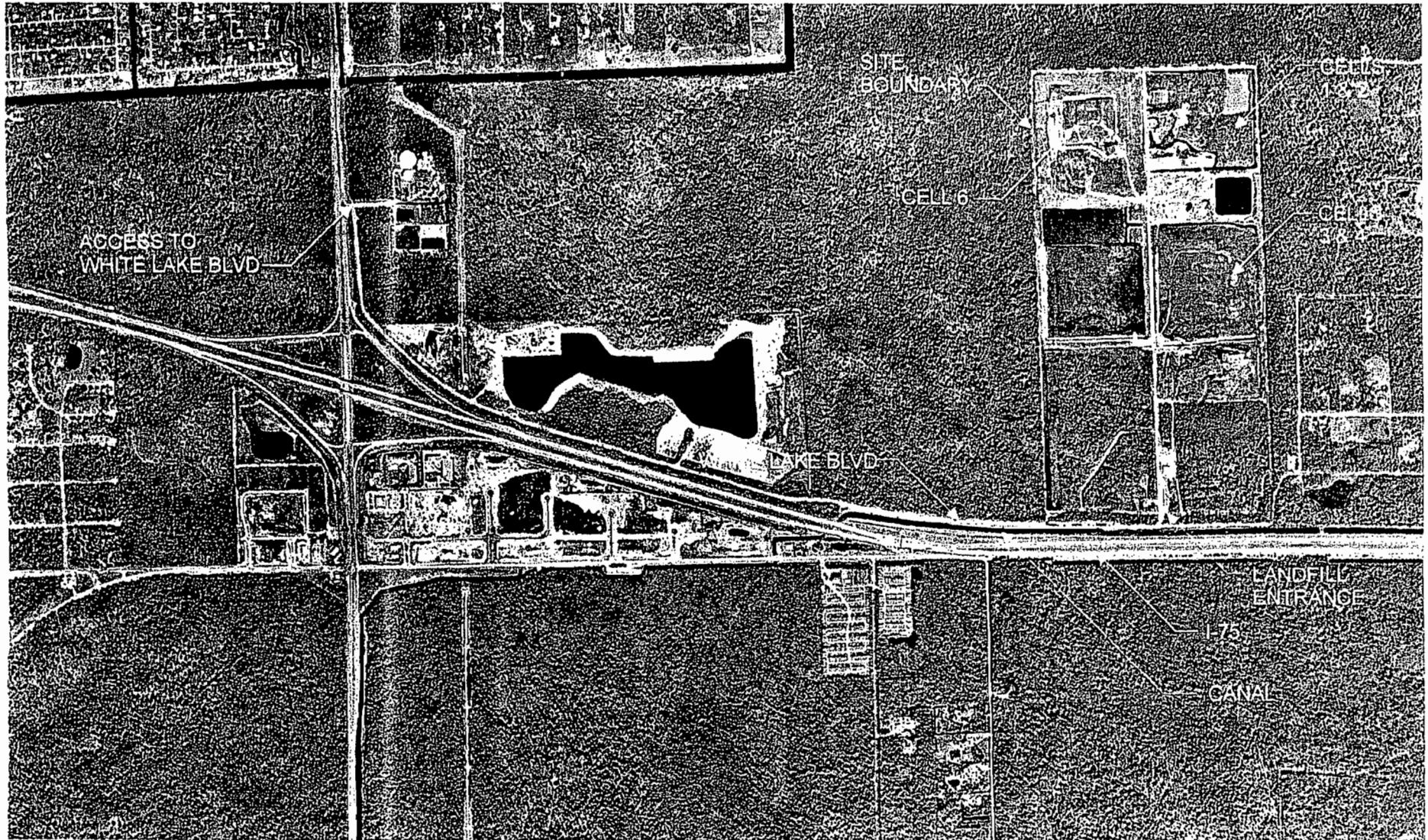
Brenda Ann Smith Clark

Brenda Ann Smith Clark, P.E.
Senior Project Manager

Attachments

Copy to: John Wong, WMIF
Dan Erni, WMIF

1349/f020439

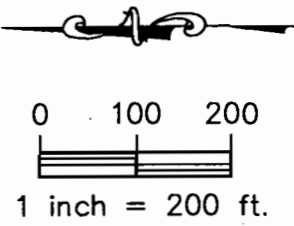
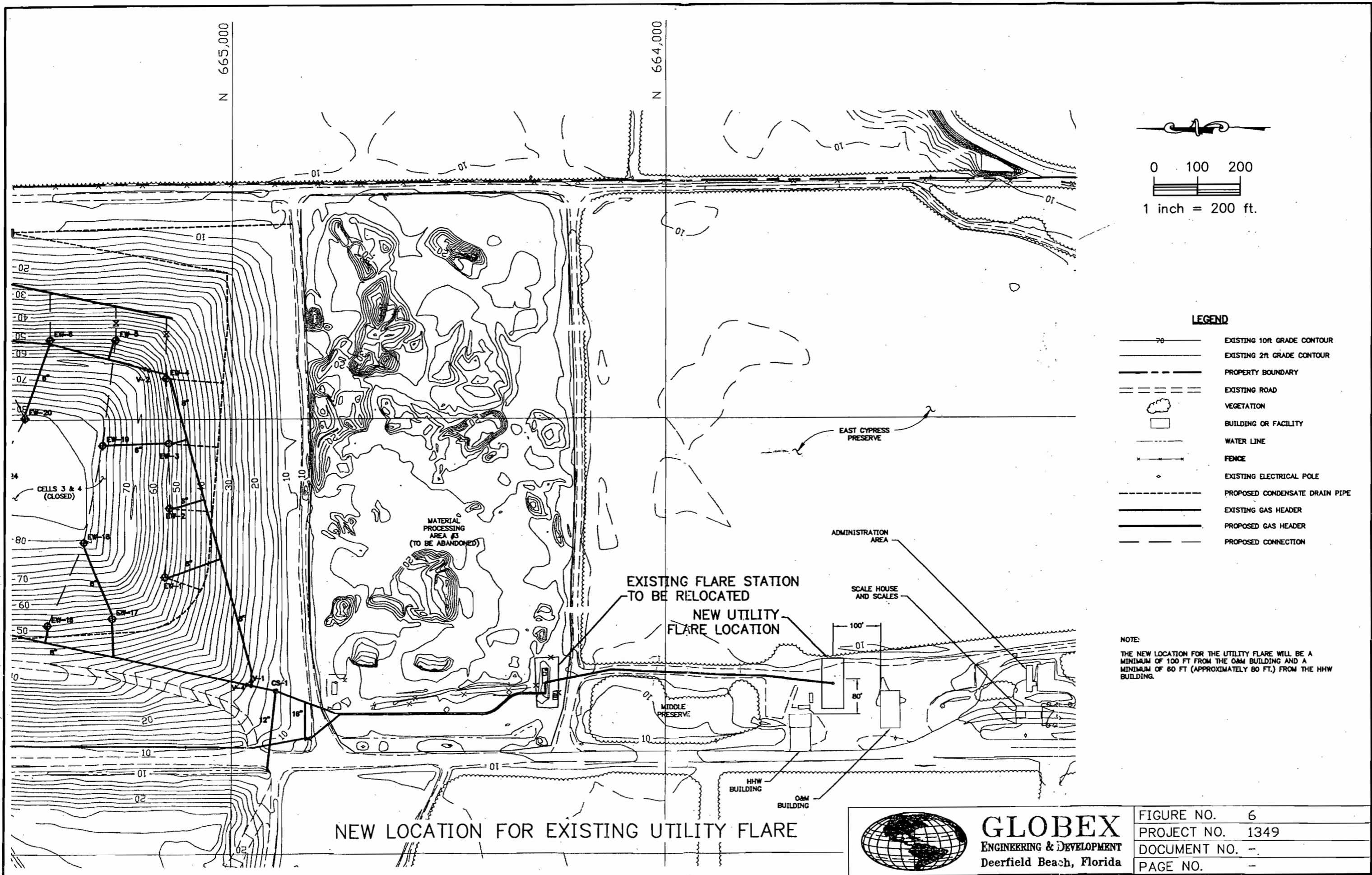


SITE LOCATION PLAN



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Deerfield Beach, Florida

FIGURE NO.	1
PROJECT NO.	1349
DOCUMENT NO.	-
PAGE NO.	-



LEGEND

- EXISTING 10R GRADE CONTOUR
- EXISTING 2R GRADE CONTOUR
- PROPERTY BOUNDARY
- EXISTING ROAD
- VEGETATION
- BUILDING OR FACILITY
- WATER LINE
- FENCE
- EXISTING ELECTRICAL POLE
- PROPOSED CONDENSATE DRAIN PIPE
- EXISTING GAS HEADER
- PROPOSED GAS HEADER
- PROPOSED CONNECTION

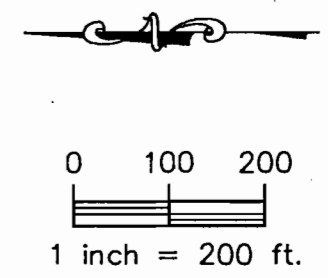
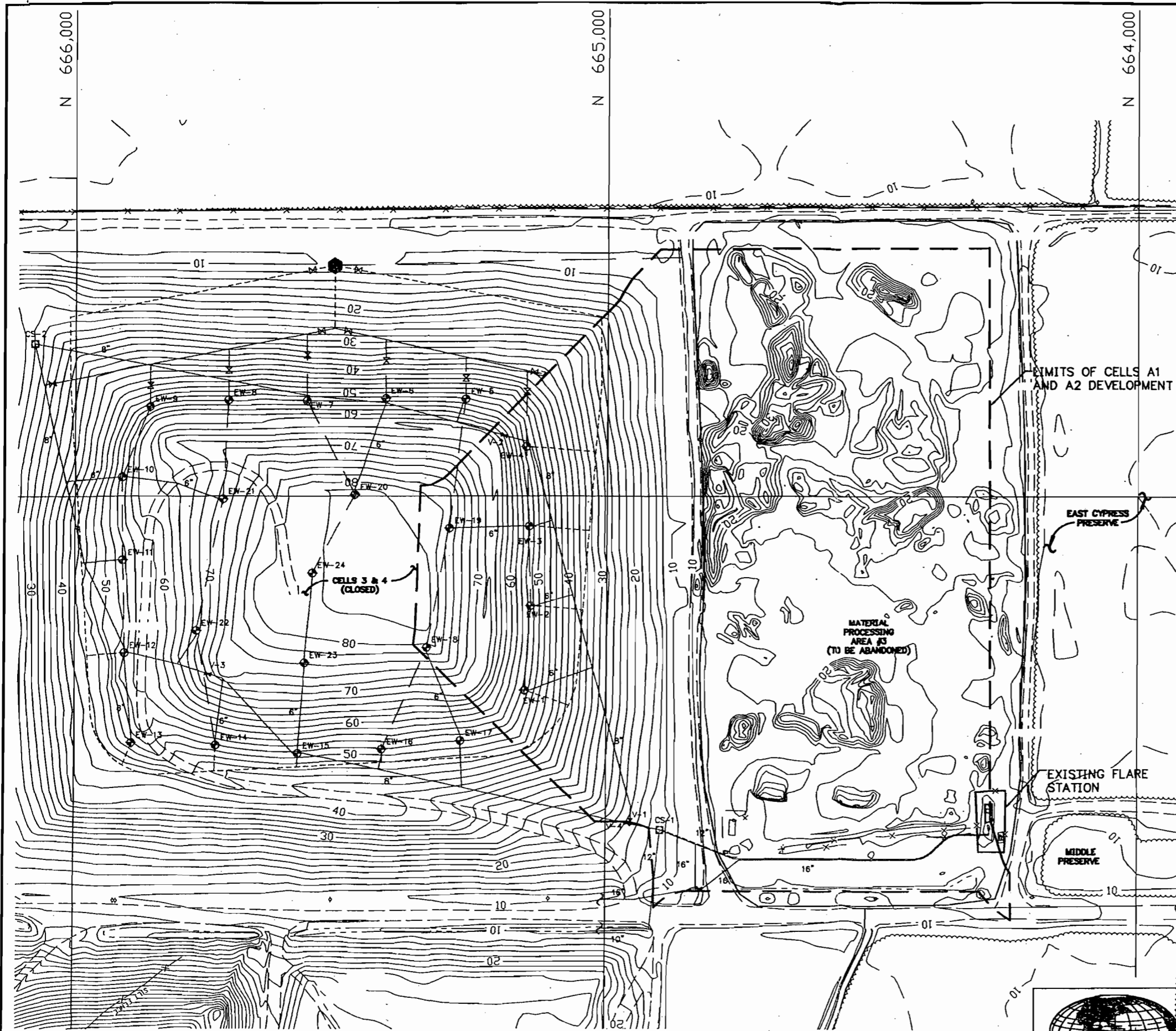
NOTE:
 THE NEW LOCATION FOR THE UTILITY FLARE WILL BE A MINIMUM OF 100 FT FROM THE O&M BUILDING AND A MINIMUM OF 60 FT (APPROXIMATELY 80 FT.) FROM THE HHW BUILDING.

NEW LOCATION FOR EXISTING UTILITY FLARE



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FIGURE NO.	6
PROJECT NO.	1349
DOCUMENT NO.	-
PAGE NO.	-



LEGEND

- EXISTING 10' GRADE CONTOUR
- EXISTING 2' GRADE CONTOUR
- PROPERTY BOUNDARY
- EXISTING ROAD
- VEGETATION
- BUILDING OR FACILITY
- WATER LINE
- FENCE
- EXISTING ELECTRICAL POLE
- LIMIT OF CELLS A1 & A2
- PROPOSED CONDENSATE DRAIN PIPE
- PROPOSED LEACHATE FORCEMAIN
- EXISTING GAS HEADER
- PROPOSED GAS HEADER
- PROPOSED GAS CONNECTION PIPE
- EXISTING CONDENSATE SUMP
- PROPOSED CONDENSATE SUMP
- EXISTING VERTICAL EXTRACTION WELL
- PROPOSED GATE VALVE
- EXISTING VALVE

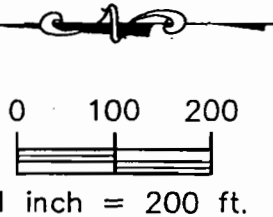
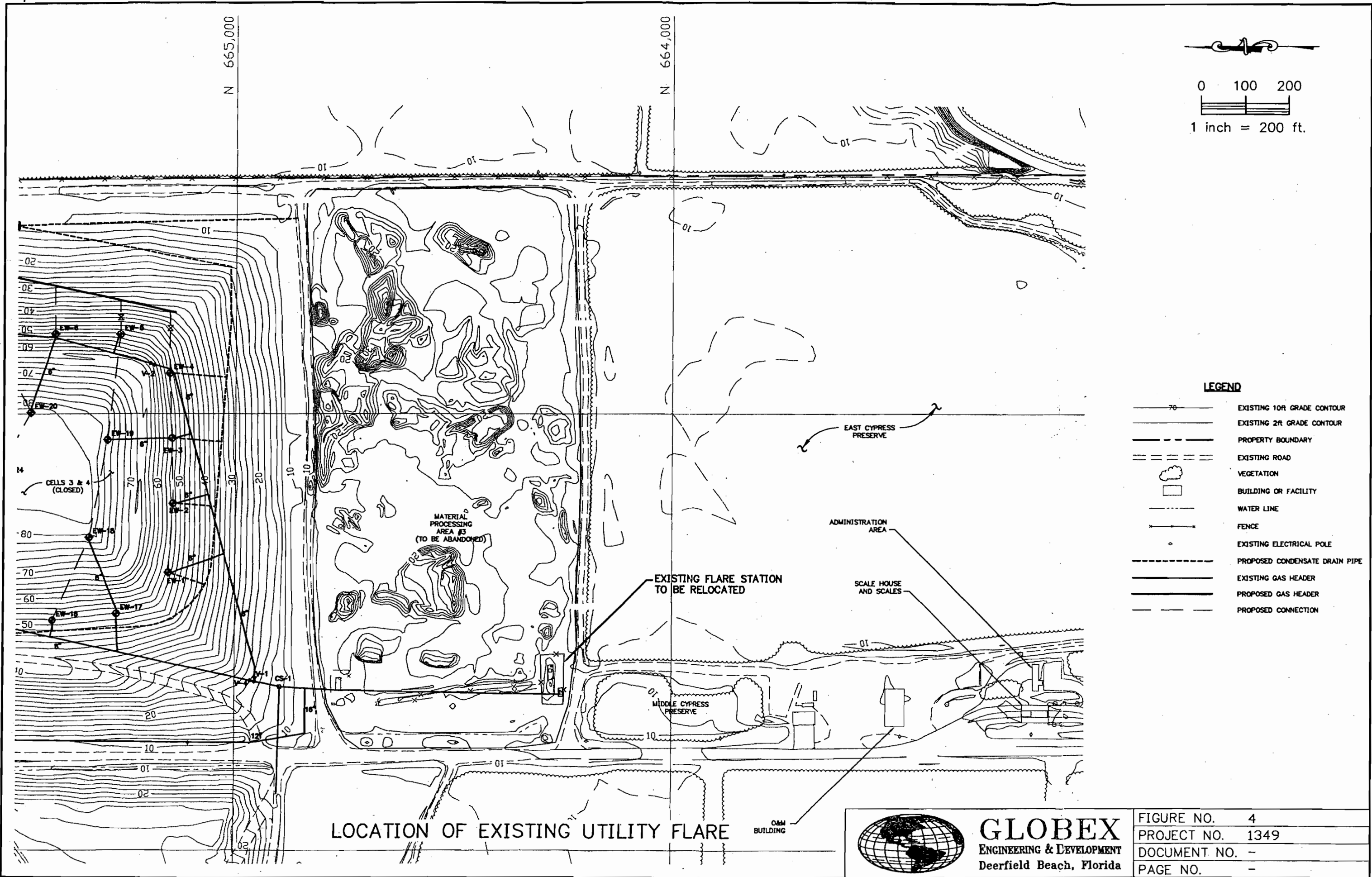
NOTES: 1. THE TOPOGRAPHIC MAP IS BASED ON AERIAL PHOTOS DATED 01/31/02, PREPARED BY LANDAIR SURVEYING, INC. (770) 631-0903

EXISTING UTILITY LOCATION IN RELATION TO CELLS A1 AND A2 DEVELOPMENT



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FIGURE NO.	5
PROJECT NO.	1349
DOCUMENT NO.	-
PAGE NO.	-



LEGEND

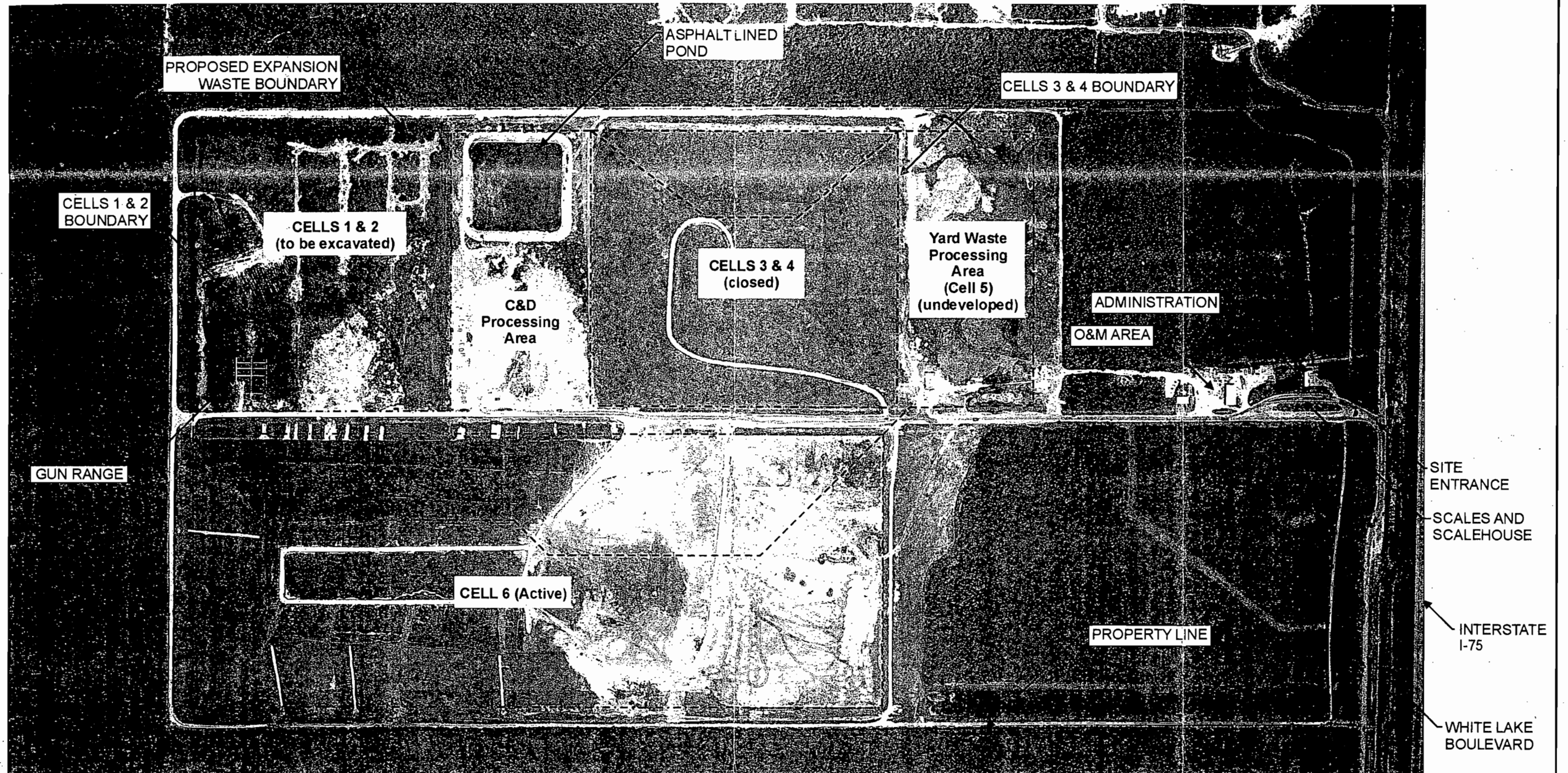
- EXISTING 10R GRADE CONTOUR
- EXISTING 2R GRADE CONTOUR
- PROPERTY BOUNDARY
- EXISTING ROAD
- VEGETATION
- BUILDING OR FACILITY
- WATER LINE
- FENCE
- EXISTING ELECTRICAL POLE
- PROPOSED CONDENSATE DRAIN PIPE
- EXISTING GAS HEADER
- PROPOSED GAS HEADER
- PROPOSED CONNECTION

LOCATION OF EXISTING UTILITY FLARE



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FIGURE NO.	4
PROJECT NO.	1349
DOCUMENT NO.	-
PAGE NO.	-

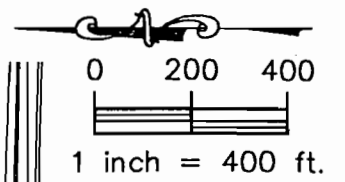


LEGEND

- EXISTING PERMIT WASTE ACTIVITIES BOUNDARY
- PROPOSED EXPANSION WASTE BOUNDARY
- PROPERTY LINE

EXPANSION LAYOUT

	FIGURE NO.	3
	PROJECT NO.	1349
	DOCUMENT NO.	-
	PAGE NO.	-



LEGEND

- 70 —— EXISTING 10R GRADE CONTOUR
- 72 —— EXISTING 2R GRADE CONTOUR
- PROPERTY BOUNDARY
- EXISTING ROAD
- ☁️ VEGETATION
- BUILDING OR FACILITY
- WATER LINE
- FENCE

EXISTING SITE PLAN

NOTE: THE TOPOGRAPHIC MAP IS BASED ON AERIAL PHOTOS DATED 01/31/02, PREPARED BY LANDAIR SURVEYING, INC. (770) 831-0903



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Deerfield Beach, Florida

FIGURE NO.	2
PROJECT NO.	1349
DOCUMENT NO.	-
PAGE NO.	-

**FIGURE 7. SCHEDULE FOR FLARE RELOCATION
NAPLES LANDFILL**

ITEM	CONSTRUCTION ACTIVITY	Days																												
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26			
<i>Activities Associated with New Flare Location - Prior to Flare Relocation</i>																														
1	Install 700 ft of 24 in. Diameter Gas Header Pipe	■	■	■	■	■	■	■																						
2	Install 700 ft of 4 in. Diameter Condensate Drain Line/Force Main	■	■	■	■	■	■	■																						
3	Install Control Valves at South End of the Gas Header Pipe and Condensate Drain Line							■																						
4	Install New Below Ground Knock Out Pot			■	■	■	■	■																						
5	Install the Header Pipe for the Above Ground Connection to Flare							■	■																					
6	Install Condensate Drain Line/Force Main to Knock Out Pot							■																						
7	Install Condensate Drain Line between Below Ground Knockout Pot to Knockout Pot at Flare							■	■																					
8	Install Foundation for the New Flare Location								■	■	■																			
9	Install Foundation for Control Panel								■	■	■																			
10	Install New Transformer for Power Supply																													
<i>Activities Associated with Existing Flare Location - Prior to Flare Relocation</i>																														
11	Construct Pad for Temporary Flare	■																												
12	Install Temporary Flare Adjacent to Existing Flare to include Knockout Pot and Blower		■	■	■	■	■	■	■																					
13	Install Temporary Piping to Connect Temporary Flare to Gas Header		■	■	■	■	■	■	■																					
14	Install Temporary Piping to Connect Temporary Knockout Pot to Condensate Drain Line	■	■	■	■	■	■	■	■																					
15	Install Temporary Control Panel									■	■	■																		
16	Turn off Flow of Landfill Gas to the Existing Utility Flare													■																
17	Connect Temporary Flare to Existing Header													■																
18	Resume Flow of Landfill Gas to the Existing Utility Flare													■																

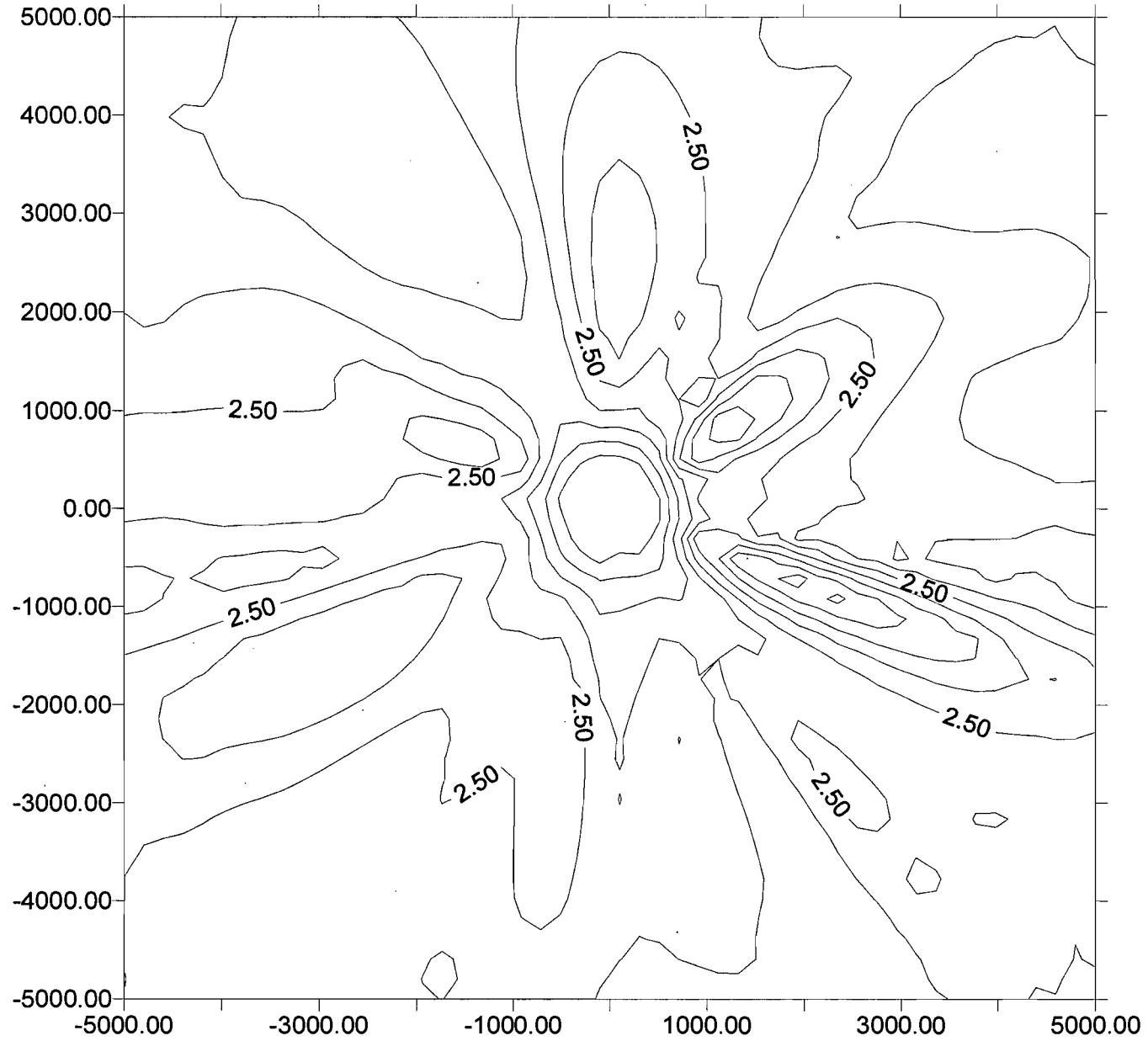
**FIGURE 7. SCHEDULE FOR FLARE RELOCATION (Continued)
NAPLES LANDFILL**

ITEM	CONSTRUCTION ACTIVITY	Days																										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
<i>Activities Associated with Existing Flare Location - Prior to Flare Relocation</i>																												
19	Connect Temporary Knockout Pot to Existing Condensate Drain Line																											
20	Connect Power Supply																											
<i>Activities Associated with Flare Relocation</i>																												
21	Turn off Flow of Landfill Gas to the Existing Utility Flare																											
22	Turn on Flow of Landfill Gas to the Temporary Utility Flare																											
23	Operate Temporary Flare																											
24	Disconnect Existing Utility Flare from Existing Header																											
25	Disconnect Knockout Pot from the Condensate Drain Line																											
26	Disconnect Flare from Existing Control Panel																											
27	Relocate Existing Flare to New Location																											
<i>Activities Associated with New Flare Location - Following Flare Relocation</i>																												
28	Connect Existing Utility Flare to New 24 in. Diameter Gas Header Pipe																											
29	Connect Knockout Pot at Flare to Drain Line to Below Ground Knockout Pot																											
30	Connect Existing Utility Flare to Control Panel																											
31	Operate Utility Flare at New Location																											
32	Install Fencing																											

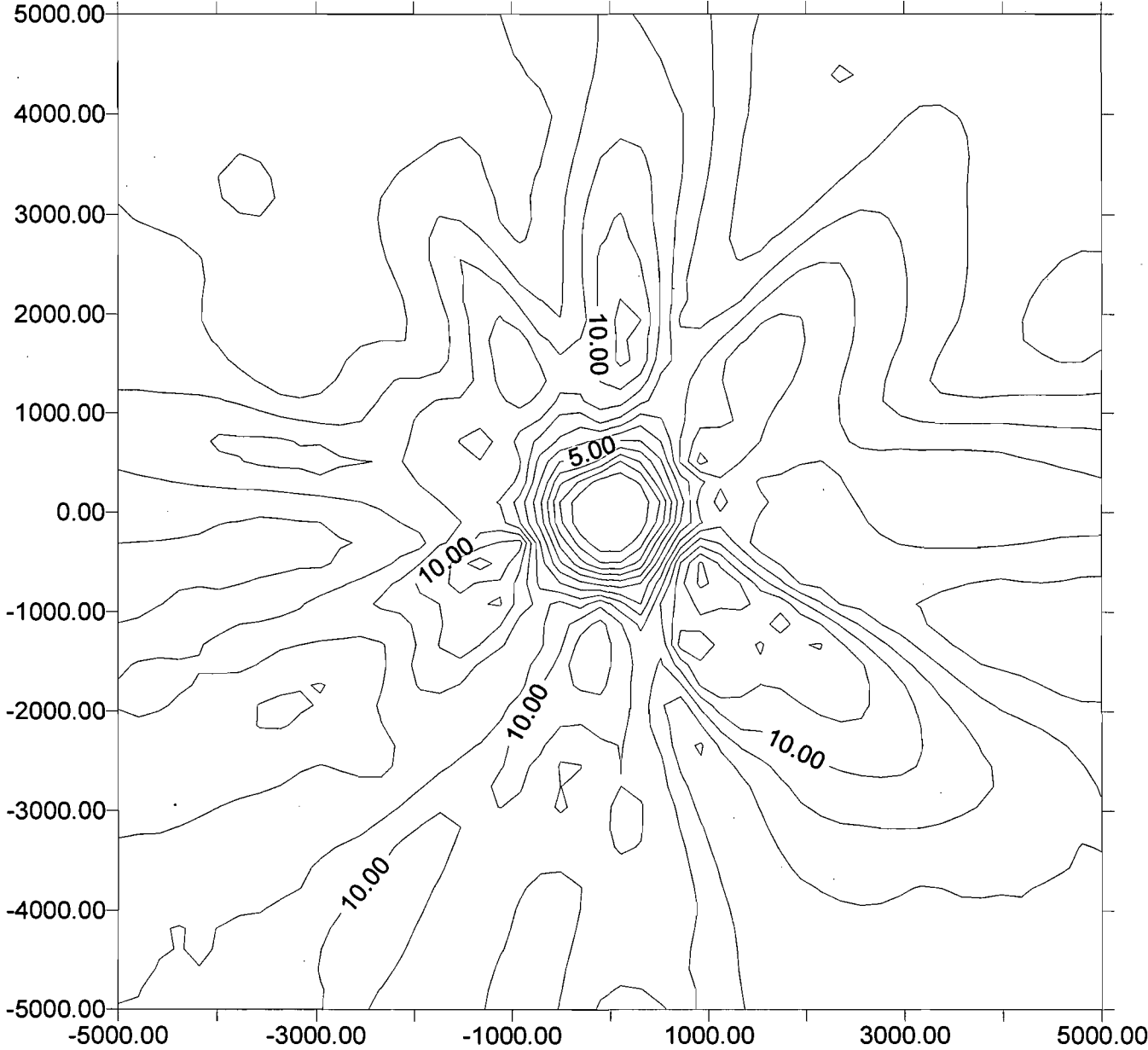
**FIGURE 7. SCHEDULE FOR FLARE RELOCATION (Continued)
NAPLES LANDFILL**

ITEM	CONSTRUCTION ACTIVITY	Days																										
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	
<i>Activities Associated with Existing Flare Location - Following Flare Relocation</i>																												
33	Cut and Cap Connection to the Temporary Flare																											
34	Cut and Cap Temporary Connection to the Condensate Drain Line																											
35	Remove Temporary Flare from the Site																											

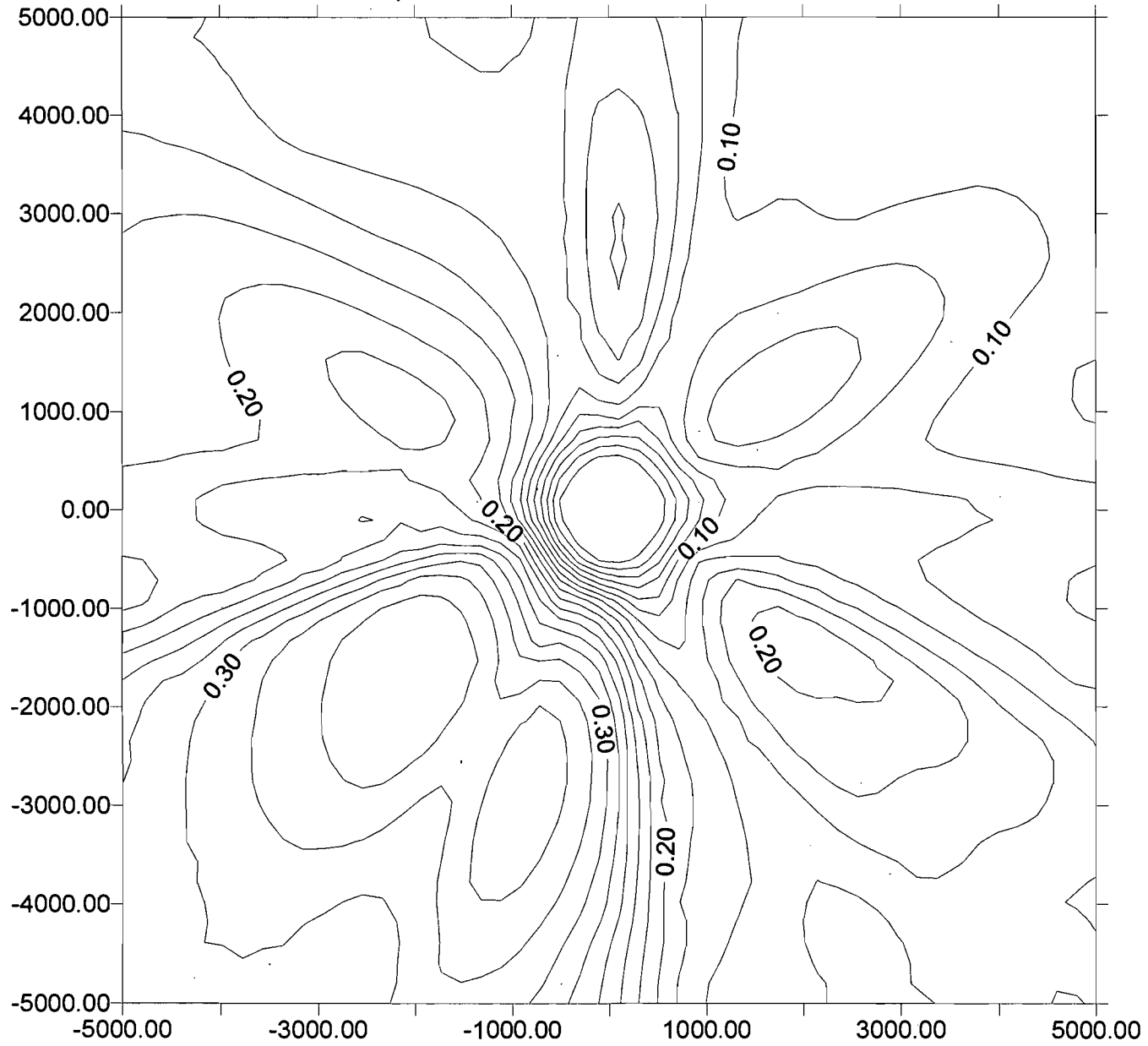
Naples Landfill Flare - Predicted Max. 24-Hour SO2 Concentrations, 1991



Naples Landfill Flare - Predicted Max. 3-Hour SO2 Concentrations, 1987



Naples Landfill Flare - Predicted Annual Avg. SO2 Concentrations, 1987



$$1.162 Q = g V_s d_s^2 \left(\frac{\Delta T}{4 T_s} \right)$$

$$= g V_s (d_s)^2 \left(\frac{970}{4 \times 1273} \right)$$

$$= 9.8 \cdot 20 \cdot (d_s)^2 \times 0.1905$$

$$\begin{array}{r} 1273 \\ \underline{303} \\ 970 \\ \textcircled{2} \cdot 303 \\ \hline 273 \neq 303 = 303 \end{array}$$

screen

$$Q = V$$

$$3000 \text{ SCF/min} = 3000 \text{ SCF/min} \times 2.832 \times 10^{-2} \text{ m}^3/\text{SCF}$$

$$\times \frac{\text{min}}{60 \text{ sec}}$$

$$= 1.416 \text{ m}^3/\text{s}$$

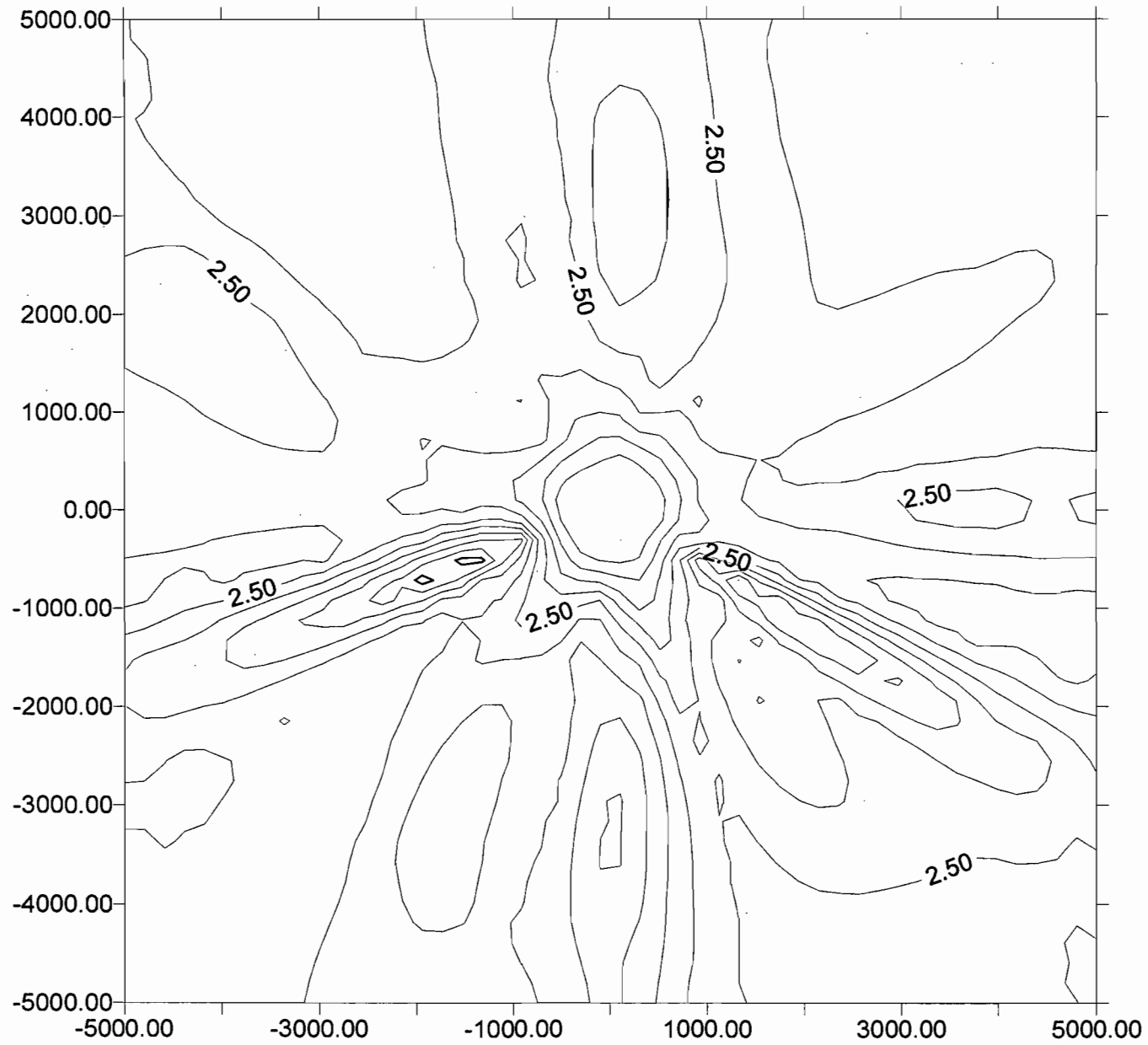
$$\frac{1.162 Q}{?} = 9.8 \times 19.4$$

	<u>Date</u>	<u>Amount</u>	<u>Location</u>
87	08/18/24	5,934(24)	-1409, -513
	08/18/24	5,637(24)	-1879, -684
91	02/15/24	5,117(24)	1879, -684

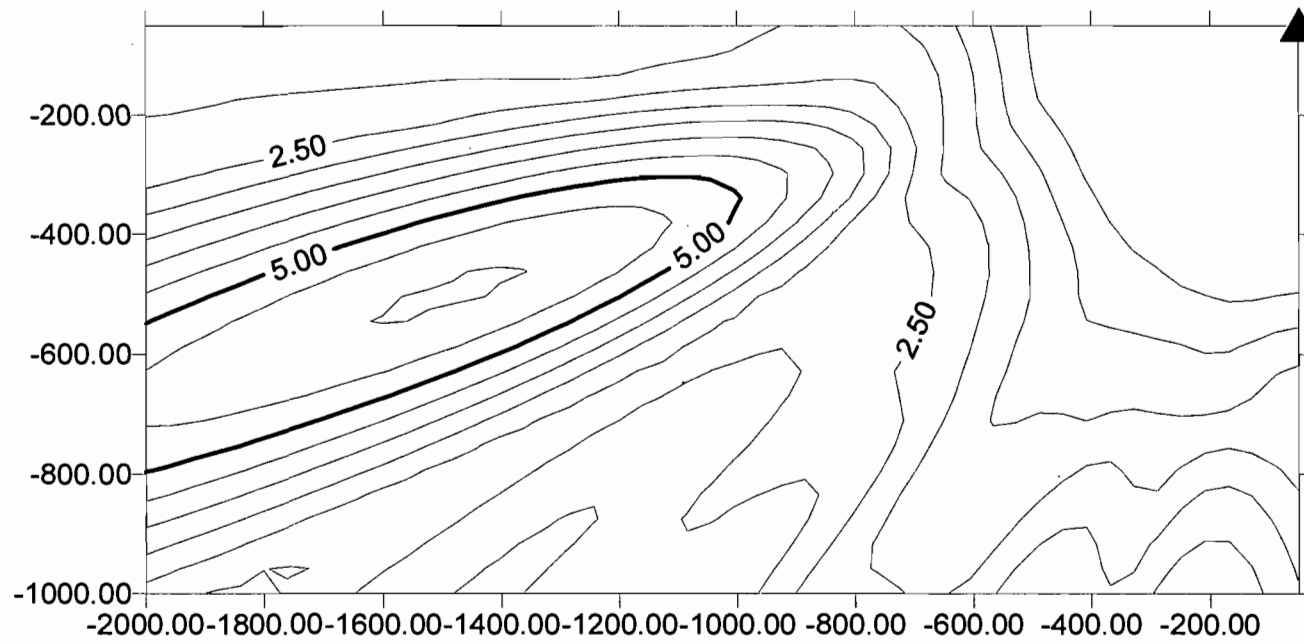
-1500, @ -500

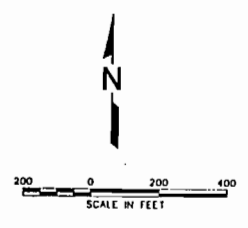
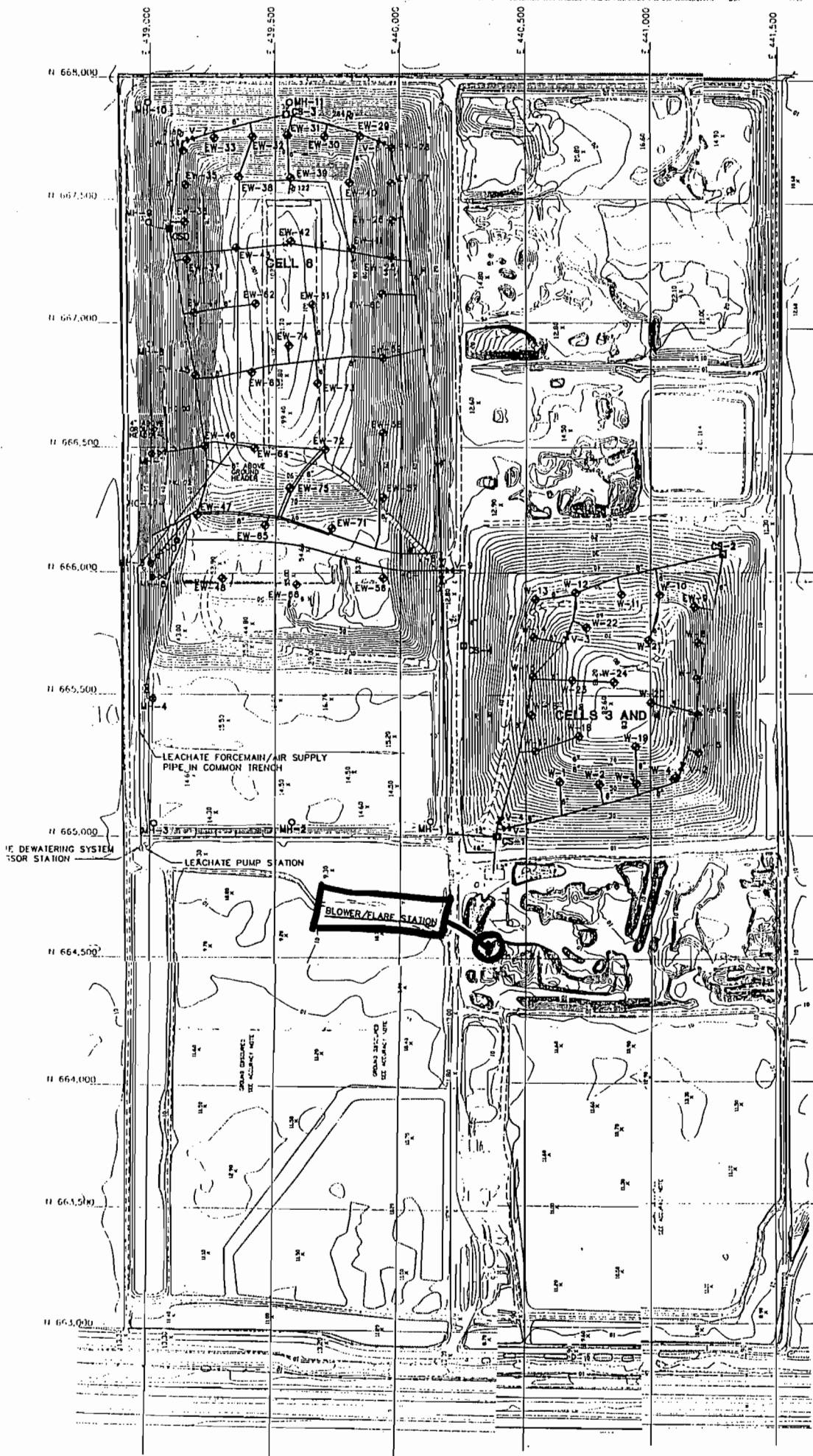
3000 1500

Naples Landfill Flare - Predicted Max. 24-Hour SO2 Concentrations, 1987



Naples Landfill Flare - Predicted Max. 24-Hour SO₂ Concentrations, 1987





- LEGEND**
- ◆ EW-1 LFG EXTRACTION WELL
 - AIR SUPPLY LINE AND LEACHATE FORCEMAIN IN COMMON TRENCH
 - EXISTING LFG HEADER AND LATERAL
 - HORIZONTAL COLLECTOR
 - CO CLEANOUT W/ LFG WELLHEAD
 - ⊕ MH LEACHATE MANHOLE W/ LFG WELLHEAD
 - CS CONDENSATE SUMP WITH ELECTRIC PUMP
 - CSD CONDENSATE SUMP WITH DRIPLEG TO MANHOLE
 - BLIND FLANGE
 - OMH LEACHATE COLLECTION SYSTEM MANHOLE
 - ⊙ LOCATION OF SURFACE EMISSIONS MONITORING

- NOTES:**
1. THE TOPOGRAPHIC CONTOURS ARE BASED ON DATA OBTAINED USING AERIAL PHOTOGRAMMETRY METHODS AND ARE BASED ON PHOTOGRAPHS FROM DECEMBER 1999 BY AIR SURVEY CORP.
 2. THE VERTICAL DATUM IS BASED ON THE NATIONAL GEODESIC VERTICAL DATUM ESTABLISHED IN 1929. THE GRID IS BASED ON FLORIDA STATE PLAN COORDINATE SYSTEM, EAST ZONE NAD 1983/1990.

Post-it® Fax Note	7671	Date	3/12/01	# of pages	1
To	MARA NASCA	From	JOE KAHN		
Co./Dept.	DER-5D	Co.	DER-BAMMS		
Phone #		Phone #	S/C 291-9509		
Fax #	S/C 748-6969	Fax #			

UTILITY FLARE MODEL CF1228110
TECHNICAL DATA

- A. Flare Tip size -- 12 in.
- B. Overall Height -- 34 ft.
- C. Maximum landfill gas flow -- 3000 SCFM
- D. Turndown Ratio -- 10:1
- E. Destruction efficiency at design flow with gas methane content 40 to 60% -- 98% overall destruction of total hydrocarbons

Guaranteed to meet E.P.A. emission standards for landfill gas disposal in utility "candle type" flares.

Note: Flare is designed in accordance with the United States Environmental Protection Agency (EPA) established criteria for open flares, 40 CFR 60.18

- F. Minimum flow rate to maintain stable flame and 98% destruction efficiency -- 300 SCFM
- G. Minimum methane content required to maintain stable flame and 98% destruction efficiency -- 30%
- H. Flow/Emissions (expected) at maximum flow, 50% methane content and 1400°F combustion temperature:

N ₂	73.5 % vol.
O ₂	13.6 % vol.
CO ₂	6.0 % vol.
H ₂ O	6.9 % vol.
NO ₂	0.068 lbs./MMBTU *
CO	0.37 lbs./MMBTU *

* Per the US EPA AP-42 Supplement D, Table 11.5-1

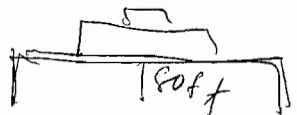
NOTE:

Wind loads: Designed for 100 mph wind loading (per ASCE 7-88, Exp. C)

17.1 m 20.8 m

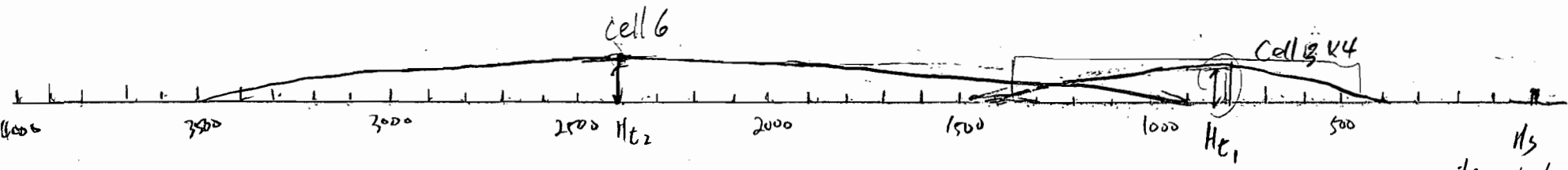


34 ft

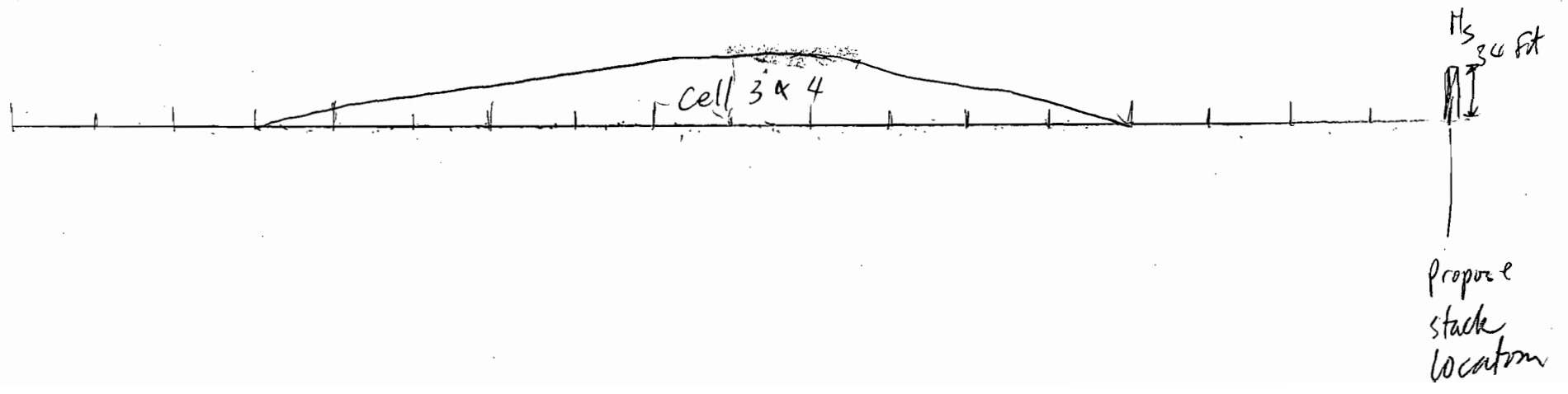


10 m

$H_t \approx 1.5 L \approx 70$



$H_t = 80 \text{ ft} @ 0.5 \text{ mile stack}$
 $\gg 0.4 H_s$
 $H_s = 34 \text{ ft}$



$$H_s = 20.02 \text{ m}$$

$$T_s = 1033 \text{ K}$$

$$\Delta T = 1033 - 303$$

$$V_s = 19.4 \text{ m/s}$$

$$T_a = 303 \text{ K}$$

$$= 730$$

$$F = 3000 \text{ SCF/min} = 1.416 \text{ m}^3/\text{s}$$

$$Q = (0.38) * 3000 \text{ SCF/min} * 60 \text{ min/hr} * 1000 \text{ BTU/SCF}$$

$$* 10^{-6} \text{ MMBTU/BTU}$$

$$= 68.4 \text{ MMBTU/hr}$$

assume

$$F_b = 1.162 Q = 79.48$$

$$= g V_s (d_s)^2 \left(\frac{\Delta T}{4 T_s} \right)$$

$$= 9.8 * 19.4 (d_s)^2 \left(\frac{730}{4 * 1033} \right)$$

$$= 33.588 (d_s)^2$$

$$d_s = \left(\frac{79.48}{33.588} \right)^{0.5} = 1.538$$

3	= 0.8
8	= 0.7
200	= 0.4
Annual	= 0.08

TS555

TS555

36.34

19

73



$$68 \text{ TPT} \times 0.02877 = 13.464 \text{ g}$$

$$Q = (0.38) \times 3000 \text{ SCF/min} \times 60 \text{ min/hr} \times 1000 \text{ BTU/SCF} \times 10^{-6} \text{ MMBTU/BTU}$$

Ohio

$$= 68.4 \text{ MMBTU/hr} \quad 20.8 \text{ m} + 4 \text{ ft} = 22.02$$



$$H_{eq} = H_{act} + 0.944(Q)^{0.478} = 7.5362764$$

$$= 22.02 \text{ m} + 7.1142 = 29.13 \text{ m}$$

$$Q \sim \text{heat release in MMBtu/hr} \Rightarrow 10.16$$

$$\text{Assume temp} = 1273 \text{ K } (711^\circ \text{F})$$

$$\text{velocity} = 20 \text{ m/s } (17.27)$$



$$d_{eq} = 0.1755(Q)^{0.5} = 1.451 \text{ m}$$

Depends on heat content and molecular weight of the fuel, velocity of the uncombusted fuel/air mixture, presence of steam for soot control.

LA DEQ H calculated from specs

$$Q_H \text{ (cal/s)} = \text{percentage of } H_{se} \times H \text{ (cal/s)}$$

$$d_{eq} \text{ (m)} = 9.88 \times 10^{-4} \times [Q_H]^{0.5} = 1.48 \text{ m}$$

$$Q_H = (0.38) (3000 \text{ SCF/min}) (1000 \text{ BTU/SCF}) \times \text{min/60sec} \times (252 \text{ cal/BTU}) \times 0.45 \text{ cal/s} = 2154600 \text{ cal/s}$$

$h_g =$
 $d_g =$ effective diameter
 $v_g =$
 $T_g =$
 Actual

$1400^\circ F = 760^\circ C$
 $1033 K$

$12835 \text{ } \varnothing m$
 12842

H₂O

TNRCC

Use following assumption

velocity = 20 m/s

$T_{emp} = 1273 K$

actual stack height

$38 - CH_4 = 12 + 4(16) \times 0.38 = 6.08$
 $31 - CO_2 = 12 + 32(40) \times 0.31 = 14.26$
 69
 $4.7 - O_2 = 32 \times 0.047 = 1.504$
 73.7
 $10 - H_2O = 18 \times 0.1 = 1.8$
 $16.3 - N_2 = 28 \times 0.163 = 4.564$

28.208

$D = (q_n \times 10^{-6})^{0.5} = 1.889 \text{ m}$

$q_n = q (1 - 0.048 \sqrt{MW})$
 $4,788,000$
 $5,311,204$

$q =$ heat release in cal/s

$MW =$ Weighted (by volume) average molecular weight of the compound being flared
 Note: enclosed vapor combustion units should not be modeled with the preceding parameters - that but instead with stack parameters - that reflect the physical characteristics of the unit.

Permit File Scanning Request from Cleve Ho Nady

Priority: -ASAP (Public Records Request, etc.) -Place in Normal Scanning Queue

Facility ID	Project#/PATs#	Type	PSD #	Submittal Date	Batch #
0210051		AC			

- File Approved For Disposal Correspondence Intent Permit Draft (Title V)
 Return File to BAR Amendment Application OGC Proposed (Title V)

Document Date Mar 12, 2001

Kahn, Joseph

From: Kahn, Joseph
Sent: Monday, March 12, 2001 3:46 PM
To: Nasca, Mara
Subject: Naples LF Modeling Assumptions

Mara,

The proposed LF flare location is approximately 400 feet south of Cells 3 and 4 and approximately 500 feet from Cell 6. The location is basically due south of the western side of Cells 3 and 4. The revised diagram that I have is a photocopy that I had to reduce and will probably not fax well, but I'll try it anyway. You may want to call the applicant and have a drawing sent to you. You can also try Bruno Ferraro at Grove Scientific at 407-298-2282. It is at a location that with a grade height that appears to be at elevation 11 ft. The entire flare height above grade is 22 meters (72 feet), including the foundation. The SO₂ emissions were estimated using the maximum proposed flow rate of 3000 scfm, and a sulfur content of 3634 ppmv, as S.

Let me know if you need anything further.

-Joe

Permit File Scanning Request from Cleve Ho Hady

Priority: -ASAP (Public Records Request, etc.) -Place in Normal Scanning Queue

Facility ID	Project#/PATs#	Type	PSD #	Submittal Date	Batch #
0210051	003	AV			

- File Approved For Disposal Correspondence Intent Permit Draft (Title V)
 Return File to BAR Amendment Application OGC Proposed (Title V)

Document Date _____



December 20, 2000

Mr. Ronald D. Blackburn
District Air Program Administrator
Florida Department of Environmental Protection
P.O. Box 2549
Ft. Myers, Florida 33902-2549

RECEIVED

DEC 22 2000

BUREAU OF AIR REGULATION

**RE: ISC Modeling for Naples Landfill
Permit Number: 0210051-003-AV**

Dear Mr. Blackburn:

Attached are the results of the ISCST3 modeling for the Naples Landfill near Naples, Florida, submitted as required by the Department in its letter to Mr. G. Randall Holcomb dated November 13, 2000. The modeling results are in Attachment 1. Attachment 2 is an updated plot plan of the facility. Also included in Attachments 3, 4 and 5 are additional modeling results and other data referenced in the discussion below.

As you may recall from the latest air permit application, the landfill has proposed a larger flare to control landfill gas. A drawing of the flare, and some manufacturer's data are enclosed in Attachment 3. The gas to be combusted is a mixture of methane and other gases, including sulfurous compounds, as shown in Attachment 4. According to the flare manufacturer, the gas is burned at an efficiency of 98%. The potential SO₂ emissions are 468 TPY which triggers PSD and new source review and thus requires air pollution modeling for the Department's review.

The Department required that the emissions from the landfill be modeled using EPA's ISCST3 model. The latest version of the model was downloaded from the EPA web site last month. ISCST3 uses a set of meteorological data specific to geographical locations and considers downwash from surrounding buildings or other objects. The Department (Mr. Alex Meng, FDEP Tallahassee) graciously provided preprocessed meteorological data for the nearest station, Fort Myers. The meteorological data are for the five years 1987 through 1991. Grove Scientific & Engineering Company (GSE) also discussed modeling of the landfill cells with the Department, and the Department recommended modeling the cells as buildings to address the effects of downwash. This recommendation was confirmed by Mr. Cleve Hollady, P.E., FDEP Tallahassee after the Department and EPA reviewed the site plan submitted in our letter dated December 5.

As can be seen from the plot plan, the cells are much longer and wider than they are tall. Cell 6 is 93 feet (28 m) high, and Cells 3 and 4 are 72 feet (22 m) high. The cells are approximately 1000 feet wide and over 1000 feet long. All of the cells may be modeled as low buildings per EPA 450/4-80-023. Downwash is significant within the area of

influence of the building, where the aerodynamic wake near the building may entrain pollutants. The area of influence of a low building extends around the building for a distance equal to five times the height of the building in the horizontal direction, and 2.5 times the height of the building in the vertical direction. Stacks placed within the area of influence must be 2.5 times the height of the building to avoid the effects of downwash. Downwash greatly increases the ground level concentrations of pollutants from the stack. Locating the stack outside the area of influence avoids downwash and its undesirable effects on ground level pollutant concentrations. This approach to avoiding downwash was confirmed with the Department (Mr. Hollady).

The initial modeling used the ISCST3 model with the current 34 ft stack located immediately adjacent to Cells 3 and 4, and therefore within the area of influence of the cells. Stack diameter, exit velocity and temperature inputs required by ISCST3 were calculated assuming that the flare discharged at the conditions stated by the manufacturer. GSE's conversations with the manufacturer, and his technical data, indicated that the flare temperature was 1400°F (1033 °K), the landfill gas exhaust line was 12 inches in diameter, and the shield surrounding the flare was 30 inches in diameter. The landfill gas velocity was calculated based on 3000 SCFM landfill gas flow through the 12-inch diameter line. This yielded a stack exhaust velocity of 3820 ft/min for the landfill gas. It was further assumed that the flare induces a draft of ambient air for combustion through the 30-inch diameter shield, and that the velocity of the induced draft was equal to the velocity of the landfill gas. It was further assumed that the flow from the flare was accelerated by combustion, increasing the velocity by a factor equal to the absolute temperature ratio. Thus, the stack exit velocity, V_s , was calculated to be:

$$V_s = 3820 \text{ ft/min } (460^\circ\text{F} + 1400^\circ\text{F}) / (460^\circ\text{F} + 75^\circ\text{F}) (\text{min}/60 \text{ sec}) (\text{m}/3.28 \text{ ft})$$
$$V_s = 67.4 \text{ m/sec.}$$

The stack diameter was 30 inches, or 0.76 m, the diameter of the flare shield. The emission rate is 468 TPY or 13.5 gm/sec for continuous operation.

The ISCST3 results indicated that ground level SO₂ concentrations were in the range of 10,000 micrograms per cubic meter. This exceeds the recommended ground level concentrations by a factor of approximately 7. The high concentrations calculated by the model were due to the effects of downwash from the adjacent cell. Raising the stack to a height outside the area of influence was not considered practical, even if the stack were placed atop the cell. Another alternative was to relocate the stack horizontally outside the area of influence of the cells. This would require relocating the stack a minimum of approximately 365 feet from Cells 3 and 4, and 465 feet from Cell 6. In addition, one must insure that the plume from the relatively short 34-ft (10.4-m) stack would never enter the area of influence of the cell and then become affected by downwash. This requires that the modeler be able to predict plume height. ISCST3 does not output a calculated plume height.

The ISCST3 model allows for various source type inputs, specifically point, area, volume and open pit sources. Unfortunately, a flare option is not supplied for the ISCST3 model,

and one may question the validity of the above assumptions used in the initial ISCST3 modeling. A simpler model, SCREEN3, does supply a flare source option and a point source option, so the ISCST3 input assumptions may be verified. SCREEN3 also outputs a calculated plume height. The conservative SCREEN3 model is generally used for approximating results and it uses only a general set of meteorological data, so it cannot be substituted for ISCST3. However, SCREEN3 is easy to set up and run, and the flare option requires only an input of emission rate, stack height and the heat release from the flare. Thus, SCREEN3 was used here to verify some of the inputs for the ISCST3 model, and to estimate plume height.

The heat release from the flare was calculated based on the minimum methane content of the flare gas. Higher methane contents result in higher heat release and greater dispersion from the flare. Results of an analysis of the flare gas are shown in Attachment 4. The minimum methane content shown is 38%. The heat release at 38% methane content, Q_{38} , is calculated below, at the design flow rate of 3000 SCFM.

$$Q_{38} = (38\%)(3000 \text{ SCF/min})(1000 \text{ BTU/SCF})(\text{min}/60 \text{ sec})(252 \text{ cal/BTU})$$
$$Q_{38} = 4,790,000 \text{ cal/sec}$$

The results of the SCREEN3 analysis are shown in Attachment 5, where stack height was varied. The ground level concentrations at 10.4, 15.6 and 20.8-m stack heights decrease with increasing stack height, as expected. Also, the calculated plume height increases with stack height, as expected. To be outside the area of influence of Cell 6 (28 m high), the plume must be higher than $(28 \text{ m})(2.5) = 70 \text{ m}$. At 20.8-m stack height, the calculated plume height is outside the area of influence of the cells at the receptor locations shown. Note that the calculated plume height is the height of the centerline of the plume, so one must be conservative and allow for an estimation of the plume dimensions.

An additional SCREEN3 run is shown in Attachment 5, labeled "test case 3". This run is for a SCREEN3 point source, at 20.8-m stack height, that uses the above ISCST3 point source inputs. Those ISCST3 point source inputs were, of course, calculated to include the effects of combustion from the flare. One may compare "test case 3" with the SCREEN3 run for a flare with a 20.8 m stack height, to estimate the accuracy of simulating a flare input by using a point source input having variables adjusted to account for combustion from the flare. The agreement between the calculated ground level concentrations is acceptable; the point source concentrations are higher than the flare source concentrations, indicating this approach is conservative. The agreement between the points of maximum concentration is excellent. The agreement between the calculated plume heights is not as good, but then one must use the flare option for this calculation. Generally, the agreement is considered acceptable. Thus, the ISCST3 model with the point source input and stack variables adjusted for combustion effects should simulate the actual flare with acceptable accuracy, based on SCREEN3 results.

All SCREEN3 runs assume that the stack has been moved outside the area of influence of the cells, so there is no downwash effect on the calculated concentrations. A plot plan of

the site, with a revised location for the stack, is included as Attachment 2. This site plan shows a location for the stack that is different from the one included in the December 5 letter. Instead of locating the flare at the base of Cells 3 and 4 as in that letter, the stack has been moved 300 feet south of the previous location. This places the stack approximately 400 feet south of Cells 3 and 4, and approximately 500 feet from Cell 6. These locations appear even more conservative when one considers that the cells may be modeled as composite buildings to simulate the sloped sides of the cells. Such composite buildings would be composed of a number of low buildings with the same center but with widths and lengths decreasing incrementally with height, like a wedding cake. For such composite buildings, the area of influence would be less than for a single building with straight, vertical walls.

The ISCST3 runs shown in Attachment 1 have the following inputs:

- ñ There is no downwash, because the stack has been moved outside the area of influence of the cells,
- ñ The flare stack has been modeled as a point source with variables adjusted to account for combustion from the flare,
- ñ The emission rate is 13.5 gm/sec, or 468 TPY,
- ñ The stack height is 20.8 m to keep the plume outside the area of influence of the cells,
- ñ The stack exhaust temperature is 1033°K or 1400 °F, as stated by the manufacturer of the flare,
- ñ The stack exhaust velocity is 67.4 m/sec, to account for acceleration of the flow due to combustion,
- ñ The stack diameter is 0.76 m, the diameter of the shield for the flare.

There is a separate ISCST3 run for each of the five years of meteorological data. A polar coordinate receptor grid was used because the maximum concentration may be located beyond the property lines. The results of the ISCST3 runs are shown in Table 1 below.

All of the calculated ground level concentrations are below the USEPA ambient air quality standards as referenced in Chapter 62-204.240(1) for SO₂.

If you have any questions or comments, please call me or Bruno Ferraro at (407) 298-2282 or e-mail at jkasper@grovescientific.com.

Sincerely,
Grove Scientific & Engineering Company



John M. Kasper, P.E.
Environmental/Mechanical Engineer

Cc: Ray Dever, P.E., SCS Engineers
John Wong, WMI
Carolyn McCreedy, WMI
Cleve Hollady, P.E., FDEP Tallahassee

Table 1. Results of ISCST3 Modeling for the Collier County Landfill

Year	Calculated Ground Level Concentrations, $\mu\text{g}/\text{m}^3$				USEPA Ambient Air Quality Standards (All Years), $\mu\text{g}/\text{m}^3$		
	3-Hour	8-Hour	24-Hour	Annual	3-Hour	24-Hour	Annual
1987	28	25	12	1	1300	260	60
1988	30	18	10	1			
1989	26	19	8	1			
1990	29	22	9	1			
1991	29	21	11	1			

ATTACHMENT 1
ISCST3 MODELING RESULTS

1987

CO STARTING
TITLEONE 1987 Collier County Landfill SO2 Modeling 12/00
TITLETWO ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00
MODELOPT DFAULT CONC RURAL
AVERTIME 3 8 24 PERIOD
POLLUTID SO2
RUNORNOT RUN
CO FINISHED

SO STARTING
LOCATION FLARESTK POINT 134277 202341
SRCPARAM FLARESTK 50.4 20.8 1033. 67.4 0.76
SRCGROUP ALL
SO FINISHED

RE STARTING
GRIDPOLR POL1 STA
POL1 ORIG 134277.0 202341.0
POL1 DIST 200. 500. 800. 900. 1000. 1100. 1500. 2000.
POL1 DIST 2500. 3000. 3500.
POL1 GDIR 36 10. 10.
POL1 END
RE FINISHED

ME STARTING
INPUTFIL Fmypre87.asc (4I2,F9.4,F9.4,F6.1,I2,2(1X,F6.1))
ANEMHIGHT 6.0 meters
SURFDATA 12835 1987 FTMYPERS
UAIRDATA 12842 1987 TAMPA
ME FINISHED

OU STARTING
RECTABLE ALLAVE FIRST
MAXTABLE ALLAVE 10
OU FINISHED

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

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

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

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

***** WARNING MESSAGES *****

SO W320 12 PPARAM :Input Parameter May Be Out-of-Range for Parameter VS

*** SETUP Finishes Successfully ***

**MODELOPTs:

CONC RURAL FLAT DEFAULT

*** 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 3 Short Term Average(s) of: 3-HR 8-HR 24-HR
and Calculates PERIOD Averages

**This Run Includes: 1 Source(s); 1 Source Group(s); and 396 Receptor(s)

**The Model Assumes A Pollutant Type of: SO2

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

**Output Options Selected:

- Model Outputs Tables of PERIOD Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- 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) = 6.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC
Output Units = MICROGRAMS/M**3

; Emission Rate Unit Factor = 0.10000E+07

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

**Input Runstream File: NLFLAT87.INP
**Output Print File: NLFLAT87.OUT

*** ISCST3 - VERSION 00101 ***

*** 1987 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:08:27

**MODELOPTs:

PAGE 2

CONC RURAL FLAT DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	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
FLARESTK	0	0.50400E+02	134277.0	202341.0	0.0	20.80	1033.00	67.40	0.76	NO	

*** ISCST3 - VERSION 00101 ***

*** 1987 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:08:27

**MODELOPTs:

PAGE 3

CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

ALL FLARESTK,

*** ISCST3 - VERSION 00101 ***

*** 1987 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:08:27
PAGE 4

**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

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

*** ORIGIN FOR POLAR NETWORK ***

X-ORIG = 134277.00 ; Y-ORIG = 202341.00 (METERS)

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

200.0, 500.0, 800.0, 900.0, 1000.0, 1100.0, 1500.0, 2000.0, 2500.0, 3000.0,
3500.0,

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

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

**MODELOPTs:

CONC RURAL FLAT DFAULT

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

FILE: Fmypre87.asc

FORMAT: (4I2,F9.4,F9.4,F6.1,I2,2(1X,F6.1))

SURFACE STATION NO.: 12835

UPPER AIR STATION NO.: 12842

NAME: FTMYERS

NAME: TAMPA

YEAR: 1987

YEAR: 1987

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M)		USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
								RURAL	URBAN					
87	01	01	01	11.0	5.66	294.8	4	598.5	598.5	0.0000	0.0	0.0000	0	0.00
87	01	01	02	8.0	6.17	292.0	4	651.6	651.6	0.0000	0.0	0.0000	0	0.00
87	01	01	03	14.0	4.63	292.0	5	704.6	1306.0	0.0000	0.0	0.0000	0	0.00
87	01	01	04	33.0	5.66	293.7	4	757.6	757.6	0.0000	0.0	0.0000	0	0.00
87	01	01	05	53.0	6.69	293.7	4	810.7	810.7	0.0000	0.0	0.0000	0	0.00
87	01	01	06	62.0	5.14	292.6	5	863.7	1306.0	0.0000	0.0	0.0000	0	0.00
87	01	01	07	115.0	6.17	292.6	4	916.7	916.7	0.0000	0.0	0.0000	0	0.00
87	01	01	08	103.0	7.72	292.6	4	969.8	969.8	0.0000	0.0	0.0000	0	0.00
87	01	01	09	107.0	10.29	293.2	4	1022.8	1022.8	0.0000	0.0	0.0000	0	0.00
87	01	01	10	111.0	6.17	293.2	4	1075.9	1075.9	0.0000	0.0	0.0000	0	0.00
87	01	01	11	114.0	10.29	293.7	4	1128.9	1128.9	0.0000	0.0	0.0000	0	0.00
87	01	01	12	116.0	10.29	293.7	4	1181.9	1181.9	0.0000	0.0	0.0000	0	0.00
87	01	01	13	123.0	10.29	292.0	4	1235.0	1235.0	0.0000	0.0	0.0000	0	0.00
87	01	01	14	119.0	12.86	293.7	4	1288.0	1288.0	0.0000	0.0	0.0000	0	0.00
87	01	01	15	122.0	8.75	292.6	4	1288.0	1288.0	0.0000	0.0	0.0000	0	0.00
87	01	01	16	124.0	8.75	291.5	4	1288.0	1288.0	0.0000	0.0	0.0000	0	0.00
87	01	01	17	151.0	8.23	290.9	4	1288.0	1288.0	0.0000	0.0	0.0000	0	0.00
87	01	01	18	127.0	9.26	289.8	4	1286.4	1286.4	0.0000	0.0	0.0000	0	0.00
87	01	01	19	144.0	4.12	288.7	5	1281.2	1079.4	0.0000	0.0	0.0000	0	0.00
87	01	01	20	137.0	4.12	288.2	5	1276.1	919.7	0.0000	0.0	0.0000	0	0.00
87	01	01	21	150.0	2.06	287.0	6	1270.9	760.0	0.0000	0.0	0.0000	0	0.00
87	01	01	22	152.0	0.00	284.8	7	1265.7	600.4	0.0000	0.0	0.0000	0	0.00
87	01	01	23	300.0	2.06	284.3	6	1260.6	440.7	0.0000	0.0	0.0000	0	0.00
87	01	01	24	300.0	0.00	283.7	7	1255.4	281.0	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.

**MODELOPTs:

CONC

RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)								
	200.00	500.00	800.00	900.00	1000.00	1100.00	1500.00	2000.00	2500.00
10.00 |	0.00033	0.32565	1.03942	1.17249	1.27939	1.33454	1.40117	1.32895	1.20779
20.00 |	0.00022	0.24694	0.72313	0.79992	0.85895	0.88642	0.90451	0.84556	0.76470
30.00 |	0.00026	0.28659	0.80517	0.88348	0.93919	0.96320	0.95706	0.87500	0.78337
40.00 |	0.00019	0.34447	0.94954	1.03603	1.09491	1.11705	1.08556	0.96062	0.83301
50.00 |	0.00022	0.37578	1.07673	1.18221	1.25621	1.28817	1.27338	1.14713	1.00965
60.00 |	0.00024	0.37283	1.06871	1.17231	1.24375	1.27597	1.26113	1.13884	1.00732
70.00 |	0.00023	0.29859	0.90933	1.00764	1.07830	1.11308	1.11375	0.99782	0.86602
80.00 |	0.00023	0.25572	0.76224	0.84578	0.90794	0.93805	0.95289	0.87981	0.78602
90.00 |	0.00015	0.26731	0.83534	0.94308	1.02871	1.07265	1.12897	1.08538	1.00193
100.00 |	0.00014	0.26793	0.82568	0.92794	1.00663	1.04490	1.07607	1.00727	0.91060
110.00 |	0.00025	0.31155	0.95347	1.07348	1.16689	1.21233	1.25663	1.18855	1.08340
120.00 |	0.00050	0.38137	1.24489	1.41949	1.55882	1.62760	1.71485	1.64375	1.51052
130.00 |	0.00050	0.36112	1.21114	1.38546	1.52615	1.59722	1.68893	1.61447	1.47674
140.00 |	0.00019	0.29403	1.08215	1.25667	1.40321	1.48248	1.61512	1.57818	1.46067
150.00 |	0.00013	0.24738	0.87984	1.00915	1.11499	1.17009	1.25162	1.21463	1.12580
160.00 |	0.00005	0.26553	0.93695	1.07720	1.19627	1.26353	1.39133	1.39622	1.32612
170.00 |	0.00006	0.35886	1.23821	1.40907	1.54658	1.61712	1.70783	1.63262	1.49196
180.00 |	0.00026	0.45968	1.70670	1.97261	2.19657	2.32143	2.53986	2.50766	2.34537
190.00 |	0.00065	0.48568	1.79884	2.07699	2.31385	2.44969	2.71516	2.74090	2.61606
200.00 |	0.00092	0.51366	1.85947	2.14197	2.38204	2.52021	2.79347	2.83080	2.71454
210.00 |	0.00120	0.49244	1.73236	1.98263	2.19289	2.31406	2.53937	2.54869	2.43304
220.00 |	0.00138	0.56441	1.89518	2.15971	2.37890	2.50679	2.73497	2.73770	2.61522
230.00 |	0.00173	0.63041	2.01355	2.27254	2.48176	2.59992	2.79053	2.76361	2.62392
240.00 |	0.00205	0.66252	2.05486	2.30447	2.50257	2.61266	2.77390	2.72027	2.56395
250.00 |	0.00168	0.67195	2.03195	2.26485	2.44332	2.53518	2.63072	2.52768	2.35337
260.00 |	0.00153	0.54594	1.58042	1.73718	1.85113	1.90390	1.91764	1.79405	1.64267
270.00 |	0.00152	0.51005	1.47736	1.63341	1.75476	1.81921	1.90629	1.87962	1.79650
280.00 |	0.00135	0.46196	1.35033	1.48880	1.59438	1.64846	1.70453	1.64016	1.53029
290.00 |	0.00172	0.47091	1.37212	1.51041	1.61452	1.67146	1.73397	1.67503	1.56998
300.00 |	0.00140	0.45250	1.38138	1.53227	1.64715	1.71255	1.79280	1.73831	1.63267
310.00 |	0.00109	0.41575	1.25717	1.39337	1.49612	1.55220	1.60963	1.54530	1.44147
320.00 |	0.00116	0.43294	1.24009	1.36477	1.45324	1.49580	1.49673	1.36932	1.22456
330.00 |	0.00127	0.35307	1.03111	1.13815	1.21665	1.25511	1.27657	1.20326	1.10899
340.00 |	0.00105	0.28891	0.86282	0.95572	1.02729	1.06358	1.10924	1.08128	1.01939
350.00 |	0.00090	0.27999	0.85448	0.94848	1.02195	1.05824	1.10709	1.08126	1.02007
360.00 |	0.00062	0.34408	1.14748	1.30641	1.43861	1.50899	1.62460	1.58638	1.47467

**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3000.00 3500.00

10.00 |	1.08823	0.97767
20.00 |	0.68882	0.61983
30.00 |	0.70520	0.63716
40.00 |	0.72582	0.63663
50.00 |	0.89124	0.79000
60.00 |	0.89571	0.79980
70.00 |	0.75141	0.65505
80.00 |	0.70009	0.62417
90.00 |	0.91635	0.83410
100.00 |	0.81998	0.73749
110.00 |	0.98185	0.88775
120.00 |	1.37645	1.25054
130.00 |	1.33750	1.20745
140.00 |	1.33171	1.20633
150.00 |	1.03262	0.94163
160.00 |	1.23887	1.14555
170.00 |	1.34889	1.21467
180.00 |	2.15968	1.97290
190.00 |	2.45597	2.28061
200.00 |	2.56189	2.39102
210.00 |	2.29299	2.13887
220.00 |	2.47428	2.31837
230.00 |	2.47240	2.31002
240.00 |	2.40058	2.23170
250.00 |	2.18764	2.02564
260.00 |	1.50954	1.38600
270.00 |	1.71110	1.61552
280.00 |	1.42583	1.32286
290.00 |	1.47155	1.37250
300.00 |	1.53329	1.43240
310.00 |	1.34532	1.25120
320.00 |	1.10165	0.99445
330.00 |	1.02610	0.94821
340.00 |	0.95648	0.89176
350.00 |	0.95680	0.89124
360.00 |	1.35325	1.23394

**MODELOPTs:
 CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.20069c(87092203)	34.34084 (87092015)	77.04459 (87022715)	84.01999 (87022715)	87.65240 (87022715)
20.0 |	0.17781c(87110506)	39.14255 (87092015)	52.66578 (87061412)	56.37202 (87061412)	57.66899 (87061412)
30.0 |	0.38604c(87111103)	43.72246 (87092015)	54.05970 (87071212)	57.64245 (87061515)	60.35750 (87061515)
40.0 |	0.15177c(87111103)	39.80603 (87092015)	57.28589 (87071212)	64.94398 (87062612)	72.08991 (87062612)
50.0 |	0.19684 (87111106)	40.16403 (87080515)	67.60612 (87080515)	64.98199 (87080515)	70.79711 (87050218)
60.0 |	0.14052c(87010806)	58.75693 (87041815)	78.36556 (87041815)	75.64965 (87041815)	71.69335 (87041815)
70.0 |	0.15983 (87041909)	35.47841 (87080515)	64.47585 (87042515)	67.15400 (87042515)	70.77052 (87081412)
80.0 |	0.17645c(87042124)	42.81987 (87050112)	67.00840 (87050112)	64.14921 (87050112)	59.70437 (87050112)
90.0 |	0.15997 (87041121)	42.45367 (87050112)	71.77573 (87050112)	70.17503 (87050112)	66.61094 (87050112)
100.0 |	0.16486 (87041715)	35.55761 (87040915)	56.56895 (87040915)	55.48984 (87040915)	53.24959 (87041612)
110.0 |	0.17543 (87102624)	58.31860 (87072715)	86.09701 (87072715)	80.99091 (87072715)	74.66019 (87072715)
120.0 |	0.33514 (87102624)	67.14219 (87041712)	95.40153 (87041712)	92.85282 (87010115)	99.85532 (87010115)
130.0 |	0.45732 (87081024)	66.09148 (87091415)	97.30650 (87091415)	94.40171 (87091415)	89.19515 (87091415)
140.0 |	0.16027 (87081024)	40.45139 (87091415)	82.95263 (87040415)	90.02485 (87040415)	94.60675 (87040415)
150.0 |	0.19658 (87102703)	31.60379 (87042212)	91.18444 (87042212)	98.26316 (87042212)	101.14557 (87042212)
160.0 |	0.04047 (87102703)	32.30462 (87080315)	58.49594 (87010712)	62.02788 (87010712)	62.62627 (87010712)
170.0 |	0.02653 (87080912)	38.26538 (87091812)	68.04630 (87022315)	73.61355 (87022315)	75.67150 (87022315)
180.0 |	0.23622c(87100203)	53.22496 (87032112)	85.30291 (87032112)	82.07193 (87042615)	85.19993 (87042615)
190.0 |	0.35770c(87100203)	40.25354 (87032112)	89.74112 (87092515)	94.16654 (87092515)	94.25531 (87092515)
200.0 |	0.41778 (87110518)	36.71884 (87072615)	70.42750 (87050912)	74.11993 (87050912)	81.76722 (87030512)
210.0 |	0.35932 (87110518)	41.94201 (87071112)	70.23573 (87071112)	68.81805 (87071112)	66.40710 (87010615)
220.0 |	0.43947 (87122306)	39.21875 (87052215)	58.98913 (87010615)	65.93885 (87010615)	70.26276 (87010615)
230.0 |	0.28864 (87122621)	43.24871 (87082815)	77.24332 (87031412)	84.52911 (87031412)	88.30981 (87031412)
240.0 |	0.41741 (87060124)	52.19264 (87052115)	71.96492 (87052115)	76.04324 (87052715)	78.09953 (87052715)
250.0 |	0.35919 (87080403)	45.70181 (87081812)	101.60348 (87081812)	103.30402 (87081812)	100.81203 (87081812)
260.0 |	0.41769 (87080403)	42.13147 (87052012)	64.88898 (87082712)	66.55695 (87082712)	66.01279 (87082712)
270.0 |	0.56432 (87121921)	43.17081 (87061915)	72.31275 (87060812)	72.57009 (87060812)	70.61640 (87060812)
280.0 |	0.35925 (87062109)	39.22461 (87061915)	61.36320 (87051712)	68.01832 (87051712)	72.24545 (87051712)
290.0 |	0.54005c(87062203)	35.48261 (87081612)	70.03146 (87062012)	74.44501 (87062012)	76.36513 (87062012)
300.0 |	0.27060 (87122206)	35.29362 (87083115)	73.54356 (87061212)	79.20579 (87061212)	81.52453 (87061212)
310.0 |	0.46736c(87110503)	39.94636 (87072612)	60.69913 (87061115)	66.24951 (87061115)	68.79800 (87061115)
320.0 |	0.75481 (87070615)	43.01926 (87072612)	74.66847 (87050312)	78.84583 (87050312)	80.05584 (87050312)
330.0 |	1.08634 (87070615)	46.86619 (87070615)	69.82702 (87031812)	79.31712 (87031812)	85.73934 (87031812)
340.0 |	0.50413 (87061915)	37.27398 (87061915)	63.67682 (87032312)	67.81709 (87032312)	69.27137 (87032312)
350.0 |	0.57080 (87061915)	41.63513 (87061915)	71.63622 (87062212)	72.22072 (87062212)	69.99592 (87062212)
360.0 |	0.20156 (87081903)	32.39244 (87032715)	77.42155 (87032715)	85.44518 (87032715)	91.39938 (87032715)

**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	88.68111 (87022715)	79.34354 (87022715)	74.25018 (87022218)	69.71801 (87022218)	63.32679 (87022218)
20.0 |	57.21621 (87061412)	54.57903 (87012209)	53.90424 (87012209)	49.94234 (87030906)	46.66286 (87030906)
30.0 |	61.17280 (87061515)	55.51006 (87050115)	48.17232 (87050115)	43.43142 (87062618)	39.37045 (87062618)
40.0 |	76.25911 (87062612)	79.37606 (87062612)	70.64690 (87062612)	60.00628 (87062612)	59.64489 (87041418)
50.0 |	74.66937 (87050218)	77.32272 (87050218)	69.24293 (87050218)	59.57048 (87050218)	51.06754 (87050218)
60.0 |	72.36539 (87042915)	71.47186 (87042915)	62.41390 (87042915)	52.99842 (87042915)	45.02980 (87042915)
70.0 |	72.71128 (87081412)	68.26266 (87081412)	55.81723 (87081412)	45.36180 (87081412)	38.16483 (87071618)
80.0 |	60.54567 (87010421)	71.14413 (87010421)	71.54280 (87010421)	66.26976 (87010421)	59.56781 (87010421)
90.0 |	63.65836 (87041618)	67.02763 (87041618)	68.29707 (87042421)	68.41401 (87042421)	65.39532 (87042421)
100.0 |	57.17776 (87041612)	63.99605 (87041612)	61.65808 (87041612)	55.50344 (87041612)	54.17383 (87071515)
110.0 |	68.10073 (87072715)	61.27565 (87042518)	58.70470 (87042518)	52.62473 (87042518)	48.60817 (87010424)
120.0 |	101.36011 (87010115)	96.28461 (87010115)	84.12412 (87041718)	71.53109 (87041718)	64.14114 (87042018)
130.0 |	85.81510 (87040518)	95.09143 (87040518)	90.77105 (87040518)	81.17039 (87040518)	71.20506 (87040518)
140.0 |	95.16563 (87040415)	88.90861 (87040415)	83.14513 (87111112)	74.07803 (87111112)	64.78601 (87111112)
150.0 |	100.96659 (87042212)	86.31730 (87042212)	75.41074 (87010215)	72.72828 (87010215)	67.21946 (87010215)
160.0 |	61.23358 (87010712)	58.99240 (87092118)	66.34056 (87092118)	66.34254 (87092118)	62.98386 (87092118)
170.0 |	75.14133 (87022315)	82.44511 (87020912)	79.04056 (87020912)	71.05486 (87101518)	67.72489 (87101518)
180.0 |	87.05157 (87100312)	84.67083 (87100812)	85.78355 (87100812)	79.83183 (87100812)	75.33182 (87100809)
190.0 |	91.51000 (87092515)	73.04911 (87110612)	69.56304 (87030506)	68.83136 (87100909)	66.75922 (87100909)
200.0 |	85.56612 (87030512)	88.72752 (87030512)	80.66348 (87030512)	69.98099 (87030512)	60.13743 (87030512)
210.0 |	66.68992 (87010615)	75.41245 (87103024)	78.55423 (87103024)	74.38074 (87103024)	67.87213 (87103024)
220.0 |	71.45926 (87010615)	69.64383 (87082415)	67.29911 (87082415)	59.87764 (87082415)	52.84431 (87030518)
230.0 |	89.36816 (87031412)	79.59240 (87031412)	66.73373 (87030703)	60.06487 (87053118)	54.37835 (87101003)
240.0 |	77.94555 (87052715)	67.10332 (87052715)	61.65031 (87101009)	57.88578 (87101009)	52.50058 (87101009)
250.0 |	95.90348 (87081812)	77.45466 (87123015)	70.77383 (87123015)	61.67268 (87123015)	57.60811 (87081721)
260.0 |	64.06655 (87082712)	58.76537 (87071812)	61.67548 (87060718)	60.67595 (87060718)	57.44557 (87060718)
270.0 |	69.88419 (87110812)	63.18558 (87110812)	59.44817 (87052418)	54.66731 (87052418)	48.96749 (87052418)
280.0 |	73.35793 (87051712)	79.73026 (87121912)	82.96566 (87121912)	78.57163 (87121912)	71.74187 (87121912)
290.0 |	76.42945 (87062012)	67.36359 (87062012)	56.15326 (87082412)	58.27237 (87010406)	58.70311 (87010406)
300.0 |	81.38910 (87061212)	69.59702 (87061212)	55.62828 (87072012)	44.63559 (87031712)	41.74257 (87080103)
310.0 |	69.07481 (87061115)	59.43163 (87061115)	55.82901 (87031718)	49.91100 (87031718)	43.89595 (87081509)
320.0 |	79.18320 (87050312)	66.72379 (87050312)	60.84036 (87022612)	55.95436 (87022612)	50.12289 (87022612)
330.0 |	88.40650 (87031812)	84.99020 (87031812)	70.86475 (87031812)	57.58327 (87031812)	47.11549 (87031812)
340.0 |	68.80118 (87032312)	60.98418 (87011512)	54.85905 (87031906)	53.19109 (87031906)	49.42427 (87031906)
350.0 |	66.21264 (87062212)	66.24441 (87030715)	60.38260 (87030715)	52.47463 (87011615)	47.53720 (87011615)
360.0 |	93.33726 (87032715)	91.93256 (87032715)	84.35275 (87012112)	80.82377 (87012112)	75.23859 (87012112)

**MODELOPTs:

CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3500.00

10.0 |	56.75113 (87022218)
20.0 |	42.63179 (87030906)
30.0 |	35.18810 (87062618)
40.0 |	57.36012 (87041418)
50.0 |	43.95588 (87050218)
60.0 |	38.58791 (87120412)
70.0 |	32.77911 (87071618)
80.0 |	52.96196 (87010421)
90.0 |	61.08920 (87042421)
100.0 |	51.95071 (87071515)
110.0 |	46.35941 (87010424)
120.0 |	57.41855 (87042018)
130.0 |	62.29904 (87040518)
140.0 |	56.53116 (87111112)
150.0 |	60.93568 (87010215)
160.0 |	58.18755 (87092118)
170.0 |	63.37864 (87101518)
180.0 |	69.71645 (87100809)
190.0 |	64.59027 (87100506)
200.0 |	53.10349 (87031306)
210.0 |	62.80505 (87110706)
220.0 |	53.94067 (87112121)
230.0 |	51.43116 (87120703)
240.0 |	46.93195 (87101009)
250.0 |	56.23711 (87081721)
260.0 |	53.20649 (87060718)
270.0 |	44.71222 (87122003)
280.0 |	64.51998 (87121912)
290.0 |	56.72286 (87010406)
300.0 |	46.99152 (87080103)
310.0 |	43.18100 (87012418)
320.0 |	45.15422 (87033003)
330.0 |	45.59198 (87072509)
340.0 |	45.40924 (87030103)
350.0 |	45.27953 (87022821)
360.0 |	69.15417 (87012112)

**MODELOPTs:
CONC

RURAL FLAT DFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.10035c (87092208)	15.74018 (87092016)	34.59115 (87022716)	38.90443 (87022716)	41.93727 (87022716)
20.0 |	0.08944c (87110508)	15.71414 (87092016)	34.38110 (87061416)	36.93611 (87061416)	37.93928 (87061416)
30.0 |	0.16571c (87111108)	17.07493 (87092016)	34.81331 (87061516)	37.40309 (87061516)	39.26143 (87062616)
40.0 |	0.08199c (87111108)	15.15522 (87092016)	29.89478 (87050816)	34.44259 (87062616)	37.98669 (87062616)
50.0 |	0.08629c (87111108)	15.76026 (87050216)	39.88714 (87062516)	43.76717 (87062516)	45.81305 (87062516)
60.0 |	0.07026c (87010808)	23.90556 (87041816)	38.31048 (87041816)	38.84320 (87041816)	38.55972 (87041816)
70.0 |	0.11285 (87041908)	17.35342 (87041816)	37.84545 (87041816)	40.62473 (87041816)	42.20135 (87041816)
80.0 |	0.07562c (87042124)	22.08629 (87042516)	43.36029 (87042516)	44.61158 (87042516)	44.51987 (87042516)
90.0 |	0.07999c (87041124)	16.02379c (87081924)	28.76256 (87042516)	31.86534 (87042516)	33.92599 (87042516)
100.0 |	0.06212 (87041716)	15.26806 (87042416)	31.42212 (87041616)	35.02353 (87041616)	37.67265 (87041616)
110.0 |	0.07655 (87041716)	24.99952 (87041716)	36.25994 (87042416)	38.39007 (87042416)	39.30470 (87042416)
120.0 |	0.12568 (87102624)	42.36939 (87041716)	78.76028 (87041716)	81.75891 (87041716)	82.52134 (87041716)
130.0 |	0.17150 (87081024)	28.36342c (87091416)	41.78690c (87091416)	40.53231c (87091416)	38.76602 (87012224)
140.0 |	0.06010 (87081024)	18.20521c (87091416)	37.44986 (87041916)	38.95768 (87041916)	43.48913 (87111116)
150.0 |	0.08425c (87102708)	13.24401 (87042216)	40.85415 (87042216)	44.69332 (87042216)	46.67471 (87042216)
160.0 |	0.01734c (87102708)	12.11423 (87080316)	25.06972c (87010716)	26.91562 (87013116)	30.68912 (87013116)
170.0 |	0.00996 (87080916)	18.19561 (87091816)	48.85509 (87020916)	58.42574 (87020916)	66.20598 (87020916)
180.0 |	0.10124c (87100208)	24.44089 (87032116)	49.62770 (87032116)	50.27362 (87032116)	54.58000 (87100816)
190.0 |	0.15330c (87100208)	25.49679 (87092516)	71.59734 (87092516)	76.10098 (87092516)	77.16884 (87092516)
200.0 |	0.15667 (87110524)	19.81776 (87080916)	48.55470 (87092516)	50.97667 (87092516)	51.86127 (87092616)
210.0 |	0.16257c (87122308)	15.77609 (87071116)	41.10992 (87092616)	44.41653 (87092616)	45.84679 (87092616)
220.0 |	0.21973c (87122308)	17.41754 (87053116)	40.38032 (87031416)	43.99317 (87031416)	45.85748 (87031416)
230.0 |	0.16149c (87102008)	24.67747 (87052116)	43.94834 (87052116)	45.11369 (87052916)	46.29172 (87052916)
240.0 |	0.20871c (87060124)	28.77083 (87052116)	54.08165 (87052716)	56.46758 (87052716)	56.90469 (87052716)
250.0 |	0.18213c (87122108)	33.04965 (87081816)	86.62822 (87081816)	91.78797 (87081816)	93.03761 (87081816)
260.0 |	0.18210 (87080408)	22.07956 (87052016)	55.18456 (87081816)	57.94435 (87081816)	58.25369 (87081816)
270.0 |	0.22858c (87060208)	19.61553 (87062116)	28.31085 (87052016)	27.87164 (87060816)	28.44386 (87122316)
280.0 |	0.17962c (87062108)	16.01740 (87072216)	33.16506 (87072216)	36.43821 (87051716)	38.67633 (87051716)
290.0 |	0.27003c (87062208)	16.17765 (87072216)	36.81680 (87052316)	39.46516 (87052316)	40.79689 (87052316)
300.0 |	0.12780c (87110508)	20.81897 (87083116)	43.73809 (87083116)	47.31040 (87031716)	49.63063 (87031716)
310.0 |	0.23368c (87110508)	15.00194 (87072616)	34.51410 (87061116)	38.03611 (87061116)	39.93977 (87061116)
320.0 |	0.28305 (87070616)	16.81838 (87072616)	33.28778 (87032316)	34.46006 (87032316)	35.67667 (87070316)
330.0 |	0.40738 (87070616)	17.62411 (87070616)	37.66689 (87031816)	43.96482 (87031816)	48.89835 (87031816)
340.0 |	0.18905 (87061916)	14.07194 (87061916)	37.32238 (87032316)	40.10646 (87032316)	41.27934 (87032316)
350.0 |	0.21405 (87061916)	15.62343 (87061916)	31.35020 (87030716)	36.67722 (87030716)	40.71190 (87030716)
360.0 |	0.15822c (87061324)	14.97063c (87080116)	35.06386 (87032716)	39.65767 (87032716)	45.64869 (87011916)

**MODELOPTs:
CONC

RURAL FLAT DFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	45.87563 (87022224)	56.32993 (87022224)	59.15229 (87022224)	56.55208 (87022224)	52.02825 (87022224)
20.0 |	37.79947 (87061416)	31.93955 (87061416)	29.48383c(87061424)	29.80362c(87061424)	29.06820c(87061424)
30.0 |	41.00872 (87062616)	41.11814 (87062616)	35.58186 (87062616)	29.66779 (87062616)	24.72329 (87062616)
40.0 |	39.96394 (87062616)	41.17504 (87062616)	36.69033 (87062616)	31.34380 (87062616)	26.64812 (87062616)
50.0 |	46.42320 (87062516)	41.42560 (87062516)	31.92640c(87121216)	26.19785c(87121216)	21.19800c(87121216)
60.0 |	38.84386 (87042916)	37.19795 (87042916)	31.33070 (87042916)	25.84547 (87042916)	21.47100 (87042916)
70.0 |	42.49052 (87041816)	38.61957 (87041816)	30.87509 (87041816)	24.23917 (87041816)	19.23307 (87041816)
80.0 |	43.31940 (87042516)	35.60035 (87042516)	28.45706 (87120416)	24.93389 (87010424)	22.40455 (87010424)
90.0 |	34.56699 (87042516)	42.14573 (87042424)	48.97350 (87042424)	50.27963 (87042424)	49.21789 (87042424)
100.0 |	38.47165 (87041616)	37.69181 (87041616)	33.31574 (87041616)	28.56861 (87041616)	24.75726 (87041724)
110.0 |	38.98143 (87042416)	34.10583 (87042416)	29.79432 (87010116)	29.29703c(87062324)	29.05768c(87062324)
120.0 |	80.70596 (87041716)	68.94980 (87041716)	54.56355 (87041716)	43.58501 (87041716)	35.48018 (87041716)
130.0 |	41.03181 (87012224)	43.88206 (87012224)	40.73301 (87012224)	35.72503 (87012224)	30.87650 (87012224)
140.0 |	45.90034 (87111116)	48.69563 (87111116)	44.94189 (87111116)	39.29959 (87111116)	35.11144c(87031924)
150.0 |	47.22384 (87042216)	42.10936 (87042216)	37.39265 (87011116)	33.30180 (87010216)	30.71349 (87010216)
160.0 |	32.92562 (87013116)	36.46030 (87013116)	42.13198 (87121624)	43.21283 (87121624)	42.00842 (87121624)
170.0 |	70.07745 (87020916)	74.62975 (87020916)	68.97653 (87020916)	60.44839 (87020916)	52.30581 (87020916)
180.0 |	59.10501 (87100816)	68.01301 (87100816)	67.09812 (87100816)	61.32584 (87100816)	55.84148 (87100808)
190.0 |	75.85989 (87092516)	61.20579 (87092516)	51.42616 (87100216)	48.24263 (87030508)	45.31660 (87030508)
200.0 |	52.24087 (87092616)	50.90778 (87030516)	47.98168 (87030516)	42.96159 (87102208)	39.77127 (87102208)
210.0 |	45.87868 (87092616)	54.04012 (87103024)	55.40791 (87103024)	51.94117 (87103024)	47.06133 (87103024)
220.0 |	46.37723 (87031416)	46.34931 (87110216)	44.75266 (87110216)	40.58718 (87101024)	36.39725 (87101024)
230.0 |	46.07248 (87052916)	43.90759 (87112216)	38.40599 (87112216)	38.27513 (87101008)	37.14249 (87101008)
240.0 |	55.77956 (87052716)	46.40168 (87052716)	38.79386 (87102416)	33.58272 (87102416)	30.16015 (87110316)
250.0 |	91.56098 (87081816)	74.54063 (87081816)	52.80353 (87081816)	42.98088 (87060824)	47.03399c(87081808)
260.0 |	56.90045 (87081816)	45.09788 (87081816)	31.06281 (87081816)	25.57076 (87071816)	22.56809c(87052524)
270.0 |	29.34409 (87122316)	33.48922 (87052424)	36.73268 (87052424)	36.39724 (87052424)	34.74562 (87052424)
280.0 |	39.32361 (87051716)	36.62132 (87051716)	37.18747 (87121916)	36.34395 (87121916)	34.08331 (87121916)
290.0 |	40.74079 (87052316)	36.33237 (87052316)	29.28738 (87052316)	27.72953 (87122516)	25.56909 (87122516)
300.0 |	50.27832 (87031716)	46.67619 (87031716)	38.39319 (87031716)	36.64431c(87070208)	40.32885c(87070208)
310.0 |	40.56695 (87061116)	36.41983 (87061116)	27.96397 (87061116)	25.93603 (87031824)	25.69142 (87032524)
320.0 |	35.85278 (87070316)	33.20850 (87022616)	34.09903 (87032516)	32.20008 (87032516)	29.33257 (87032516)
330.0 |	51.33469 (87031816)	53.19135 (87031816)	48.12476 (87031816)	41.64582 (87031816)	35.74374 (87031816)
340.0 |	41.26212 (87032316)	39.12477c(87021524)	39.52433c(87021524)	36.88367c(87021524)	34.14308 (87030108)
350.0 |	42.52039 (87030716)	43.25498 (87030716)	38.38901 (87030716)	32.71401 (87030716)	31.50966 (87022824)
360.0 |	50.12176 (87011916)	60.35084 (87011916)	61.91167 (87011916)	58.13052 (87011916)	52.82022 (87011916)

**MODELOPTs:
CONC

RURAL FLAT DFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3500.00

10.0 |	47.01230 (87022224)
20.0 |	27.84873c(87061424)
30.0 |	20.77601 (87062616)
40.0 |	22.75185 (87062616)
50.0 |	18.35874c(87121224)
60.0 |	20.89821 (87042908)
70.0 |	18.98228 (87042908)
80.0 |	19.91401 (87010424)
90.0 |	47.01032 (87042424)
100.0 |	24.04789 (87041724)
110.0 |	28.03751c(87062324)
120.0 |	30.53937c(87040824)
130.0 |	26.69013 (87012224)
140.0 |	34.35917c(87031924)
150.0 |	27.79531 (87010216)
160.0 |	39.71698 (87121624)
170.0 |	45.28719 (87020916)
180.0 |	52.94707 (87100808)
190.0 |	45.13321 (87100508)
200.0 |	37.18954 (87031308)
210.0 |	42.06456 (87103024)
220.0 |	32.29731 (87101024)
230.0 |	35.08871 (87101008)
240.0 |	28.28311 (87110316)
250.0 |	49.75385c(87081808)
260.0 |	21.33658 (87082724)
270.0 |	32.58221 (87052424)
280.0 |	31.30476 (87121916)
290.0 |	23.23287 (87122516)
300.0 |	42.14312c(87070208)
310.0 |	25.36878 (87032524)
320.0 |	27.19780 (87022808)
330.0 |	30.75466 (87031816)
340.0 |	32.51839 (87030108)
350.0 |	32.07388 (87022824)
360.0 |	47.39832 (87011916)

**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.02867c(87092224)	6.99563c(87092024)	14.77587 (87022224)	18.26097 (87022224)	21.40613 (87022224)
20.0 |	0.02959c(87091924)	6.98406c(87092024)	19.11359c(87061424)	21.27900c(87061424)	22.73028c(87061424)
30.0 |	0.05043c(87111124)	7.59399c(87092024)	15.24372c(87061424)	16.94570c(87062624)	18.96472c(87062624)
40.0 |	0.02495c(87111124)	6.94082c(87092024)	13.28657c(87050824)	14.40694c(87062624)	16.02517c(87062624)
50.0 |	0.02626c(87111124)	7.69094c(87050224)	17.09547c(87062524)	18.79251c(87062524)	19.70973c(87062524)
60.0 |	0.02342c(87010824)	8.07235 (87041824)	13.54904 (87041824)	14.96726c(87042924)	16.30344c(87042924)
70.0 |	0.03762 (87041924)	5.91112 (87041824)	13.94552 (87041824)	15.30252 (87041824)	16.27862 (87041824)
80.0 |	0.02786c(87042124)	8.07161c(87050124)	14.78308 (87042524)	15.32407 (87042524)	15.43826 (87042524)
90.0 |	0.02690c(87041124)	7.12108c(87050124)	14.47845c(87041024)	16.61588c(87041024)	18.32923c(87041024)
100.0 |	0.02071 (87041724)	6.16838c(87040924)	11.67777c(87041624)	13.02821c(87041624)	14.02489c(87041624)
110.0 |	0.02552 (87041724)	8.48492 (87041724)	14.04421c(87042424)	14.91806c(87042424)	15.33488c(87042424)
120.0 |	0.04189 (87102624)	15.89352 (87041724)	34.44892 (87041724)	37.16331 (87041724)	38.90649 (87041724)
130.0 |	0.05717 (87081024)	11.03022c(87091424)	16.25046c(87091424)	19.05458 (87012224)	21.85320 (87012224)
140.0 |	0.02003 (87081024)	7.07981c(87091424)	21.27261 (87033124)	25.23824 (87033124)	28.35773 (87033124)
150.0 |	0.02808c(87102724)	4.76160c(87081624)	14.64682 (87011124)	18.10039 (87011124)	21.11665 (87011124)
160.0 |	0.00578c(87102724)	4.76053c(87081624)	9.83947 (87010524)	12.10131 (87010524)	14.04106 (87010524)
170.0 |	0.00447c(87080924)	8.08753c(87091824)	19.94361 (87020924)	24.08597 (87020924)	27.56194 (87020924)
180.0 |	0.03081c(87100224)	10.27456c(87091824)	18.92479 (87100824)	24.08686 (87100824)	28.93179 (87100824)
190.0 |	0.04670c(87100224)	9.92936c(87092524)	28.09768c(87092524)	29.93631c(87092524)	30.44633c(87092524)
200.0 |	0.06267c(87110524)	8.82874c(87080924)	20.36849c(87092624)	22.40391c(87092624)	23.57099c(87092624)
210.0 |	0.05390c(87110524)	7.15449c(87071124)	18.66463c(87092624)	21.17681 (87103024)	25.36801 (87103024)
220.0 |	0.06290c(87052224)	6.73930c(87091724)	15.70083 (87110224)	19.44970 (87110224)	22.74619 (87110224)
230.0 |	0.05100c(87102024)	11.00835c(87052124)	20.81234c(87052924)	23.20669c(87052924)	24.94793c(87052924)
240.0 |	0.06286c(87060124)	12.84683c(87052124)	23.36881c(87052124)	23.26804c(87052124)	22.83088c(87052724)
250.0 |	0.05753c(87122124)	14.38072c(87081824)	39.00921c(87081824)	42.04325c(87081824)	43.52224c(87081824)
260.0 |	0.06937c(87080424)	10.03603c(87052024)	24.44983c(87081824)	25.87771c(87081824)	26.24999c(87081824)
270.0 |	0.07702c(87121924)	8.87236c(87062124)	12.61687c(87052024)	11.56115c(87052024)	11.87899c(87122324)
280.0 |	0.06042c(87062124)	5.66988c(87061924)	12.52868c(87051724)	14.06259c(87051724)	15.11666c(87051724)
290.0 |	0.09071c(87062224)	5.77601c(87081624)	12.80933c(87052324)	13.73077c(87052324)	14.19432c(87052324)
300.0 |	0.04273c(87122224)	7.26543c(87083124)	15.82713c(87031724)	17.35493c(87031724)	18.36270c(87031724)
310.0 |	0.07026c(87122224)	7.72397c(87050324)	15.36678c(87061124)	16.93193c(87061124)	17.77723c(87061124)
320.0 |	0.10293c(87070624)	10.79916c(87050324)	19.90857c(87050324)	20.19081c(87050324)	19.85121c(87050324)
330.0 |	0.14814c(87070624)	7.18889c(87072624)	12.89912 (87031824)	15.06264 (87031824)	16.76030 (87031824)
340.0 |	0.07202c(87061924)	5.36074c(87061924)	13.57858 (87032324)	15.50972 (87032424)	17.79654 (87032424)
350.0 |	0.08154c(87061924)	5.95178c(87061924)	13.06493 (87030724)	15.45467 (87030724)	17.32712 (87030724)
360.0 |	0.06158c(87061324)	5.51549c(87080124)	15.06928 (87030724)	18.58650 (87030724)	21.69473 (87030724)

**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	23.19889 (87022224)	26.94655 (87022224)	27.06627 (87022224)	25.16026 (87022224)	22.71208 (87022224)
20.0 |	23.44062c(87061424)	22.94463c(87061424)	20.15958c(87061424)	17.45332c(87061424)	15.31046c(87061424)
30.0 |	20.07019c(87062624)	21.19593c(87062624)	19.36649c(87062624)	16.82765c(87062624)	14.46778c(87062624)
40.0 |	16.95794c(87062624)	18.00289c(87062624)	16.78961c(87062624)	14.97626c(87062624)	13.27521c(87062624)
50.0 |	19.99289c(87062524)	17.92190c(87062524)	15.24266c(87121224)	14.12988c(87121224)	12.94598c(87121224)
60.0 |	17.03676c(87042924)	17.88330c(87042924)	17.42063c(87042924)	16.54256c(87042924)	15.72777c(87042924)
70.0 |	16.68403 (87041824)	16.34220 (87041824)	15.20144c(87042924)	14.59337c(87042924)	14.04517c(87042924)
80.0 |	15.16035 (87042524)	13.08991 (87042524)	12.77567 (87120424)	12.30605 (87120424)	11.74172 (87120424)
90.0 |	19.12443c(87041024)	19.98129c(87041024)	19.02323c(87042424)	19.39311c(87042424)	18.91524c(87042424)
100.0 |	14.32784c(87041624)	14.54790c(87081224)	14.44470c(87081224)	13.43537c(87081224)	12.20007c(87081224)
110.0 |	15.26315c(87042424)	14.38266c(87010124)	13.08615c(87010124)	11.40559c(87010124)	9.84140c(87010124)
120.0 |	39.11164 (87041724)	37.07972 (87041724)	32.93401 (87041724)	28.85574 (87041724)	25.40531 (87041724)
130.0 |	23.18557 (87012224)	25.05727 (87012224)	23.54408 (87012224)	20.84546 (87012224)	18.14384 (87012224)
140.0 |	29.66546 (87033124)	30.77654 (87033124)	28.03555 (87033124)	24.34251 (87033124)	20.90911 (87033124)
150.0 |	22.69785 (87011124)	25.60417 (87011124)	25.00547 (87011124)	22.73280 (87011124)	20.18551 (87011124)
160.0 |	15.27582 (87013124)	18.51356 (87013124)	19.56220 (87013124)	18.93843 (87013124)	17.75303c(87021724)
170.0 |	29.36382 (87020924)	32.05597 (87020924)	30.39970 (87020924)	27.15546 (87020924)	23.83929 (87020924)
180.0 |	31.84783 (87100824)	39.08799 (87100824)	41.40662 (87100824)	39.95377 (87100824)	37.19791 (87100824)
190.0 |	30.02661c(87092524)	29.84332 (87101424)	29.53085c(87100224)	28.72343c(87100224)	27.30262 (87100524)
200.0 |	24.90630 (87030524)	28.94100 (87030524)	29.25838 (87030524)	27.40370 (87030524)	24.91995 (87030524)
210.0 |	27.81370 (87103024)	33.40303 (87103024)	34.27442 (87103024)	32.16880 (87103024)	29.19357 (87103024)
220.0 |	24.49264 (87110224)	27.77328 (87110224)	27.18147 (87110224)	24.73456 (87110224)	21.95105 (87110224)
230.0 |	25.65761c(87052924)	25.51270c(87052924)	23.01238c(87052924)	20.14644c(87052924)	17.92338 (87110224)
240.0 |	22.73115c(87052724)	20.62748 (87101024)	20.91973 (87101024)	19.51831 (87101024)	17.98928c(87061024)
250.0 |	43.68218c(87081824)	39.52741c(87081824)	33.59015c(87081824)	29.26405c(87081824)	26.35058c(87081824)
260.0 |	25.84716c(87081824)	21.24803c(87081824)	15.45096c(87081824)	13.68839c(87091624)	13.11479c(87091624)
270.0 |	12.50077c(87122324)	14.24965 (87111624)	15.74436 (87111624)	15.68228 (87111624)	16.18738c(87122024)
280.0 |	15.50454c(87051724)	17.58086 (87111624)	18.56223 (87111624)	18.28918c(87121924)	18.05037c(87121924)
290.0 |	14.17507c(87052324)	14.65895c(87122524)	17.25348c(87122524)	18.08548c(87122524)	18.15883c(87122524)
300.0 |	18.73155c(87031724)	17.97575c(87031724)	15.52016c(87031724)	15.60353c(87070224)	17.06154c(87070224)
310.0 |	18.05473c(87061124)	16.20491c(87061124)	14.77001 (87080324)	13.70114 (87080324)	12.71398 (87080324)
320.0 |	19.13302c(87050324)	16.99801 (87032524)	18.77214 (87032524)	18.73991 (87032524)	17.87026 (87032524)
330.0 |	17.59473 (87031824)	18.23272 (87031824)	16.50154 (87031824)	14.27840 (87031824)	13.52650 (87032624)
340.0 |	18.95764 (87032424)	21.10972 (87032424)	20.80507 (87032424)	19.19598 (87032424)	17.33192 (87032424)
350.0 |	18.19868 (87030724)	18.88787 (87030724)	17.06944 (87030724)	17.10822 (87022824)	16.86798 (87022824)
360.0 |	23.39805 (87030724)	26.94715 (87030724)	27.10319 (87030724)	25.29808 (87030724)	23.00314 (87030724)

**MODELOPTs:
CONC

RURAL FLAT DEFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3500.00

10.0 |	20.25189 (87022224)
20.0 |	13.61066c(87061424)
30.0 |	12.44925c(87062624)
40.0 |	11.78614c(87062624)
50.0 |	11.86981c(87121224)
60.0 |	14.84610c(87042924)
70.0 |	13.33153c(87042924)
80.0 |	11.06252 (87120424)
90.0 |	18.02885c(87042424)
100.0 |	10.96202c(87081224)
110.0 |	8.97615 (87042324)
120.0 |	22.53589 (87041724)
130.0 |	17.28514c(87112924)
140.0 |	18.00048 (87033124)
150.0 |	17.79817 (87011124)
160.0 |	16.72742c(87021724)
170.0 |	21.05707c(87112024)
180.0 |	34.06760 (87100824)
190.0 |	25.98864 (87100524)
200.0 |	22.37382 (87030524)
210.0 |	26.13622 (87103024)
220.0 |	19.32868 (87110224)
230.0 |	16.58336c(87052724)
240.0 |	17.03965c(87061024)
250.0 |	24.19398c(87081824)
260.0 |	12.42573c(87091624)
270.0 |	17.00697c(87122024)
280.0 |	17.33762c(87121924)
290.0 |	17.70617c(87122524)
300.0 |	17.72044c(87070224)
310.0 |	11.72270 (87080324)
320.0 |	16.59780 (87032524)
330.0 |	12.70621 (87032624)
340.0 |	15.53195 (87032424)
350.0 |	16.24552 (87022824)
360.0 |	20.71444 (87030724)

**MODELOPTs:
 CONC

RURAL FLAT DFAULT

*** THE MAXIMUM 10 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	103.30402	(87081812) AT	(133431.28, 202033.19) GP	6.	100.81203	(87081812) AT	(133337.31, 201998.98) GP
2.	101.60348	(87081812) AT	(133525.25, 202067.39) GP	7.	99.85532	(87010115) AT	(135143.03, 201841.00) GP
3.	101.36011	(87010115) AT	(135229.63, 201791.00) GP	8.	98.26316	(87042212) AT	(134727.00, 201561.58) GP
4.	101.14557	(87042212) AT	(134777.00, 201474.97) GP	9.	97.30650	(87091415) AT	(134889.83, 201826.77) GP
5.	100.96659	(87042212) AT	(134827.00, 201388.38) GP	10.	96.28461	(87010115) AT	(135576.03, 201591.00) GP

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

**MODELOPTs:
 CONC

RURAL FLAT DFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	93.03761	(87081816) AT	(133337.31, 201998.98) GP	6.	81.75891	(87041716) AT	(135056.42, 201891.00) GP
2.	91.78797	(87081816) AT	(133431.28, 202033.19) GP	7.	80.70596	(87041716) AT	(135229.63, 201791.00) GP
3.	91.56098	(87081816) AT	(133243.34, 201964.78) GP	8.	78.76028	(87041716) AT	(134969.83, 201941.00) GP
4.	86.62822	(87081816) AT	(133525.25, 202067.39) GP	9.	77.16884	(87092516) AT	(134103.36, 201356.19) GP
5.	82.52134	(87041716) AT	(135143.03, 201841.00) GP	10.	76.10098	(87092516) AT	(134120.72, 201454.67) GP

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

*** ISCST3 - VERSION 00101 ***

*** 1987 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

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**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR, YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR, YR) OF TYPE
1.	43.68218c	(87081824) AT	(133243.34, 201964.78) GP	6.	39.52741c	(87081824) AT	(132867.47, 201827.97) GP
2.	43.52224c	(87081824) AT	(133337.31, 201998.98) GP	7.	39.11164	(87041724) AT	(135229.63, 201791.00) GP
3.	42.04325c	(87081824) AT	(133431.28, 202033.19) GP	8.	39.08799	(87100824) AT	(134277.00, 200841.00) GP
4.	41.40662	(87100824) AT	(134277.00, 200341.00) GP	9.	39.00921c	(87081824) AT	(133525.25, 202067.39) GP
5.	39.95377	(87100824) AT	(134277.00, 199841.00) GP	10.	38.90649	(87041724) AT	(135143.03, 201841.00) GP

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

**MODELOPTs:

CONC RURAL FLAT DFAULT

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	2.83080 AT (133592.95, 200461.61, 0.00, 0.00)	GP	POL1
	2ND HIGHEST VALUE IS	2.79347 AT (133763.97, 200931.47, 0.00, 0.00)	GP	POL1
	3RD HIGHEST VALUE IS	2.79053 AT (133127.94, 201376.81, 0.00, 0.00)	GP	POL1
	4TH HIGHEST VALUE IS	2.77390 AT (132977.97, 201591.00, 0.00, 0.00)	GP	POL1
	5TH HIGHEST VALUE IS	2.76361 AT (132744.91, 201055.42, 0.00, 0.00)	GP	POL1
	6TH HIGHEST VALUE IS	2.74090 AT (133929.70, 200371.39, 0.00, 0.00)	GP	POL1
	7TH HIGHEST VALUE IS	2.73770 AT (132991.42, 200808.91, 0.00, 0.00)	GP	POL1
	8TH HIGHEST VALUE IS	2.73497 AT (133312.81, 201191.94, 0.00, 0.00)	GP	POL1
	9TH HIGHEST VALUE IS	2.72027 AT (132544.95, 201341.00, 0.00, 0.00)	GP	POL1
	10TH HIGHEST VALUE IS	2.71516 AT (134016.53, 200863.78, 0.00, 0.00)	GP	POL1

*** RECEPTOR TYPES:

- GC = GRIDCART
- GP = GRIDPOLR
- DC = DISCCART
- DP = DISCPOLR
- BD = BOUNDARY

*** ISCST3 - VERSION 00101 ***

*** 1987 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

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**MODELOPTs:

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CONC RURAL FLAT DFAULT

*** THE SUMMARY OF HIGHEST 3-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR	(XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 103.30402	ON 87081812: AT (	133431.28,	202033.19,	0.00,	0.00) GP POL1

*** RECEPTOR TYPES:

- GC = GRIDCART
- GP = GRIDPOLR
- DC = DISCCART
- DP = DISCPOLR
- BD = BOUNDARY

*** ISCST3 - VERSION 00101 ***

*** 1987 Collier County Landfill SO2 Modeling 12/00
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**MODELOPTs:

CONC RURAL FLAT DFAULT

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR	(XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	93.03761	ON 87081816: AT (	133337.31, 201998.98,	0.00, 0.00)	GP POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1987 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

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**MODELOPTs:

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CONC

RURAL FLAT

DEFAULT

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3

**

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	43.68218c ON 87081824: AT (	133243.34, 201964.78,	0.00, 0.00)	GP POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1987 Collier County Landfill SO2 Modeling 12/00
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**MODELOPTs:

CONC RURAL FLAT DEFAULT

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

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

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 1059 Informational Message(s)

A Total of 1059 Calm Hours Identified

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

***** WARNING MESSAGES *****
SO W320 12 PPARAM :Input Parameter May Be Out-of-Range for Parameter VS

*** ISCST3 Finishes Successfully ***

1988

CO STARTING
TITLEONE 1988 Collier County Landfill SO2 Modeling 12/00
TITLETWO ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00
MODELOPT DFAULT CONC RURAL
AVERTIME 3 8 24 PERIOD
POLLUTID SO2
RUNORNOT RUN
CO FINISHED

SO STARTING
LOCATION FLARESTK POINT 134277 202341
SRCPARAM FLARESTK 50.4 20.8 1033. 67.4 0.76
SRCGROUP ALL
SO FINISHED

RE STARTING
GRIDPOLR POL1 STA
POL1 ORIG 134277.0 202341.0
POL1 DIST 200. 500. 800. 900. 1000. 1100. 1500. 2000.
POL1 DIST 2500. 3000. 3500.
POL1 GDIR 36 10. 10.
POL1 END
RE FINISHED

ME STARTING
INPUTFIL Fmypre88.asc (4I2, F9.4, F9.4, F6.1, I2, 2(1X, F6.1))
ANEMHGHT 6.0 meters
SURFDATA 12835 1988 FTMYPERS
UAIRDATA 12842 1988 TAMPA
ME FINISHED

OU STARTING
RECTABLE ALLAVE FIRST
MAXTABLE ALLAVE 10
OU FINISHED

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

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

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

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

***** WARNING MESSAGES *****
SO W320 12 PPARAM :Input Parameter May Be Out-of-Range for Parameter VS

*** SETUP Finishes Successfully ***

**MODELOPTs:

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 3 Short Term Average(s) of: 3-HR 8-HR 24-HR
and Calculates PERIOD Averages

**This Run Includes: 1 Source(s); 1 Source Group(s); and 396 Receptor(s)

**The Model Assumes A Pollutant Type of: SO2

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

**Output Options Selected:

- Model Outputs Tables of PERIOD Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- 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) = 6.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC
Output Units = MICROGRAMS/M**3

; Emission Rate Unit Factor = 0.10000E+07

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

**Input Runstream File: nflat88.inp
**Output Print File: nflat88.out

*** ISCST3 - VERSION 00101 ***

*** 1988 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

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*** 15:26:58

**MODELOPTs:

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CONC

RURAL FLAT

DEFAULT

*** POINT SOURCE DATA ***

SOURCE	NUMBER	EMISSION RATE			BASE	STACK	STACK	STACK	STACK	BUILDING	EMISSION RATE
ID	PART.	(GRAMS/SEC)	X	Y	ELEV.	HEIGHT	TEMP.	EXIT VEL.	DIAMETER	EXISTS	SCALAR VARY
	CATS.		(METERS)	(METERS)	(METERS)	(METERS)	(DEG.K)	(M/SEC)	(METERS)		BY
FLARESTK	0	0.50400E+02	134277.0	202341.0	0.0	20.80	1033.00	67.40	0.76	NO	

*** ISCST3 - VERSION 00101 ***

*** 1988 Collier County Landfill SO2 Modeling 12/00
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*** 12/15/00
*** 15:26:58
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**MODELOPTs:

CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID

SOURCE IDs

ALL FLARESTK,

*** ISCST3 - VERSION 00101 ***

*** 1988 Collier County Landfill SO2 Modeling 12/00
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**MODELOPT's:
CONC

RURAL FLAT DEFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

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

*** ORIGIN FOR POLAR NETWORK ***

X-ORIG = 134277.00 ; Y-ORIG = 202341.00 (METERS)

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

200.0, 500.0, 800.0, 900.0, 1000.0, 1100.0, 1500.0, 2000.0, 2500.0, 3000.0,
3500.0,

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

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

**MODELOPTs:
CONC

RURAL FLAT DEFAULT

*** THE PERIOD (8784 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)								
	200.00	500.00	800.00	900.00	1000.00	1100.00	1500.00	2000.00	2500.00
10.00 |	0.00014	0.29602	0.89355	0.99837	1.08311	1.12277	1.17266	1.11828	1.02206
20.00 |	0.00006	0.27865	0.76811	0.84317	0.90125	0.92519	0.93739	0.87246	0.78460
30.00 |	0.00010	0.30751	0.78405	0.84730	0.89066	0.90351	0.87342	0.77579	0.67488
40.00 |	0.00019	0.31638	0.84318	0.92093	0.97650	0.99713	0.97698	0.87125	0.75800
50.00 |	0.00024	0.31341	0.89079	0.98271	1.05162	1.08232	1.09080	1.00600	0.90177
60.00 |	0.00023	0.36976	1.04886	1.15053	1.22165	1.25093	1.22968	1.10146	0.96535
70.00 |	0.00041	0.36807	0.96887	1.04103	1.08483	1.09602	1.03473	0.89859	0.77270
80.00 |	0.00075	0.35910	0.92538	0.99327	1.03584	1.04695	0.99497	0.86771	0.74406
90.00 |	0.00063	0.38241	1.06439	1.17230	1.25349	1.28897	1.30385	1.21203	1.09262
100.00 |	0.00028	0.37618	1.07807	1.18935	1.27026	1.30314	1.29578	1.17647	1.03923
110.00 |	0.00044	0.45846	1.35631	1.51232	1.62905	1.68092	1.70283	1.57729	1.41657
120.00 |	0.00080	0.46789	1.35584	1.51167	1.62947	1.68330	1.71975	1.62162	1.48195
130.00 |	0.00060	0.33321	1.07330	1.21999	1.33930	1.40217	1.49786	1.46721	1.37408
140.00 |	0.00024	0.22342	0.75211	0.85462	0.93758	0.98176	1.04698	1.02332	0.95759
150.00 |	0.00007	0.21315	0.72479	0.82440	0.90498	0.94957	1.01751	0.99788	0.93632
160.00 |	0.00007	0.20350	0.73149	0.83748	0.92597	0.97693	1.06349	1.04747	0.97839
170.00 |	0.00022	0.23089	0.89641	1.03551	1.15276	1.22169	1.34348	1.32819	1.24280
180.00 |	0.00030	0.32837	1.30759	1.52425	1.70767	1.81466	2.00515	1.97943	1.84650
190.00 |	0.00038	0.33172	1.28615	1.49513	1.67427	1.77902	1.97654	1.97134	1.85537
200.00 |	0.00081	0.35122	1.40306	1.64198	1.84759	1.96802	2.20215	2.21633	2.10323
210.00 |	0.00146	0.34779	1.30746	1.51266	1.68841	1.79196	1.99647	2.02464	1.94201
220.00 |	0.00179	0.40740	1.49656	1.73001	1.93360	2.05965	2.34045	2.43747	2.38937
230.00 |	0.00259	0.47804	1.70229	1.95250	2.16593	2.29882	2.58462	2.68914	2.65072
240.00 |	0.00281	0.54794	2.00193	2.30778	2.56867	2.72942	3.06175	3.14588	3.05897
250.00 |	0.00285	0.58618	2.02050	2.30539	2.54018	2.67768	2.92458	2.93633	2.81200
260.00 |	0.00250	0.58020	1.86795	2.10615	2.29677	2.40587	2.57592	2.54534	2.41317
270.00 |	0.00230	0.58347	1.92212	2.18053	2.39034	2.51182	2.71307	2.69819	2.56921
280.00 |	0.00239	0.61979	1.97926	2.22508	2.41797	2.52382	2.66056	2.58167	2.41618
290.00 |	0.00230	0.71942	2.27775	2.54871	2.75091	2.85826	2.94495	2.78489	2.56113
300.00 |	0.00194	0.60965	1.99573	2.24377	2.43489	2.53926	2.65411	2.53966	2.35085
310.00 |	0.00158	0.42917	1.32922	1.47432	1.58240	1.63703	1.66677	1.54909	1.39982
320.00 |	0.00096	0.32946	0.96517	1.05997	1.12949	1.16408	1.18542	1.11944	1.02961
330.00 |	0.00106	0.26233	0.74067	0.81036	0.86280	0.88897	0.91456	0.88018	0.82235
340.00 |	0.00070	0.21869	0.63988	0.71036	0.76702	0.79724	0.84003	0.81032	0.74832
350.00 |	0.00045	0.22897	0.69032	0.77005	0.83423	0.86743	0.91305	0.87671	0.80572
360.00 |	0.00034	0.32914	0.99343	1.11396	1.21036	1.25686	1.31002	1.23706	1.12067

**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** THE PERIOD (8784 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3000.00 3500.00

10.00 |	0.92428	0.83240
20.00 |	0.69976	0.62272
30.00 |	0.58827	0.51547
40.00 |	0.66060	0.57877
50.00 |	0.80679	0.72220
60.00 |	0.84862	0.74966
70.00 |	0.67254	0.59131
80.00 |	0.64185	0.55811
90.00 |	0.98163	0.88112
100.00 |	0.91807	0.81352
110.00 |	1.26957	1.13865
120.00 |	1.35184	1.23243
130.00 |	1.27417	1.17318
140.00 |	0.88729	0.81641
150.00 |	0.87066	0.80416
160.00 |	0.90079	0.82345
170.00 |	1.14577	1.04784
180.00 |	1.69587	1.54580
190.00 |	1.71591	1.57165
200.00 |	1.96361	1.81446
210.00 |	1.83511	1.71484
220.00 |	2.29923	2.17918
230.00 |	2.57478	2.46271
240.00 |	2.93110	2.77063
250.00 |	2.66640	2.50315
260.00 |	2.27228	2.12157
270.00 |	2.42786	2.27565
280.00 |	2.25343	2.09124
290.00 |	2.36131	2.17429
300.00 |	2.17219	1.99945
310.00 |	1.26753	1.14948
320.00 |	0.94833	0.87233
330.00 |	0.76559	0.70889
340.00 |	0.68416	0.62291
350.00 |	0.73438	0.66710
360.00 |	1.00661	0.90222

**MODELOPTs:
 CONC

RURAL FLAT DEFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.14367c (88062624)	32.01947 (88081715)	58.79407 (88071312)	60.89803 (88071312)	60.72188 (88012015)
20.0 |	0.02961c (88080815)	36.32951 (88042415)	72.07171 (88071312)	77.49369 (88071312)	79.76749 (88071312)
30.0 |	0.07884 (88041212)	56.09451 (88041015)	85.76538 (88041015)	83.85025 (88041015)	79.89727 (88041015)
40.0 |	0.21600 (88041212)	43.68818 (88041212)	87.26115 (88052312)	94.30584 (88052312)	97.52081 (88052312)
50.0 |	0.29597 (88060515)	70.03509 (88060515)	80.73682 (88041115)	83.24345 (88041115)	84.10007 (88072215)
60.0 |	0.33508 (88060515)	61.45570 (88060515)	91.43645 (88052615)	94.01501 (88052615)	93.13876 (88052615)
70.0 |	0.82602 (88081715)	36.56368 (88062712)	85.18777 (88062715)	92.60903 (88062715)	96.18941 (88062715)
80.0 |	1.70161 (88081715)	49.01479 (88081715)	62.91171 (88052215)	70.02359 (88052215)	74.11599 (88052215)
90.0 |	1.05471 (88081715)	31.99019 (88080615)	61.13690 (88102112)	67.58660 (88112309)	75.10132 (88112309)
100.0 |	0.17630 (88081715)	41.44388 (88070112)	98.40578 (88070112)	103.28513 (88070112)	104.17340 (88070112)
110.0 |	0.40303 (88040715)	67.29700 (88040815)	109.69698 (88040815)	110.22466 (88040815)	107.85307 (88040815)
120.0 |	1.19304 (88040715)	70.46870 (88040715)	80.98362 (88050612)	80.50043 (88050612)	78.48297 (88050512)
130.0 |	0.52609 (88040715)	51.95685 (88070312)	60.52025 (88042815)	66.77962 (88050709)	73.58775 (88031915)
140.0 |	0.19090c (88063003)	32.89563 (88052715)	45.45607 (88022915)	53.23286 (88022915)	59.04935 (88022915)
150.0 |	0.02988c (88063003)	50.56514 (88052715)	68.13232 (88040712)	71.25141 (88040712)	71.62766 (88040712)
160.0 |	0.06629c (88030124)	36.53733 (88052715)	52.35781 (88040915)	46.05988 (88121712)	48.33140 (88121712)
170.0 |	0.32300 (88021106)	36.73748 (88040915)	64.68399 (88022712)	70.66135 (88022712)	73.75673 (88022712)
180.0 |	0.43828 (88021106)	32.53435 (88070315)	56.12303 (88022712)	60.54941 (88022712)	68.61050 (88031509)
190.0 |	0.19004c (88062906)	39.36539 (88070315)	73.53905 (88120212)	83.62930 (88120212)	90.57764 (88120212)
200.0 |	0.31217c (88032103)	40.34881 (88070315)	62.26523 (88012712)	71.87507 (88012712)	79.15778 (88012712)
210.0 |	0.47042c (88032103)	38.78908 (88070315)	65.69493 (88011412)	70.62962 (88011412)	72.67265 (88011412)
220.0 |	0.67700c (88061106)	35.65127 (88032112)	53.79460 (88102612)	57.77197 (88072915)	60.47753 (88072915)
230.0 |	0.60059c (88061106)	32.32470 (88081715)	79.61457 (88102612)	85.37384 (88102612)	87.24589 (88102612)
240.0 |	0.46737 (88062106)	31.80323 (88041412)	60.95329 (88091215)	65.10626 (88091215)	67.20600 (88091215)
250.0 |	0.48659 (88080306)	36.32240 (88091212)	69.72655 (88052912)	71.16126 (88052912)	71.25482 (88071912)
260.0 |	0.44031 (88071306)	42.65747 (88091115)	93.87823 (88091115)	99.23278 (88091115)	101.29815 (88091115)
270.0 |	0.35749 (88121418)	38.65746 (88051012)	83.88744 (88081915)	88.75674 (88081915)	91.83228 (88091318)
280.0 |	0.41614 (88121418)	47.63140 (88061815)	72.34774 (88071115)	73.96801 (88071115)	72.75132 (88071115)
290.0 |	0.34258c (88062003)	46.71572 (88090212)	85.97516 (88071212)	88.59386 (88071212)	87.98822 (88071212)
300.0 |	0.38921 (88060603)	54.89490 (88072712)	98.77872 (88091512)	106.60812 (88091512)	110.12655 (88091512)
310.0 |	0.67572 (88071815)	46.24895 (88071815)	60.81520 (88032612)	62.97966 (88081712)	67.31419 (88081712)
320.0 |	0.36286 (88071815)	44.93689 (88082315)	79.38468 (88041012)	84.63180 (88041012)	86.34715 (88041012)
330.0 |	0.40075c (88060803)	44.19864 (88082315)	61.60707 (88082315)	60.96225 (88041012)	60.20501 (88041012)
340.0 |	0.38917c (88042209)	37.56782 (88072615)	61.52155 (88072212)	65.31467 (88072212)	66.28008 (88072212)
350.0 |	0.37309c (88080103)	30.07964 (88062815)	47.26659 (88041812)	47.48500 (88041812)	46.32978 (88041812)
360.0 |	0.19684c (88051806)	49.13156 (88041812)	98.04775 (88041812)	101.64367 (88041812)	102.16387 (88041812)

**MODELOPTs:
 CONC

RURAL FLAT DEFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	64.61591 (88012015)	70.18239 (88012015)	66.78586 (88030518)	72.95559 (88030518)	73.91473 (88030518)
20.0 |	79.72641 (88071312)	68.70273 (88071312)	57.62714 (88121112)	54.17399 (88121112)	49.21972 (88121112)
30.0 |	76.35226 (88110512)	78.40741 (88110512)	70.47092 (88110512)	60.54637 (88110512)	51.60136 (88110512)
40.0 |	97.87070 (88052312)	85.34939 (88052312)	64.45313 (88052312)	55.45694 (88041918)	50.04158 (88041918)
50.0 |	85.10120 (88072215)	75.56568 (88072215)	57.46283 (88072215)	48.36630 (88060715)	46.11013 (88110403)
60.0 |	90.10443 (88052615)	71.04404 (88052615)	59.56077 (88041212)	52.38388 (88041212)	48.51136 (88052818)
70.0 |	96.84554 (88062715)	85.00984 (88062715)	64.35635 (88062715)	48.33818 (88062715)	39.80046 (88042615)
80.0 |	75.75748 (88052215)	68.96815 (88052215)	60.32502 (88032118)	58.12042 (88032118)	53.32338 (88032118)
90.0 |	78.06026 (88112309)	79.80462 (88112309)	72.15912 (88112309)	62.48720 (88112309)	53.63559 (88112309)
100.0 |	102.35256 (88070112)	84.25349 (88070112)	61.27890 (88070112)	50.36586 (88092318)	46.44527 (88092318)
110.0 |	103.16879 (88040815)	89.41680 (88041318)	87.83279 (88041318)	79.99994 (88041318)	71.06263 (88041318)
120.0 |	76.65097 (88050512)	66.11845 (88030118)	65.89114 (88030118)	60.62957 (88030118)	54.33462 (88030118)
130.0 |	77.24924 (88050709)	79.50769 (88031915)	72.11425 (88031915)	66.07201 (88031921)	60.32214 (88031921)
140.0 |	62.94253 (88022915)	64.64623 (88022915)	54.08220 (88022915)	51.57293 (88012203)	47.67389 (88012203)
150.0 |	70.18272 (88040712)	57.42797 (88040712)	47.00502 (88031015)	40.10039 (88121321)	43.50853 (88121321)
160.0 |	50.05665 (88022615)	52.45659 (88022615)	48.48336 (88011109)	54.83158 (88012303)	59.21349 (88012303)
170.0 |	74.63854 (88022712)	66.82901 (88022712)	64.04903 (88022106)	59.36446 (88022106)	53.62221 (88022106)
180.0 |	74.23208 (88031509)	85.00681 (88031509)	83.35423 (88031509)	75.83427 (88031509)	67.30042 (88031509)
190.0 |	93.81565 (88120212)	91.18176 (88120212)	76.55141 (88120212)	69.84932 (88020621)	66.52125 (88020621)
200.0 |	82.52468 (88012712)	83.72591 (88012712)	74.50637 (88012712)	67.12046 (88011409)	60.27710 (88011409)
210.0 |	72.59193 (88011412)	74.15297 (88010609)	76.20656 (88010609)	71.50704 (88010609)	64.82504 (88010609)
220.0 |	62.77605 (88070318)	60.92514 (88070318)	59.88712 (88100606)	61.20504 (88100606)	59.45657 (88100606)
230.0 |	86.35302 (88102612)	71.17344 (88102612)	56.09086 (88121412)	50.33428 (88101421)	52.25346 (88070803)
240.0 |	67.89771 (88102815)	70.77898 (88100612)	73.03745 (88100612)	68.83133 (88100612)	62.63595 (88100612)
250.0 |	73.45640 (88071912)	80.98923 (88091315)	79.88339 (88091315)	72.94226 (88091315)	64.88211 (88091315)
260.0 |	100.15455 (88091115)	86.35324 (88091115)	67.16991 (88091115)	60.33891 (88091703)	65.85446 (88091703)
270.0 |	96.56779 (88091318)	101.87540 (88091318)	94.11300 (88091318)	82.63186 (88091318)	71.67243 (88091318)
280.0 |	69.83146 (88071115)	71.72482 (88112209)	71.15463 (88112209)	65.32833 (88112209)	58.37422 (88112209)
290.0 |	85.49296 (88091412)	88.89719 (88090312)	82.63098 (88090312)	72.88800 (88090312)	63.47491 (88090312)
300.0 |	110.43073 (88091512)	96.18764 (88091512)	75.36777 (88112218)	70.54182 (88112218)	63.88890 (88112218)
310.0 |	69.33796 (88081712)	66.48904 (88052512)	59.04383 (88073118)	54.83779 (88073118)	49.36275 (88073118)
320.0 |	85.54843 (88041012)	71.49612 (88041012)	52.06100 (88041012)	38.11021 (88041012)	30.54636 (88090624)
330.0 |	57.87658 (88041012)	45.83035 (88123112)	36.16739 (88100309)	36.97832 (88100309)	38.25035 (88021903)
340.0 |	65.27146 (88072212)	56.93391 (88072315)	48.88068 (88040409)	43.73514 (88040409)	38.86774 (88040409)
350.0 |	47.54892 (88022015)	52.60716 (88022015)	50.08865 (88022015)	44.65762 (88022015)	40.21503 (88012109)
360.0 |	99.81039 (88041812)	83.69953 (88041812)	68.94987 (88012112)	63.43829 (88012112)	56.75645 (88012112)

**MODELOPTs:
CONC

RURAL FLAT DEFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION |	DISTANCE (METERS)				
(DEGREES) |	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.07183c(88062624)	18.31563 (88082116)	39.68341 (88082116)	41.05857 (88082116)	40.98074 (88082116)
20.0 |	0.01480c(88080816)	20.05712 (88082116)	39.84369 (88082116)	40.41539 (88082116)	39.62996 (88082116)
30.0 |	0.03329c(88080816)	21.03544 (88041016)	33.71709 (88042416)	35.49065 (88042416)	36.22126 (88042416)
40.0 |	0.08100 (88041216)	21.85544c(88040516)	39.60776 (88052316)	42.47414 (88052316)	43.60202 (88052316)
50.0 |	0.11099 (88060516)	26.26316 (88060516)	32.42170c(88040616)	34.71625c(88040616)	35.73207c(88040616)
60.0 |	0.12565 (88060516)	26.80717 (88042616)	55.08513 (88042616)	56.59424 (88042616)	56.16406 (88042616)
70.0 |	0.30976 (88081716)	25.77641 (88062716)	59.12157 (88062716)	61.77788 (88062716)	62.10321 (88062716)
80.0 |	0.63857 (88081716)	20.61006 (88080616)	45.62059 (88042216)	47.17145 (88042216)	46.94174 (88042216)
90.0 |	0.39774 (88081716)	21.11351 (88081716)	28.70187 (88042216)	31.47344 (88041224)	34.66314 (88041224)
100.0 |	0.06690 (88081716)	21.17846 (88041316)	42.44498 (88070116)	45.50787 (88070116)	47.01593 (88070116)
110.0 |	0.15130 (88040716)	26.19644 (88040816)	45.53444 (88040816)	46.42899 (88040816)	46.04607 (88040816)
120.0 |	0.44740 (88040716)	27.88076 (88041316)	54.30855 (88041316)	55.04757 (88041316)	55.44640 (88050616)
130.0 |	0.19731 (88040716)	19.48382 (88070316)	36.94960 (88041316)	38.01679 (88041316)	37.80744 (88112324)
140.0 |	0.09545c(88063008)	13.41088 (88052716)	24.57432 (88092616)	26.91501 (88031416)	29.74982 (88031416)
150.0 |	0.01494c(88063008)	21.20912 (88052716)	30.71515 (88052716)	29.45166 (88031416)	32.09581 (88031416)
160.0 |	0.02841c(88030124)	20.53013 (88052716)	33.11943 (88052716)	33.68686 (88121316)	39.21475 (88121316)
170.0 |	0.12113 (88021108)	13.77813 (88040916)	27.55223 (88021616)	31.66681 (88021616)	34.56203 (88021616)
180.0 |	0.16436 (88021108)	12.20082 (88070316)	40.90533 (88021616)	47.10305 (88021616)	51.47346 (88021616)
190.0 |	0.09502c(88062908)	14.80591 (88070316)	32.47565 (88120216)	37.44637 (88120216)	41.09822 (88120216)
200.0 |	0.15608c(88032108)	15.75573 (88070316)	30.02863 (88012716)	35.26878 (88012716)	39.41784 (88012716)
210.0 |	0.23521c(88032108)	16.89629 (88070316)	29.73967 (88011416)	32.98413 (88011416)	35.07063 (88011416)
220.0 |	0.33850c(88061108)	14.53032 (88070316)	32.90751 (88070316)	34.35049 (88070316)	36.87257 (88050216)
230.0 |	0.30029c(88061108)	17.21283 (88062516)	47.76345 (88062516)	51.29725 (88062516)	52.71694 (88062516)
240.0 |	0.21273 (88080308)	18.78254 (88091216)	44.87827 (88091216)	49.82484 (88102816)	54.14385 (88102816)
250.0 |	0.19323 (88080308)	23.66973 (88091216)	45.23024 (88091216)	46.97150 (88091216)	47.46474 (88091216)
260.0 |	0.22194c(88041508)	28.68077 (88091116)	58.77843 (88091116)	61.50962 (88091116)	62.37254 (88091116)
270.0 |	0.19883c(88081808)	21.60330 (88080316)	53.44530 (88080316)	56.08726 (88080316)	56.43371 (88080316)
280.0 |	0.26534c(88020308)	23.04233 (88071116)	54.73202 (88071116)	57.03971 (88071116)	57.22100 (88071116)
290.0 |	0.17911c(88071108)	23.39828 (88071116)	61.39384 (88071116)	64.95016 (88071116)	65.88448 (88071116)
300.0 |	0.26465c(88030108)	23.49982 (88071816)	51.63816 (88091516)	55.96046 (88091516)	58.00496 (88091516)
310.0 |	0.28045c(88052608)	33.75412 (88071816)	37.65139 (88071816)	37.14827 (88091516)	38.46284 (88091516)
320.0 |	0.13628 (88071816)	24.12966 (88082316)	38.31312 (88082316)	34.09634 (88082316)	32.38018 (88041016)
330.0 |	0.24779c(88060808)	20.64119 (88082316)	35.25792 (88082316)	33.03155 (88082316)	30.44175 (88082316)
340.0 |	0.19459c(88042208)	15.91921 (88072616)	23.08125 (88072216)	24.50266 (88072216)	24.86378 (88072216)
350.0 |	0.15989c(88080108)	12.50218 (88041816)	27.07559 (88122816)	30.22630 (88122816)	32.16137 (88122816)
360.0 |	0.09842c(88051808)	31.25921 (88041816)	58.22618 (88041816)	59.75275 (88041816)	59.58726 (88041816)

**MODELOPTs:
 CONC

RURAL FLAT DEFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION |	DISTANCE (METERS)				
(DEGREES) |	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	39.95793 (88082116)	44.52538 (88012016)	42.81282 (88012016)	38.46738 (88012016)	33.84027 (88012016)
20.0 |	38.03591 (88082116)	29.67349 (88121116)	30.83066 (88121116)	29.16588 (88121116)	26.60759 (88121116)
30.0 |	36.34898 (88110516)	38.02878 (88110516)	34.70659 (88110516)	30.09989 (88110516)	25.80152 (88110516)
40.0 |	43.45733 (88052316)	37.04261 (88052316)	28.46143 (88041916)	25.87051 (88041916)	22.94101 (88041916)
50.0 |	35.49873c (88040616)	32.70552 (88060716)	28.74319 (88060716)	25.32640 (88060816)	23.42188 (88060816)
60.0 |	54.46341 (88042616)	43.44424 (88042616)	39.44481 (88041216)	34.47286 (88041216)	29.79795 (88041216)
70.0 |	60.85304 (88062716)	49.69703 (88062716)	36.59898 (88042616)	29.29803 (88042616)	23.87555 (88042616)
80.0 |	46.02549 (88102116)	45.06186 (88102116)	38.99544 (88102116)	32.67445 (88102116)	27.30423 (88102116)
90.0 |	35.70482 (88041224)	36.27968 (88040724)	32.57964 (88040724)	28.88284 (88021124)	29.11436 (88021124)
100.0 |	47.02773 (88070116)	41.94083 (88070116)	35.13924 (88040724)	30.21549 (88040724)	25.79482 (88040724)
110.0 |	44.61265 (88040816)	45.24332 (88041124)	41.13728 (88041124)	35.79436 (88041124)	30.86192 (88041124)
120.0 |	54.29454 (88050616)	45.45080 (88050616)	34.45937 (88050616)	28.01545 (88031908)	26.00309 (88050708)
130.0 |	40.75086 (88112324)	46.25761 (88112324)	45.19913 (88112324)	41.03521 (88112324)	36.40640 (88012524)
140.0 |	31.29149 (88022916)	32.78648 (88031416)	31.04030 (88031416)	27.93048 (88031416)	25.39722 (88031508)
150.0 |	33.20729 (88031416)	34.01236 (88031416)	31.39647 (88031416)	27.77690 (88031416)	30.54093c (88121324)
160.0 |	42.64304 (88121316)	49.04478 (88121316)	47.98855 (88121316)	43.55394 (88121316)	38.55671 (88121316)
170.0 |	36.32594 (88021616)	38.80643 (88012216)	36.15476 (88012216)	31.54149 (88012216)	28.12777 (88031608)
180.0 |	54.15134 (88021616)	53.67704 (88021616)	49.72691 (88022116)	44.00680 (88022116)	38.30690 (88022116)
190.0 |	42.85721 (88120216)	47.11042 (88020624)	51.20135 (88020624)	50.06382 (88020624)	46.79506 (88020624)
200.0 |	42.01873 (88101408)	49.10094 (88101408)	49.22244 (88101316)	45.68271 (88101316)	41.09934 (88101316)
210.0 |	36.27040 (88103016)	39.13539 (88010608)	40.36160 (88010608)	37.96046 (88010608)	34.48754 (88010608)
220.0 |	39.49266 (88050216)	44.24573 (88050216)	43.17487 (88050216)	39.37169 (88050216)	35.06482 (88050216)
230.0 |	52.58745 (88062516)	44.97540 (88062516)	35.16989 (88070624)	33.73764 (88070808)	34.37167 (88070808)
240.0 |	56.79910 (88102816)	56.52465 (88102816)	47.02425 (88102816)	39.74709 (88100616)	35.60545 (88100616)
250.0 |	46.47308 (88091216)	49.89119 (88061316)	50.19735 (88061316)	46.53716 (88061316)	41.90864 (88061316)
260.0 |	61.33939 (88091116)	52.45348 (88091116)	40.88625 (88091116)	32.09484 (88091116)	32.81658 (88091708)
270.0 |	55.22546 (88080316)	44.45127 (88080316)	33.27338 (88053016)	31.27015 (88053016)	29.31116c (88040124)
280.0 |	56.00372 (88071116)	45.77420 (88071116)	33.16623 (88071116)	36.94772 (88090224)	39.06750 (88090224)
290.0 |	64.99471 (88071116)	60.24964 (88091416)	53.06170 (88091416)	45.45361 (88091416)	38.86368 (88091416)
300.0 |	58.30097 (88091516)	51.05032 (88091516)	40.12737 (88112216)	37.83000 (88112216)	35.85712 (88112708)
310.0 |	38.61663 (88091516)	33.56410 (88091516)	25.12668 (88091516)	22.01263 (88090216)	20.61768 (88081524)
320.0 |	32.08066 (88041016)	27.17544c (88120616)	25.20082 (88031216)	21.95626 (88031216)	20.28425 (88021908)
330.0 |	27.90070 (88082316)	19.99192 (88082316)	24.37381 (88090508)	27.79236 (88090508)	29.55607 (88090508)
340.0 |	24.48470 (88072216)	21.35030 (88072316)	22.39620 (88090516)	21.80117 (88090516)	20.40553 (88090516)
350.0 |	33.08498 (88122816)	30.91799 (88122816)	34.60474 (88012108)	34.71103 (88012108)	33.01270 (88012108)
360.0 |	57.84523 (88041816)	59.72699 (88012116)	55.76225 (88012116)	49.29474 (88012116)	42.93935 (88012116)

**MODELOPTs:
CONC

RURAL FLAT DEFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3500.00

10.0 |	30.58147c(88030524)
20.0 |	23.91272 (88121116)
30.0 |	22.66799 (88042608)
40.0 |	20.17662 (88041916)
50.0 |	22.36256c(88041724)
60.0 |	25.81138 (88041216)
70.0 |	19.80908 (88042616)
80.0 |	22.95213 (88102116)
90.0 |	28.29482 (88021124)
100.0 |	22.13368 (88040724)
110.0 |	26.69276 (88041124)
120.0 |	26.22394 (88050708)
130.0 |	33.40474 (88012524)
140.0 |	23.13312 (88031508)
150.0 |	32.07246c(88121324)
160.0 |	33.83509 (88121316)
170.0 |	27.99837 (88031608)
180.0 |	34.71015 (88010424)
190.0 |	42.76995 (88020624)
200.0 |	37.81795 (88112908)
210.0 |	30.88781 (88010608)
220.0 |	35.14775 (88061308)
230.0 |	34.13150 (88070808)
240.0 |	32.05528 (88111516)
250.0 |	37.31961 (88091316)
260.0 |	34.10075 (88091708)
270.0 |	30.01446c(88040124)
280.0 |	39.47548 (88090224)
290.0 |	33.41043 (88091416)
300.0 |	35.54485 (88112708)
310.0 |	20.89338 (88081524)
320.0 |	20.05713 (88021908)
330.0 |	29.88443 (88090508)
340.0 |	18.71832 (88090516)
350.0 |	30.53816 (88012108)
360.0 |	37.38289 (88012116)

**MODELOPTs:
 CONC

RURAL FLAT DEFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.02411c(88062624)	8.17574c(88082124)	17.95780c(88082124)	18.64986c(88082124)	18.69482c(88082124)
20.0 |	0.00467c(88080824)	9.08583c(88082124)	19.46524c(88082124)	20.27801c(88082124)	20.50895c(88082124)
30.0 |	0.01051c(88080824)	9.34909c(88041024)	15.19128c(88042424)	16.01782c(88042424)	16.37745c(88042424)
40.0 |	0.02700 (88041224)	10.13931c(88040524)	17.28802c(88040524)	16.82432c(88040524)	16.61029c(88052324)
50.0 |	0.04228c(88060524)	10.55048c(88060524)	15.13242c(88041124)	15.89647c(88041124)	16.18633c(88041124)
60.0 |	0.04787c(88060524)	9.37683 (88042624)	21.66709 (88042624)	23.04806 (88042624)	23.73529 (88042624)
70.0 |	0.11264c(88081724)	10.37099c(88062724)	24.97254c(88062724)	26.43246c(88062724)	26.93080c(88062724)
80.0 |	0.23221c(88081724)	9.20164c(88042224)	21.59088c(88042224)	22.46381c(88042224)	22.48753c(88042224)
90.0 |	0.14463c(88081724)	9.44121c(88080624)	13.59544c(88080624)	15.14283 (88041224)	17.28111 (88041224)
100.0 |	0.02433c(88081724)	7.92055c(88080624)	19.14287 (88040724)	21.58557 (88040724)	23.24389 (88040724)
110.0 |	0.05043 (88040724)	9.16110 (88040824)	19.17178c(88050524)	20.59092c(88050524)	21.31513c(88050524)
120.0 |	0.14913 (88040724)	9.81558 (88041324)	22.37827 (88050624)	23.88077 (88050624)	24.63094 (88050624)
130.0 |	0.06577 (88040724)	6.49461 (88070324)	16.10469 (88031924)	19.77001 (88031924)	22.96321 (88031924)
140.0 |	0.03182c(88063024)	4.68319c(88052724)	9.65357c(88022924)	11.27345c(88022924)	12.45408 (88031524)
150.0 |	0.00557c(88110124)	7.38325c(88052724)	10.74829c(88052724)	11.12696 (88040724)	12.07494c(88121324)
160.0 |	0.01050c(88030124)	7.14099c(88052724)	11.52014c(88052724)	13.22275c(88121324)	15.42682c(88121324)
170.0 |	0.04038 (88021124)	5.02705c(88040924)	12.12472 (88022124)	15.05606 (88022124)	17.66653 (88022124)
180.0 |	0.05479 (88021124)	4.06694 (88070324)	16.22817 (88020624)	19.89038 (88020624)	23.02511 (88020624)
190.0 |	0.03001c(88062924)	4.93533 (88070324)	18.84303 (88020624)	23.83689 (88020624)	28.44070 (88020624)
200.0 |	0.04686c(88032124)	5.27251 (88070324)	16.69330 (88010524)	20.93941 (88010524)	24.75963 (88010524)
210.0 |	0.07068c(88032124)	6.19356 (88070324)	11.91658 (88070324)	13.50961 (88011424)	14.71442 (88011424)
220.0 |	0.11284c(88061124)	5.93845 (88070324)	16.01762 (88070324)	17.44178 (88070324)	18.36749 (88070324)
230.0 |	0.10011c(88061124)	6.91509c(88062524)	19.15409c(88062524)	20.57587c(88062524)	21.15292c(88062524)
240.0 |	0.07399c(88080324)	6.83972 (88091224)	19.04233 (88091224)	21.44771 (88091224)	23.34583 (88091224)
250.0 |	0.06734c(88080324)	8.19580 (88091224)	17.38797 (88091224)	18.58827 (88091224)	19.33101 (88091224)
260.0 |	0.09533c(88081624)	9.78116 (88091124)	21.76101 (88091124)	23.33293 (88091124)	24.30534 (88091124)
270.0 |	0.06628c(88081824)	7.82583c(88080324)	20.39507c(88081924)	21.72964c(88081924)	22.13628c(88081924)
280.0 |	0.08845c(88020324)	9.72487c(88061824)	21.39959c(88071124)	22.62671c(88071124)	23.08750c(88071124)
290.0 |	0.06028c(88072724)	9.16725c(88061824)	23.05861c(88071124)	24.55248c(88071124)	25.11938c(88071124)
300.0 |	0.08357c(88030124)	9.39995c(88071824)	18.20377 (88091524)	19.81399 (88091524)	20.64004 (88091524)
310.0 |	0.10156c(88071824)	13.50165c(88071824)	15.06056c(88071824)	13.54745c(88071824)	13.44264c(88071624)
320.0 |	0.05451c(88071824)	10.73920c(88082324)	17.04616c(88082324)	15.17037c(88082324)	14.39119c(88041024)
330.0 |	0.07542c(88060824)	9.30054c(88082324)	16.17613c(88082324)	15.28585c(88082324)	14.23400c(88082324)
340.0 |	0.06486c(88042224)	6.95574c(88072624)	9.84216c(88072224)	10.46693c(88072224)	10.64632c(88072224)
350.0 |	0.05330c(88080124)	4.74942c(88062824)	12.03360c(88122824)	13.43391c(88122824)	14.29394c(88122824)
360.0 |	0.03281c(88051824)	10.88026c(88041824)	20.31097c(88041824)	21.66631 (88031824)	22.85519 (88031824)

**MODELOPTs:
 CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION |	DISTANCE (METERS)				
(DEGREES) |	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	18.28762c(88082124)	19.25545c(88022024)	18.73171c(88022024)	17.03271c(88022024)	15.16065c(88022024)
20.0 |	20.19296c(88082124)	17.53174c(88082124)	18.07589c(88121124)	17.46541c(88121124)	16.19495c(88121124)
30.0 |	16.21099c(88042424)	14.24295c(88042424)	12.68375(88060924)	12.69382(88042624)	12.62584(88042624)
40.0 |	16.55517c(88052324)	16.43552(88041924)	16.35643(88041924)	15.05218(88041924)	13.46706(88041924)
50.0 |	16.45207(88042624)	17.87510(88042624)	17.69153(88042624)	16.58017(88042624)	15.21921(88042624)
60.0 |	23.67193(88042624)	21.30421(88042624)	17.70156(88042624)	14.76955(88042624)	13.87463c(88102424)
70.0 |	26.71167c(88062724)	22.87673c(88062724)	17.51425c(88062724)	13.55004c(88062724)	10.81185c(88062724)
80.0 |	21.95724c(88042224)	17.84791c(88042224)	14.74982c(88052224)	13.04408(88042724)	12.04309(88042724)
90.0 |	18.32176(88041224)	20.03722(88041224)	19.32880(88041224)	17.54448(88041224)	15.61080(88041224)
100.0 |	23.67935(88040724)	22.60911(88040724)	19.26792(88040724)	16.04257(88040724)	13.40234(88040724)
110.0 |	21.23285c(88050524)	20.10814c(88041124)	18.28324c(88041124)	15.90860c(88041124)	15.26978c(88021224)
120.0 |	24.53970(88050624)	22.64866(88031924)	20.90260c(88050524)	18.99285c(88050524)	17.16236c(88050524)
130.0 |	24.63233(88031924)	27.75540(88031924)	27.18681(88031924)	24.83192(88031924)	22.13248(88031924)
140.0 |	13.18012c(88022924)	13.87316(88031524)	13.04534(88031524)	12.39710(88012224)	11.56432(88012224)
150.0 |	13.21893c(88121324)	15.93971c(88121324)	17.11539c(88121324)	16.96652c(88121324)	16.44452c(88121324)
160.0 |	16.78609c(88121324)	19.36516c(88121324)	19.00620c(88121324)	17.27887c(88121324)	15.30836c(88121324)
170.0 |	19.10850(88022124)	22.18612(88022124)	22.48874(88022124)	21.10103(88022124)	19.27534(88022124)
180.0 |	24.60552(88020624)	27.24844(88020624)	26.19547(88020624)	23.59784c(88121824)	24.08396c(88121824)
190.0 |	31.09698(88020624)	37.09410(88020624)	37.93122(88020624)	35.59804(88020624)	32.32357(88020624)
200.0 |	26.88327(88010524)	31.29497(88010524)	31.30000(88010524)	28.92054(88010524)	25.96199(88010524)
210.0 |	15.91471(88010624)	19.23119(88010624)	19.80754(88010624)	18.61532(88010624)	16.90167(88010624)
220.0 |	18.81510(88070324)	20.78350(88050224)	20.83960(88050224)	19.34512(88050224)	18.52065(88101624)
230.0 |	21.10728c(88062524)	18.96475(88070624)	18.23669(88070624)	16.39669(88070624)	15.63127(88101624)
240.0 |	24.70815c(88102824)	26.05266c(88102824)	24.77094(88060124)	24.16113(88060124)	22.92818(88060124)
250.0 |	19.57976(88061324)	24.08794(88061324)	25.33770(88061324)	24.30459(88061324)	22.51031(88061324)
260.0 |	24.42368(88091124)	22.89243(88091124)	19.93426(88091124)	21.10295(88091724)	22.07166(88091724)
270.0 |	22.01080c(88080324)	19.23803c(88080324)	18.48413(88053024)	17.31507(88053024)	15.70203(88053024)
280.0 |	22.97466c(88071124)	20.27799c(88071124)	18.93478(88030824)	18.37177(88030824)	17.09284(88030824)
290.0 |	24.98302c(88071124)	21.92431(88091424)	19.95057(88091424)	17.60912c(88072124)	18.81608c(88072124)
300.0 |	20.83539(88091524)	23.98835(88112224)	24.29597(88112224)	22.66011(88112224)	20.48058(88112224)
310.0 |	13.69410c(88071624)	14.79323(88090824)	14.15824(88090824)	12.82161(88090824)	11.45645(88090824)
320.0 |	14.25807c(88041024)	13.72801c(88011924)	12.86183c(88011924)	11.93929(88030424)	11.01778(88030424)
330.0 |	13.19633c(88082324)	9.95345c(88082324)	9.42669c(88100324)	9.73113c(88090724)	10.20769(88090524)
340.0 |	10.50339c(88072224)	10.25797(88012124)	10.25976(88012124)	9.86761(88040424)	9.47034(88040424)
350.0 |	14.70443c(88122824)	15.89252c(88021924)	17.68547c(88021924)	17.57050c(88021924)	16.71232c(88021924)
360.0 |	24.39174c(88022024)	28.68825c(88022024)	29.75222c(88022024)	28.52085c(88022024)	26.56446c(88022024)

**MODELOPT's:
CONC

RURAL FLAT DEFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3500.00

10.0 |	13.41092c(88022024)
20.0 |	14.72374c(88121124)
30.0 |	12.14181 (88042624)
40.0 |	11.92783 (88041924)
50.0 |	13.82744 (88042624)
60.0 |	13.25728c(88102424)
70.0 |	9.29959c(88010824)
80.0 |	11.01676 (88042724)
90.0 |	13.93283c(88060324)
100.0 |	11.48185c(88060424)
110.0 |	14.41677c(88021224)
120.0 |	15.50951c(88050524)
130.0 |	19.56697 (88031924)
140.0 |	10.55514 (88012224)
150.0 |	15.67482c(88121324)
160.0 |	13.43702c(88121324)
170.0 |	17.42510 (88022124)
180.0 |	23.85429c(88121824)
190.0 |	28.94949 (88020624)
200.0 |	23.06280 (88010524)
210.0 |	15.13121 (88010624)
220.0 |	17.89097 (88101624)
230.0 |	14.94830 (88100524)
240.0 |	21.38719 (88060124)
250.0 |	20.51621 (88061324)
260.0 |	22.16442 (88091724)
270.0 |	14.03812 (88053024)
280.0 |	15.56396 (88030824)
290.0 |	19.19206c(88072124)
300.0 |	18.27894 (88112224)
310.0 |	10.74160 (88081524)
320.0 |	9.99399 (88030424)
330.0 |	10.26173 (88090524)
340.0 |	9.01213 (88040424)
350.0 |	15.56601c(88021924)
360.0 |	24.42052c(88022024)

*** ISCST3 - VERSION 00101 ***

*** 1988 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:26:58

**MODELOPTs:

CONC

RURAL FLAT DEFAULT

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*** THE MAXIMUM 10 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	110.43073	(88091512) AT	(133324.38, 202891.00) GP	6.	106.60812	(88091512) AT	(133497.58, 202791.00) GP
2.	110.22466	(88040815) AT	(135122.72, 202033.19) GP	7.	104.17340	(88070112) AT	(135261.81, 202167.36) GP
3.	110.12655	(88091512) AT	(133410.97, 202841.00) GP	8.	103.28513	(88070112) AT	(135163.33, 202184.72) GP
4.	109.69698	(88040815) AT	(135028.75, 202067.39) GP	9.	103.16879	(88040815) AT	(135310.66, 201964.78) GP
5.	107.85307	(88040815) AT	(135216.69, 201998.98) GP	10.	102.35256	(88070112) AT	(135360.28, 202149.98) GP

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

*** ISCST3 - VERSION 00101 ***

*** 1988 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:26:58
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**MODELOPTs:
CONC

RURAL FLAT DEFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	65.88448	(88071116) AT (	133337.31, 202683.02) GP	6.	61.77788	(88062716) AT (	135122.72, 202648.81) GP
2.	64.99471	(88071116) AT (	133243.34, 202717.22) GP	7.	61.51040	(88091416) AT (	133243.34, 202717.22) GP
3.	64.95016	(88071116) AT (	133431.28, 202648.81) GP	8.	61.50962	(88091116) AT (	133390.67, 202184.72) GP
4.	62.37254	(88091116) AT (	133292.19, 202167.36) GP	9.	61.39384	(88071116) AT (	133525.25, 202614.61) GP
5.	62.10321	(88062716) AT (	135216.69, 202683.02) GP	10.	61.33939	(88091116) AT (	133193.72, 202149.98) GP

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

*** ISCST3 - VERSION 00101 ***

*** 1988 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:26:58

**MODEL OPT's:

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CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	37.93122	(88020624) AT	(133929.70, 200371.39) GP	6.	31.29497	(88010524) AT	(133763.97, 200931.47) GP
2.	37.09410	(88020624) AT	(134016.53, 200863.78) GP	7.	31.09698	(88020624) AT	(134085.98, 201257.72) GP
3.	35.59804	(88020624) AT	(133842.88, 199878.98) GP	8.	29.75222c	(88022024) AT	(134277.00, 204341.00) GP
4.	32.32357	(88020624) AT	(133756.06, 199386.58) GP	9.	28.94949	(88020624) AT	(133669.23, 198894.17) GP
5.	31.30000	(88010524) AT	(133592.95, 200461.61) GP	10.	28.92054	(88010524) AT	(133421.95, 199991.77) GP

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

**MODELOPTs:

CONC RURAL FLAT DEFAULT

*** THE SUMMARY OF MAXIMUM PERIOD (8784 HRS) RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	3.14588 AT (132544.95, 201341.00,	0.00, 0.00)	GP POL1
	2ND HIGHEST VALUE IS	3.06175 AT (132977.97, 201591.00,	0.00, 0.00)	GP POL1
	3RD HIGHEST VALUE IS	3.05897 AT (132111.94, 201091.00,	0.00, 0.00)	GP POL1
	4TH HIGHEST VALUE IS	2.94495 AT (132867.47, 202854.03,	0.00, 0.00)	GP POL1
	5TH HIGHEST VALUE IS	2.93633 AT (132397.61, 201656.95,	0.00, 0.00)	GP POL1
	6TH HIGHEST VALUE IS	2.93110 AT (131678.92, 200841.00,	0.00, 0.00)	GP POL1
	7TH HIGHEST VALUE IS	2.92458 AT (132867.47, 201827.97,	0.00, 0.00)	GP POL1
	8TH HIGHEST VALUE IS	2.85826 AT (133243.34, 202717.22,	0.00, 0.00)	GP POL1
	9TH HIGHEST VALUE IS	2.81200 AT (131927.77, 201485.95,	0.00, 0.00)	GP POL1
	10TH HIGHEST VALUE IS	2.78489 AT (132397.61, 203025.05,	0.00, 0.00)	GP POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1988 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:26:58

**MODELOPTs:

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CONC

RURAL FLAT

DEFAULT

*** THE SUMMARY OF HIGHEST 3-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 110.43073	ON 88091512: AT (	133324.38, 202891.00, 0.00,	0.00)	GP POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1988 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:26:58
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**MODELOPTs:
CONC

RURAL FLAT DEFAULT

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 65.88448	ON 88071116	AT (133337.31, 202683.02, 0.00, 0.00)	GP	POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1988 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:26:58

**MODELOPTs:

PAGE 24

CONC RURAL FLAT DEFAULT

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 37.93122	ON 88020624: AT (	133929.70, 200371.39, 0.00,	0.00) GP	POL1

*** RECEPTOR TYPES:

- GC = GRIDCART
- GP = GRIDPOLR
- DC = DISCCART
- DP = DISCPOLR
- BD = BOUNDARY

*** ISCST3 - VERSION 00101 ***

*** 1988 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:26:58
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**MODELOPTs:

CONC RURAL FLAT DFAULT

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

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

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 948 Informational Message(s)

A Total of 948 Calm Hours Identified

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

***** WARNING MESSAGES *****
SO W320 12 PPARAM :Input Parameter May Be Out-of-Range for Parameter VS

*** ISCST3 Finishes Successfully ***

1989

CO STARTING
TITLEONE 1989 Collier County Landfill SO2 Modeling 12/00
TITLETWO ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00
MODELOPT DFAULT CONC RURAL
AVERTIME 3 8 24 PERIOD
POLLUTID SO2
RUNORNOT RUN
CO FINISHED

SO STARTING
LOCATION FLARESTK POINT 134277 202341
SRCPARAM FLARESTK 50.4 20.8 1033. 67.4 0.76
SRCGROUP ALL
SO FINISHED

RE STARTING
GRIDPOLR POL1 STA
POL1 ORIG 134277.0 202341.0
POL1 DIST 200. 500. 800. 900. 1000. 1100. 1500. 2000.
POL1 DIST 2500. 3000. 3500.
POL1 GDIR 36 10. 10.
POL1 END
RE FINISHED

ME STARTING
INPUTFIL Fmypre89.asc (4I2,F9.4,F9.4,F6.1,I2,2(1X,F6.1))
ANEMHGHT 6.0 meters
SURFDATA 12835 1989 FTMYERS
UAIRDATA 12842 1989 TAMPA
ME FINISHED

OU STARTING
RECTABLE ALLAVE FIRST
MAXTABLE ALLAVE 10
OU FINISHED

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

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

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

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

***** WARNING MESSAGES *****
SO W320 12 PPARAM :Input Parameter May Be Out-of-Range for Parameter VS

**MODELOPTs:

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 3 Short Term Average(s) of: 3-HR 8-HR 24-HR
and Calculates PERIOD Averages

**This Run Includes: 1 Source(s); 1 Source Group(s); and 396 Receptor(s)

**The Model Assumes A Pollutant Type of: SO2

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

**Output Options Selected:

- Model Outputs Tables of PERIOD Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- 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) = 6.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC
Output Units = MICROGRAMS/M**3

; Emission Rate Unit Factor = 0.10000E+07

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

**Input Runstream File: nflat89.inp
**Output Print File: nflat89.out

*** ISCST3 - VERSION 00101 ***

*** 1989 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:31:01

**MODELOPTs:

PAGE 2

CONC

RURAL FLAT

DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	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
FLARESTK	0	0.50400E+02	134277.0	202341.0	0.0	20.80	1033.00	67.40	0.76	NO	

*** ISCST3 - VERSION 00101 ***

*** 1989 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:31:01

**MODELOPTs:

PAGE 3

CONC

RURAL FLAT

DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID

SOURCE IDs

ALL FLARESTK,

*** ISCST3 - VERSION 00101 ***

*** 1989 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:31:01
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**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

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

*** ORIGIN FOR POLAR NETWORK ***
X-ORIG = 134277.00 ; Y-ORIG = 202341.00 (METERS)

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

200.0, 500.0, 800.0, 900.0, 1000.0, 1100.0, 1500.0, 2000.0, 2500.0, 3000.0,
3500.0,

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

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

**MODELOPTs:

CONC RURAL FLAT DFAULT

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

FILE: Fmypre89.asc

FORMAT: (4I2,F9.4,F9.4,F6.1,I2,2(1X,F6.1))

SURFACE STATION NO.: 12835

UPPER AIR STATION NO.: 12842

NAME: FTMYPERS

NAME: TAMPA

YEAR: 1989

YEAR: 1989

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M)		USTAR (M/S)	M-O LENGTH (M)	Z-0 (M)	IPCODE	PRATE (mm/HR)
								RURAL	URBAN					
89	01	01	01	181.0	1.00	291.5	7	999.5	590.0	0.0000	0.0	0.0000	0	0.00
89	01	01	02	178.0	0.00	290.9	7	999.1	590.0	0.0000	0.0	0.0000	0	0.00
89	01	01	03	184.0	0.00	290.4	7	998.8	590.0	0.0000	0.0	0.0000	0	0.00
89	01	01	04	183.0	0.00	289.8	7	998.4	590.0	0.0000	0.0	0.0000	0	0.00
89	01	01	05	183.0	0.00	289.3	7	998.1	590.0	0.0000	0.0	0.0000	0	0.00
89	01	01	06	182.0	0.00	289.3	6	997.8	590.0	0.0000	0.0	0.0000	0	0.00
89	01	01	07	185.0	0.00	289.3	7	997.4	590.0	0.0000	0.0	0.0000	0	0.00
89	01	01	08	183.0	0.00	288.7	6	99.3	630.4	0.0000	0.0	0.0000	0	0.00
89	01	01	09	287.0	2.06	290.4	5	248.6	691.2	0.0000	0.0	0.0000	0	0.00
89	01	01	10	271.0	2.06	295.4	4	397.9	751.9	0.0000	0.0	0.0000	0	0.00
89	01	01	11	304.0	2.57	298.7	3	547.1	812.7	0.0000	0.0	0.0000	0	0.00
89	01	01	12	16.0	4.12	299.3	3	696.4	873.5	0.0000	0.0	0.0000	0	0.00
89	01	01	13	323.0	3.09	300.9	2	845.7	934.2	0.0000	0.0	0.0000	0	0.00
89	01	01	14	349.0	3.09	300.9	2	995.0	995.0	0.0000	0.0	0.0000	0	0.00
89	01	01	15	62.0	4.12	300.9	3	995.0	995.0	0.0000	0.0	0.0000	0	0.00
89	01	01	16	74.0	2.57	299.8	3	995.0	995.0	0.0000	0.0	0.0000	0	0.00
89	01	01	17	61.0	3.60	298.7	4	995.0	995.0	0.0000	0.0	0.0000	0	0.00
89	01	01	18	47.0	2.06	296.5	5	993.9	991.6	0.0000	0.0	0.0000	0	0.00
89	01	01	19	54.0	0.00	294.8	6	990.5	980.5	0.0000	0.0	0.0000	0	0.00
89	01	01	20	47.0	0.00	293.2	7	987.0	969.4	0.0000	0.0	0.0000	0	0.00
89	01	01	21	50.0	0.00	293.2	7	983.6	958.3	0.0000	0.0	0.0000	0	0.00
89	01	01	22	52.0	0.00	292.0	7	980.2	947.2	0.0000	0.0	0.0000	0	0.00
89	01	01	23	50.0	0.00	292.0	7	976.7	936.1	0.0000	0.0	0.0000	0	0.00
89	01	01	24	50.0	0.00	290.9	7	973.3	925.0	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.

**MODELOPTs:
 CONC

RURAL FLAT DEFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)								
	200.00	500.00	800.00	900.00	1000.00	1100.00	1500.00	2000.00	2500.00
10.00 |	0.00048	0.36821	1.10353	1.22050	1.30591	1.34471	1.34685	1.22386	1.08121
20.00 |	0.00028	0.41546	1.16173	1.26796	1.34117	1.37215	1.34246	1.18826	1.02730
30.00 |	0.00012	0.51751	1.35580	1.45917	1.52494	1.54395	1.47039	1.28641	1.11074
40.00 |	0.00009	0.56503	1.45065	1.55283	1.61839	1.63594	1.56580	1.39395	1.22415
50.00 |	0.00027	0.65699	1.74087	1.87186	1.95317	1.97668	1.86992	1.61378	1.37427
60.00 |	0.00037	0.66429	1.84219	2.00526	2.11518	2.16227	2.11421	1.88428	1.64720
70.00 |	0.00020	0.44757	1.21728	1.30603	1.35580	1.36746	1.26789	1.06880	0.89527
80.00 |	0.00025	0.27170	0.81782	0.89529	0.94870	0.97218	0.95683	0.85841	0.75344
90.00 |	0.00039	0.31645	0.97491	1.08860	1.17713	1.22694	1.28404	1.22226	1.12041
100.00 |	0.00028	0.39379	1.04978	1.13745	1.19670	1.21802	1.18431	1.05921	0.92869
110.00 |	0.00027	0.43454	1.18990	1.29964	1.37824	1.40975	1.39786	1.28155	1.14961
120.00 |	0.00036	0.45651	1.34344	1.49485	1.61321	1.67048	1.72728	1.64309	1.50967
130.00 |	0.00026	0.37441	1.09163	1.20567	1.29202	1.33234	1.35872	1.27962	1.16880
140.00 |	0.00022	0.31691	0.96148	1.06954	1.15204	1.19172	1.22344	1.15913	1.06500
150.00 |	0.00038	0.30862	0.97071	1.08840	1.18005	1.22677	1.27650	1.22174	1.13129
160.00 |	0.00042	0.26701	0.87433	0.98498	1.07336	1.12221	1.18877	1.14889	1.06472
170.00 |	0.00029	0.24841	0.85450	0.97153	1.06898	1.12632	1.22987	1.22550	1.15927
180.00 |	0.00046	0.29508	1.11282	1.28674	1.43381	1.52166	1.69505	1.72540	1.66284
190.00 |	0.00048	0.30208	1.12832	1.29114	1.42174	1.49545	1.59886	1.54950	1.44010
200.00 |	0.00044	0.31827	1.22062	1.40417	1.55427	1.64530	1.79964	1.79051	1.70158
210.00 |	0.00072	0.35356	1.30703	1.49496	1.64722	1.74021	1.89594	1.89067	1.80746
220.00 |	0.00152	0.38889	1.27844	1.43851	1.56837	1.64991	1.79813	1.82056	1.76630
230.00 |	0.00248	0.44803	1.42149	1.59855	1.74582	1.84244	2.04434	2.12216	2.10175
240.00 |	0.00216	0.49906	1.59242	1.78839	1.94715	2.04836	2.22787	2.24279	2.16478
250.00 |	0.00144	0.52050	1.62855	1.81818	1.96794	2.05932	2.19723	2.16775	2.06334
260.00 |	0.00136	0.54416	1.59652	1.75558	1.87324	1.93714	1.98357	1.87170	1.71838
270.00 |	0.00198	0.61418	1.84178	2.04168	2.19386	2.28158	2.39086	2.33501	2.21436
280.00 |	0.00242	0.58946	1.83658	2.03278	2.17525	2.25092	2.29998	2.17696	2.01446
290.00 |	0.00218	0.55412	1.84394	2.06089	2.22199	2.31611	2.40717	2.29322	2.12420
300.00 |	0.00165	0.57765	1.97313	2.22273	2.41412	2.53052	2.68492	2.61341	2.45763
310.00 |	0.00106	0.51828	1.76414	1.97517	2.13005	2.22168	2.29472	2.14191	1.93730
320.00 |	0.00095	0.40856	1.38472	1.54424	1.65978	1.72789	1.77738	1.66429	1.51859
330.00 |	0.00058	0.32015	1.03372	1.14052	1.21405	1.25242	1.25032	1.14149	1.02496
340.00 |	0.00033	0.27356	0.81737	0.89250	0.94424	0.96928	0.96468	0.88719	0.80069
350.00 |	0.00032	0.33644	0.98488	1.07679	1.13811	1.16379	1.13471	1.01300	0.89072
360.00 |	0.00052	0.37400	1.17493	1.31044	1.41129	1.46272	1.49180	1.37959	1.23925

**MODELOPTs:
 CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.35969 (89071021)	40.57067 (89100112)	73.67300 (89060812)	75.67081 (89060812)	75.20667 (89060812)
20.0 |	0.17717 (89020221)	36.17155 (89060615)	71.94111 (89060615)	74.99771 (89060615)	75.99704 (89060615)
30.0 |	0.10360 (89020221)	33.47584 (89083112)	76.65414 (89030415)	84.21648 (89030415)	88.24828 (89030415)
40.0 |	0.03944c (89123021)	38.39402 (89052312)	63.50043 (89052315)	69.62146 (89061618)	74.12548 (89061618)
50.0 |	0.28979c (89123021)	41.97691c (89060312)	83.06971 (89040815)	87.14267 (89040815)	89.36035 (89110912)
60.0 |	0.45648c (89123021)	41.72220c (89060312)	64.82883 (89051712)	69.24817 (89051712)	70.69450 (89051712)
70.0 |	0.15897c (89123021)	51.43567 (89083115)	90.82821 (89083115)	91.36457 (89083115)	89.27274 (89083115)
80.0 |	0.25702c (89081509)	24.48190 (89081512)	58.28419 (89081512)	60.90222 (89081512)	61.26303 (89081512)
90.0 |	0.46829c (89081509)	31.68499 (89051212)	62.81870 (89060315)	68.11405 (89051515)	71.63418 (89051515)
100.0 |	0.19080c (89081509)	51.83801 (89041615)	68.57365 (89041615)	67.46578 (89040715)	71.16076 (89040715)
110.0 |	0.17671c (89032403)	32.15581 (89042715)	56.29543 (89052515)	59.94960 (89052515)	62.63356 (89071118)
120.0 |	0.45791 (89061721)	33.34841 (89041612)	71.64033 (89112115)	76.12282 (89112115)	77.67678 (89112115)
130.0 |	0.29192 (89061721)	32.51867 (89050715)	73.12235 (89112115)	78.33595 (89112115)	80.49650 (89112115)
140.0 |	0.17266 (89082215)	33.45155 (89032515)	56.75616 (89022324)	65.29192 (89022324)	71.17733 (89022324)
150.0 |	0.29057 (89092921)	32.86155 (89082215)	64.25587 (89040615)	65.31365 (89040615)	64.24944 (89040615)
160.0 |	0.35871c (89112103)	33.66284 (89052712)	47.24410 (89050815)	47.88070 (89050815)	47.70576 (89122318)
170.0 |	0.19536c (89031124)	33.05119 (89050815)	65.48592 (89050815)	66.09435 (89050815)	75.53819 (89122403)
180.0 |	0.38729c (89010103)	32.30455 (89061115)	54.05751 (89052015)	55.33315 (89100315)	57.47213 (89100315)
190.0 |	0.20257 (89120424)	26.66940 (89040612)	63.13646 (89012412)	70.73006 (89012412)	75.65798 (89012412)
200.0 |	0.19967 (89120321)	23.60628 (89040612)	61.57416 (89040115)	66.70329 (89040115)	69.08432 (89040115)
210.0 |	0.19786 (89062221)	27.06364 (89052612)	68.50674 (89040115)	75.91190 (89040115)	80.20869 (89040115)
220.0 |	0.42830 (89120124)	38.98853 (89073015)	52.05705 (89110312)	57.32378 (89110312)	60.18688 (89110312)
230.0 |	0.78386 (89120124)	51.20052 (89073015)	77.28614 (89041815)	82.66038 (89041815)	84.50974 (89041815)
240.0 |	0.82019 (89111403)	38.32453 (89073015)	79.58271 (89080512)	84.04797 (89080512)	85.27831 (89080512)
250.0 |	0.36484 (89111403)	30.74957c (89040218)	68.59663 (89080515)	74.74561 (89080515)	77.39709 (89080515)
260.0 |	0.50814c (89092421)	38.06992 (89061715)	81.28513 (89042312)	85.85943 (89042312)	87.54939 (89042312)
270.0 |	0.72757c (89092421)	45.51941 (89090712)	91.24170 (89082315)	92.10166 (89082315)	89.69491 (89082315)
280.0 |	0.39028 (89073106)	35.24959 (89071015)	87.03067 (89072515)	93.55163 (89072515)	96.04892 (89072515)
290.0 |	0.45696 (89062806)	36.30308 (89082312)	79.25028 (89082312)	82.45116 (89082312)	82.84621 (89082312)
300.0 |	0.44020c (89082121)	37.62367 (89082312)	86.42645 (89021515)	92.83234 (89021515)	95.73968 (89021515)
310.0 |	0.30813 (89091221)	43.61086 (89090912)	70.51350 (89072212)	77.67948 (89030412)	81.74183 (89030412)
320.0 |	0.46071 (89091221)	43.55381 (89090912)	66.68449 (89091412)	74.75599 (89091412)	79.63583 (89091412)
330.0 |	0.22767c (89101024)	38.20383 (89090912)	57.83156 (89081812)	62.03001 (89091415)	64.82806 (89091415)
340.0 |	0.33239c (89101024)	35.60335 (89081812)	62.19553 (89081812)	60.59423 (89100715)	65.56155 (89100715)
350.0 |	0.18949 (89050121)	28.86550 (89042412)	51.25583 (89061612)	55.66527 (89061612)	59.55606 (89031512)
360.0 |	0.41809 (89071021)	30.64536 (89042412)	79.49796 (89061315)	89.36463 (89061315)	95.64104 (89061315)

**MODELOPTs:
 CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	76.86121 (89032218)	82.61510 (89032218)	77.32298 (89032218)	68.36961 (89032218)	59.52191 (89032218)
20.0 |	75.62080 (89060615)	67.74667 (89060615)	55.22837 (89060615)	46.91668 (89022118)	43.48475 (89101015)
30.0 |	89.50073 (89030415)	80.05506 (89030415)	61.29152 (89030415)	50.11930 (89032018)	45.69814 (89032018)
40.0 |	76.17806 (89061618)	72.64741 (89061618)	65.32874 (89013018)	61.61647 (89013018)	56.57304 (89013018)
50.0 |	92.87557 (89110912)	89.70911 (89110912)	74.87653 (89110912)	62.28160 (89110912)	53.04453 (89110912)
60.0 |	70.06625 (89071515)	59.58557 (89071515)	57.04936 (89033121)	59.41858 (89033121)	58.52888 (89033121)
70.0 |	85.63385 (89083115)	66.84748 (89083115)	49.71469 (89081615)	39.45638 (89081615)	31.87627 (89081615)
80.0 |	60.11242 (89081512)	49.47544 (89081512)	43.80826 (89101818)	45.80272 (89101818)	45.05075 (89101818)
90.0 |	72.88527 (89051515)	65.86884 (89051515)	55.40054 (89100218)	54.83971 (89100218)	51.97966 (89100218)
100.0 |	71.76325 (89040715)	65.66383 (89040715)	57.63774 (89051218)	51.81192 (89051218)	45.47968 (89051218)
110.0 |	64.77838 (89071118)	63.87577 (89071118)	56.21161 (89071118)	50.10221 (89041118)	45.97053 (89041118)
120.0 |	77.08527 (89112115)	74.99603 (89111615)	68.11768 (89111615)	60.61866 (89081518)	56.08298 (89081518)
130.0 |	80.32758 (89112115)	71.07363 (89022321)	67.74039 (89121312)	61.86783 (89121312)	55.04202 (89121312)
140.0 |	72.86452 (89022324)	70.65704 (89022324)	61.62923 (89122315)	55.76235 (89122315)	49.33743 (89122315)
150.0 |	61.90111 (89040615)	64.86727 (89031006)	70.86384 (89031006)	69.52311 (89031006)	65.15384 (89031006)
160.0 |	50.21727 (89070409)	58.62413 (89070409)	54.87827 (89070409)	53.09253 (89031003)	49.29618 (89031003)
170.0 |	81.02238 (89122403)	90.68154 (89122403)	87.62879 (89122403)	79.12499 (89122403)	69.93085 (89122403)
180.0 |	57.68100 (89100315)	56.61761 (89122409)	61.91084 (89122409)	60.93707 (89122409)	58.96795 (89112921)
190.0 |	77.92722 (89012412)	74.38963 (89012412)	61.76638 (89012412)	50.23181 (89012412)	41.21709 (89012412)
200.0 |	75.17448 (89051209)	87.02993 (89051209)	82.92422 (89051209)	73.51102 (89051209)	64.28159 (89051209)
210.0 |	81.97294 (89040115)	76.12811 (89102512)	62.66480 (89102512)	57.72711 (89111809)	61.18684 (89111809)
220.0 |	61.90593 (89112412)	60.77208 (89112412)	49.89312 (89112412)	44.72889 (89102318)	43.38252 (89102318)
230.0 |	83.83615 (89041815)	70.22839 (89041815)	57.56201 (89070918)	49.38100 (89070918)	48.53792 (89042309)
240.0 |	84.28922 (89080512)	70.99227 (89080512)	56.95278 (89072609)	53.29094 (89120118)	55.54345 (89120118)
250.0 |	77.43185 (89080515)	70.65464 (89092715)	68.00869 (89092715)	60.77198 (89092715)	53.16001 (89092715)
260.0 |	87.16949 (89042312)	75.83364 (89042312)	58.07153 (89042312)	46.29747 (89051912)	42.36654 (89011918)
270.0 |	85.58421 (89053115)	80.90958 (89053115)	64.53080 (89053115)	52.45627 (89092924)	47.73609 (89092924)
280.0 |	95.61001 (89072515)	80.73077 (89072515)	59.12776 (89072515)	50.38413 (89021421)	54.54457 (89021421)
290.0 |	81.34251 (89082312)	69.79798 (89082918)	60.70899 (89082918)	51.37727 (89082918)	43.67508 (89082918)
300.0 |	96.09836 (89021515)	85.20605 (89021515)	70.60805 (89082012)	62.51680 (89082012)	54.40535 (89082012)
310.0 |	83.10783 (89030412)	74.29285 (89030412)	59.62953 (89020512)	53.58641 (89091118)	47.72404 (89091118)
320.0 |	81.96240 (89091412)	77.29957 (89091412)	62.54873 (89091412)	56.68567 (89101115)	57.24098 (89101115)
330.0 |	65.48769 (89091415)	57.38241 (89091415)	46.88393 (89120818)	46.02841 (89120818)	43.03571 (89120818)
340.0 |	68.24480 (89100715)	64.89414 (89100715)	50.93165 (89100715)	38.57213 (89100715)	43.82130 (89112306)
350.0 |	62.77175 (89010615)	69.11259 (89010615)	64.96107 (89010615)	57.40604 (89010615)	49.92293 (89010615)
360.0 |	98.87257 (89061315)	93.74021 (89061315)	79.27702 (89100115)	73.40908 (89100115)	65.94302 (89100115)

**MODELOPTs:
 CONC

RURAL FLAT DFAULT

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

*** NETWORK ID: POLL ; NETWORK TYPE: GRIDPOLR ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.15415c(89071024)	24.21106 (89060816)	43.74746 (89060816)	44.24564 (89060816)	43.40897 (89060816)
20.0 |	0.08910c(89020224)	17.86941 (89050116)	35.58249 (89060616)	37.38082 (89060616)	41.39608c(89121916)
30.0 |	0.05180c(89020224)	19.21228 (89060716)	46.48519 (89060716)	49.07338 (89060716)	49.79996 (89060716)
40.0 |	0.01972c(89123024)	26.01262 (89052316)	48.08277 (89052316)	47.50449 (89052316)	45.78274 (89052316)
50.0 |	0.14489c(89123024)	29.05813 (89052316)	55.88022 (89052316)	55.96118 (89052316)	54.56832 (89052316)
60.0 |	0.22824c(89123024)	22.29626c(89091716)	43.21549 (89051716)	45.55976 (89051716)	46.03350 (89051716)
70.0 |	0.07948c(89123024)	20.35077 (89083116)	37.46696 (89083116)	39.39414 (89071516)	40.02499 (89071516)
80.0 |	0.12851c(89081508)	13.95616 (89081516)	32.88921 (89081516)	34.56908 (89081516)	35.05759 (89081516)
90.0 |	0.23414c(89081508)	18.88257 (89051216)	31.08438 (89081516)	32.11285 (89081516)	31.97186 (89081516)
100.0 |	0.09540c(89081508)	26.08834 (89041616)	38.34491 (89041616)	37.15678 (89041616)	35.35746 (89041616)
110.0 |	0.08835c(89032408)	23.76640 (89041616)	43.46616c(89041116)	47.47513c(89041116)	50.06336c(89041116)
120.0 |	0.17172 (89061724)	19.97660c(89041116)	46.88997c(89041116)	49.30989c(89041116)	50.01855c(89041116)
130.0 |	0.10947 (89061724)	17.55730 (89092116)	42.86259 (89092116)	45.36392 (89092116)	46.14792 (89092116)
140.0 |	0.07126c(89020124)	13.69031c(89052816)	27.25870 (89050216)	28.79826 (89050216)	29.40433 (89022324)
150.0 |	0.10896 (89092924)	12.32310 (89082216)	24.15571 (89040616)	25.96437c(89120516)	28.10091 (89031008)
160.0 |	0.17936c(89112108)	14.48278c(89052716)	33.52298 (89122324)	40.22954 (89122324)	45.57612 (89122324)
170.0 |	0.09768c(89031124)	15.19545c(89052716)	34.95920 (89031016)	38.66372 (89031016)	40.85767 (89031016)
180.0 |	0.19364c(89010108)	17.98919c(89052716)	39.22219 (89031016)	44.21980 (89031016)	47.53594 (89031016)
190.0 |	0.09481c(89100908)	20.69285c(89052716)	46.96346 (89012416)	53.50133 (89012416)	58.14043 (89012416)
200.0 |	0.07499 (89120324)	16.22507c(89052716)	34.14524c(89052716)	34.71040 (89040116)	36.03119 (89040116)
210.0 |	0.14596 (89062224)	13.01117 (89040116)	43.00402 (89040116)	47.64717 (89040116)	50.70071 (89102516)
220.0 |	0.17885c(89110208)	19.49426c(89073016)	35.39865 (89042216)	36.72425 (89110316)	39.30115 (89110316)
230.0 |	0.34113c(89111408)	25.60026c(89073016)	47.83921 (89041816)	51.85524 (89041816)	53.86658 (89041816)
240.0 |	0.58069c(89111408)	22.31158 (89041816)	58.49987 (89041816)	61.99532 (89041816)	62.90509 (89041816)
250.0 |	0.29721c(89111408)	19.58567 (89080516)	53.14247 (89080516)	56.32412 (89080516)	57.12109 (89080516)
260.0 |	0.22845c(89070308)	16.53836 (89061716)	39.81429 (89080516)	43.15430 (89080516)	44.65152 (89080516)
270.0 |	0.31948c(89092424)	22.06526 (89090716)	49.84299 (89072516)	53.96381 (89072516)	56.16277 (89072516)
280.0 |	0.19496c(89090308)	20.25715 (89052916)	49.18110 (89072516)	52.30759 (89072516)	53.42757 (89072516)
290.0 |	0.19493c(89090308)	14.90999 (89070916)	40.30912 (89070916)	42.94231 (89070916)	43.98038 (89070916)
300.0 |	0.22010c(89082124)	17.84650 (89072316)	43.87461 (89072316)	46.20540 (89072316)	46.74505 (89072316)
310.0 |	0.14385c(89103108)	24.01494c(89090916)	46.13663c(89090916)	46.66413c(89090916)	46.38982c(89090916)
320.0 |	0.19749c(89091224)	22.93716c(89090916)	57.96383c(89091416)	65.04105c(89091416)	69.40519c(89091416)
330.0 |	0.18076c(89101024)	23.88614c(89081816)	38.08750c(89091416)	41.67324c(89091416)	43.39693c(89091416)
340.0 |	0.18667c(89101024)	28.99866c(89081816)	39.26377c(89081816)	34.16688c(89081816)	33.05848 (89043016)
350.0 |	0.07106 (89050124)	18.39283 (89050116)	32.81533 (89050116)	32.96001 (89050116)	33.82782 (89032316)
360.0 |	0.17918c(89071024)	12.92877c(89082424)	39.66111 (89061316)	44.19144 (89061316)	46.83900 (89061316)

**MODELOPTs:

CONC RURAL FLAT DEFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	42.93798 (89060916)	42.37794 (89060916)	36.01810 (89060916)	29.62910 (89060916)	24.45575 (89060916)
20.0 |	44.14476c(89121916)	48.42846c(89121916)	46.68135c(89121916)	42.67439c(89121916)	38.34152c(89121916)
30.0 |	49.21220 (89060716)	41.17965 (89060716)	32.02048 (89041516)	30.34750 (89041516)	27.77839 (89041516)
40.0 |	43.43079 (89052316)	37.23408 (89060716)	31.92956 (89033116)	29.46386 (89033116)	28.52600c(89040824)
50.0 |	52.29348 (89052316)	44.72852 (89110916)	38.81257 (89110916)	33.01087 (89110916)	28.36567 (89110916)
60.0 |	45.23726 (89051716)	37.06752 (89051716)	27.89520 (89040916)	29.13127 (89010324)	29.96379 (89010324)
70.0 |	39.35448 (89071516)	31.54730 (89071516)	23.02991 (89040916)	18.32211 (89062516)	17.94699c(89050524)
80.0 |	34.55107 (89081516)	29.21334 (89081516)	22.12730 (89081516)	18.11797 (89071716)	18.07871c(89101824)
90.0 |	31.07835 (89081516)	25.33558 (89051516)	25.10741c(89071624)	24.50750 (89070316)	23.53851 (89070316)
100.0 |	33.28451 (89041616)	27.57146 (89040716)	24.08857 (89101416)	20.98806 (89101416)	18.51619 (89040724)
110.0 |	51.09714c(89041116)	48.90710c(89041116)	41.38840c(89041116)	34.45437c(89041116)	29.12942c(89041116)
120.0 |	49.47792c(89041116)	42.15385c(89041116)	32.10454c(89041116)	27.02527c(89031924)	25.79425c(89031924)
130.0 |	45.71404 (89092116)	50.11224 (89121316)	48.39149 (89121316)	43.61919 (89121316)	38.47107 (89121316)
140.0 |	31.27094 (89120916)	39.01386 (89120916)	41.66661 (89120916)	40.36674 (89120916)	37.53333 (89120916)
150.0 |	31.45465 (89031008)	40.49201 (89031008)	44.11028 (89031008)	43.15487 (89031008)	40.33756 (89031008)
160.0 |	47.92745 (89122324)	50.33053 (89122324)	46.12650 (89122324)	40.17567 (89122324)	34.58888 (89122324)
170.0 |	41.54131 (89031016)	38.02976 (89031016)	37.27006 (89121008)	37.60382 (89121008)	35.98645 (89121008)
180.0 |	48.85987 (89031016)	46.75105 (89100316)	39.52523 (89102616)	33.69996 (89122408)	34.61309 (89112924)
190.0 |	60.93406 (89012416)	61.34450 (89012416)	52.69773 (89012416)	43.33907 (89012416)	35.55055 (89012416)
200.0 |	36.25511 (89040116)	40.64944 (89102316)	40.08030 (89102316)	36.77569 (89102316)	34.59199 (89113008)
210.0 |	53.04697 (89102516)	52.97213 (89102516)	44.92371 (89102516)	36.56295 (89102516)	29.78250 (89102516)
220.0 |	40.46916 (89110316)	38.94718 (89110316)	35.52225 (89030816)	35.28184 (89030816)	33.63234 (89030816)
230.0 |	54.05531 (89041816)	47.86980 (89041816)	37.62741c(89062124)	41.08951c(89062124)	42.56636c(89062124)
240.0 |	62.00867 (89041816)	50.99746 (89041816)	39.07745 (89113016)	33.58536 (89113016)	28.49895 (89113016)
250.0 |	56.25934 (89080516)	51.81554 (89111216)	42.79435 (89111216)	36.53286 (89101216)	34.19481 (89101208)
260.0 |	45.26154 (89053116)	41.70612 (89053116)	34.64093 (89051916)	28.96521 (89051916)	24.31879 (89051916)
270.0 |	56.36695 (89072516)	50.41584 (89072516)	40.23156 (89072516)	37.96671 (89112516)	35.79951 (89112516)
280.0 |	52.91000 (89072516)	44.71303 (89072516)	33.36348 (89072516)	27.29431 (89050416)	27.07423 (89021424)
290.0 |	43.89397 (89070916)	39.17482 (89082916)	34.08951 (89112816)	30.80790 (89112816)	27.35867 (89112816)
300.0 |	46.05375 (89072316)	40.76711 (89082816)	34.28837 (89082816)	30.64370 (89032916)	32.47232c(89022808)
310.0 |	45.51164c(89090916)	43.86771 (89091016)	42.74735 (89091016)	38.10007 (89091016)	33.02946 (89091016)
320.0 |	71.48409c(89091416)	67.57380c(89091416)	55.20213c(89091416)	48.52934 (89101116)	45.42982 (89101116)
330.0 |	43.69626c(89091416)	37.94306c(89091416)	28.15814c(89091416)	20.93884c(89091516)	18.16285c(89090924)
340.0 |	33.90659 (89043016)	31.21098 (89043016)	24.32747 (89043016)	21.68648c(89101024)	23.30039c(89101024)
350.0 |	35.59979 (89032316)	37.45421 (89032316)	34.35988 (89032316)	29.93157 (89032316)	25.76041 (89032316)
360.0 |	47.95428 (89061316)	44.79284 (89123116)	41.15418 (89123116)	35.64567 (89123116)	30.75314 (89033016)

**MODELOPTs:

CONC RURAL FLAT DFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3500.00

10.0 |	21.55046 (89022208)
20.0 |	34.25157c(89121916)
30.0 |	25.03691 (89041516)
40.0 |	28.63482c(89040824)
50.0 |	24.70251 (89110916)
60.0 |	29.65605 (89010324)
70.0 |	17.29020c(89050524)
80.0 |	17.42542c(89101824)
90.0 |	21.73548 (89070316)
100.0 |	17.68968 (89040724)
110.0 |	25.18168 (89042524)
120.0 |	23.96524c(89031924)
130.0 |	33.76999 (89121316)
140.0 |	34.20177 (89120916)
150.0 |	36.86683 (89031008)
160.0 |	29.84370 (89122324)
170.0 |	33.42991 (89121008)
180.0 |	34.72383 (89112924)
190.0 |	29.43739 (89012416)
200.0 |	32.26487 (89113008)
210.0 |	26.02779 (89072408)
220.0 |	31.71297 (89110508)
230.0 |	42.83442c(89062124)
240.0 |	24.97807c(89091808)
250.0 |	34.88072 (89101208)
260.0 |	20.57921 (89051916)
270.0 |	32.90567 (89112516)
280.0 |	27.94548 (89021424)
290.0 |	24.32798 (89112816)
300.0 |	35.69826c(89022808)
310.0 |	29.52336c(89091224)
320.0 |	41.84786 (89101116)
330.0 |	20.04894c(89090924)
340.0 |	24.41393 (89112308)
350.0 |	22.21314 (89032316)
360.0 |	27.08263 (89033016)

**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.04905c (89071024)	8.93146c (89060824)	17.46669c (89032224)	19.81369c (89032224)	21.51574c (89032224)
20.0 |	0.02970c (89020224)	6.33028 (89050124)	13.20673 (89050124)	14.46869c (89121924)	16.46259c (89121924)
30.0 |	0.01727c (89020224)	6.48701 (89060724)	16.38891 (89060724)	17.55346 (89060724)	18.11413 (89060724)
40.0 |	0.00657c (89123024)	11.61407c (89052324)	22.03891c (89052324)	22.00924c (89052324)	21.50059c (89052324)
50.0 |	0.04830c (89123024)	12.92576c (89052324)	24.90981c (89052324)	24.95289c (89052324)	24.33994c (89052324)
60.0 |	0.07608c (89123024)	8.45737c (89060324)	20.40908c (89040924)	22.02663c (89040924)	22.90826c (89040924)
70.0 |	0.02649c (89123024)	8.62168c (89083124)	17.60071c (89071524)	19.11570c (89071524)	19.82350c (89071524)
80.0 |	0.04330c (89081524)	6.22486c (89081524)	14.63483c (89081524)	15.38133c (89081524)	15.59867c (89081524)
90.0 |	0.07853c (89081524)	6.53848c (89081524)	14.51273c (89081524)	15.18441c (89081524)	15.37412c (89081524)
100.0 |	0.03188c (89081524)	11.59500c (89041624)	17.04301c (89041624)	16.51490c (89041624)	16.97711c (89040724)
110.0 |	0.02719c (89032424)	10.61348c (89041624)	17.45470c (89041124)	19.39571c (89041124)	20.82056c (89041124)
120.0 |	0.06542c (89061724)	7.39509c (89041124)	17.61546c (89041124)	18.56560c (89041124)	18.88747c (89041124)
130.0 |	0.04170c (89061724)	5.85526 (89092124)	14.39199c (89070424)	15.33895c (89070424)	15.68880c (89070424)
140.0 |	0.02878c (89082224)	5.47679c (89082224)	11.40518c (89070424)	12.00362 (89120924)	14.64576 (89120924)
150.0 |	0.03632 (89092924)	5.47693c (89082224)	12.50530c (89040624)	13.46643c (89040624)	14.07222c (89040624)
160.0 |	0.05979c (89112124)	5.33576c (89052724)	14.01462 (89122324)	17.01891 (89122324)	19.52678 (89122324)
170.0 |	0.02664c (89031124)	5.59832c (89052724)	14.02805 (89031024)	15.95472 (89031024)	17.35544 (89031024)
180.0 |	0.06455c (89010124)	6.62760c (89052724)	14.96090 (89100324)	17.32387 (89100324)	19.18344 (89100324)
190.0 |	0.02869c (89071124)	7.62368c (89052724)	17.64420c (89012424)	20.38108c (89012424)	22.53713c (89012424)
200.0 |	0.03000c (89120324)	5.97766c (89052724)	12.57983c (89052724)	12.14996c (89052724)	13.66078 (89102824)
210.0 |	0.04892 (89062224)	4.69823 (89040124)	15.78235 (89040124)	17.58479 (89040124)	18.70076 (89040124)
220.0 |	0.05962c (89110224)	6.60616c (89073024)	14.24922c (89042224)	14.83949c (89110324)	15.89746c (89110324)
230.0 |	0.10773c (89111424)	8.53390c (89073024)	20.65940c (89041824)	22.50448c (89041824)	23.53550c (89041824)
240.0 |	0.18338c (89111424)	9.45202c (89041824)	24.79328c (89041824)	26.31004c (89041824)	26.74364c (89041824)
250.0 |	0.09392c (89111424)	8.70494c (89080524)	23.61956c (89080524)	25.03341c (89080524)	25.38748c (89080524)
260.0 |	0.07674c (89092424)	6.41449c (89061724)	17.74843c (89080524)	19.23499c (89080524)	19.90269c (89080524)
270.0 |	0.11188c (89092424)	9.29064c (89090724)	18.23138c (89072524)	19.75788c (89072524)	20.59100c (89072524)
280.0 |	0.05570c (89090324)	7.43006c (89052924)	17.88404c (89072524)	19.02094c (89072524)	19.42821c (89072524)
290.0 |	0.05993c (89062824)	6.54905c (89082324)	18.79099c (89082924)	21.38814c (89082924)	23.25188c (89082924)
300.0 |	0.07234c (89082824)	7.93441c (89072324)	19.52205c (89072324)	20.55704c (89072324)	20.79641c (89072324)
310.0 |	0.05214c (89091224)	8.86341c (89090924)	17.20475c (89090924)	18.43253c (89091224)	20.65204c (89091224)
320.0 |	0.07680c (89091224)	8.47154c (89090924)	24.05566c (89091424)	27.25290c (89091424)	29.42525c (89091424)
330.0 |	0.05501c (89101024)	8.80016c (89081824)	15.93587c (89091424)	17.64159c (89091424)	18.65228c (89091424)
340.0 |	0.05681c (89101024)	10.68372c (89081824)	14.46560c (89081824)	13.99026c (89043024)	15.06047c (89043024)
350.0 |	0.02567 (89050124)	6.64754c (89081824)	11.65216 (89050124)	12.48088c (89010624)	14.19483c (89010624)
360.0 |	0.05897c (89123124)	5.11479c (89061324)	17.62716c (89061324)	19.64064c (89061324)	20.81733c (89061324)

**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	22.06922c (89032224)	21.71266c (89032224)	19.16535c (89032224)	16.40852c (89032224)	14.00378c (89032224)
20.0 |	17.55572c (89121924)	19.29429c (89121924)	18.67363c (89121924)	17.14861c (89121924)	15.47906c (89121924)
30.0 |	18.14057 (89060724)	16.16348 (89060724)	14.23132c (89041524)	13.48778c (89041524)	12.34595c (89041524)
40.0 |	20.65045c (89052324)	16.81027c (89052324)	14.40161c (89013024)	13.22399c (89013024)	12.43618c (89040824)
50.0 |	23.32984c (89052324)	21.57310c (89110924)	19.91369c (89110924)	18.03602c (89110924)	16.49078c (89110924)
60.0 |	23.21485c (89040924)	21.25407c (89040924)	19.03680c (89033124)	17.77846c (89033124)	16.29400c (89033124)
70.0 |	19.82369c (89071524)	17.29090c (89071524)	13.57164c (89071524)	10.82524c (89071524)	8.86791c (89071524)
80.0 |	15.37322c (89081524)	13.00037c (89081524)	10.25113 (89051024)	10.26604 (89051024)	9.85194 (89051024)
90.0 |	15.19381c (89081524)	13.40053c (89081524)	11.98567c (89031224)	10.47978c (89031224)	9.65817c (89052424)
100.0 |	17.58426c (89040724)	17.98204c (89040724)	16.81556c (89040724)	15.17463c (89040724)	13.64334c (89040724)
110.0 |	21.51453c (89041124)	21.60568c (89041124)	19.26641c (89041124)	16.69424c (89041124)	14.51652c (89041124)
120.0 |	18.72579c (89041124)	17.86433c (89040624)	16.33316c (89040624)	14.75287c (89111624)	13.46620c (89050624)
130.0 |	15.60706c (89070424)	16.76319 (89121324)	16.17498 (89121324)	14.57254 (89121324)	12.84809 (89121324)
140.0 |	16.31119 (89120924)	20.78626 (89120924)	22.61808 (89120924)	22.17055 (89120924)	20.76569 (89120924)
150.0 |	14.20127c (89040624)	13.64680 (89102924)	14.71468 (89031024)	14.39128 (89031024)	13.56472 (89102924)
160.0 |	20.73665 (89122324)	22.52063 (89122324)	21.27961 (89122324)	18.92481 (89122324)	16.52947 (89122324)
170.0 |	17.99598 (89031024)	17.85789 (89031024)	18.67831 (89122424)	18.32546 (89122424)	17.48041 (89122424)
180.0 |	20.29029 (89100324)	21.73304 (89100324)	20.92569 (89100324)	20.50349 (89030924)	19.92556 (89030924)
190.0 |	23.96858c (89012424)	26.07377c (89012424)	25.36117c (89012424)	23.6006c (89012424)	21.87671c (89012424)
200.0 |	14.81635 (89102824)	17.60105c (89102324)	18.56700c (89102324)	18.05846c (89102324)	17.03355c (89102324)
210.0 |	19.75758 (89102524)	21.20478 (89102524)	20.21614 (89102524)	18.45133 (89102524)	16.84753 (89102524)
220.0 |	16.38338c (89110324)	15.83999c (89110324)	16.04047c (89030824)	15.75095c (89030824)	14.85771c (89030824)
230.0 |	23.79589c (89041824)	22.09624c (89041824)	19.17406c (89041824)	17.48806 (89012524)	17.18730 (89012524)
240.0 |	26.40525c (89041824)	21.91591c (89041824)	22.22803 (89012124)	22.65183 (89012124)	22.02577 (89012124)
250.0 |	25.00439c (89080524)	23.18598 (89101224)	23.84635 (89101224)	22.95530 (89101224)	21.75169 (89101224)
260.0 |	19.95683c (89080524)	18.18634 (89051924)	17.36463 (89051924)	16.22394 (89051924)	15.06821 (89051924)
270.0 |	20.69959c (89072524)	20.86238c (89081924)	22.53137c (89081924)	22.71459c (89081924)	22.36575c (89081924)
280.0 |	19.24000c (89072524)	16.25928c (89072524)	14.86536 (89050424)	14.49624 (89021424)	15.06552 (89021424)
290.0 |	24.37745c (89082924)	24.72621c (89082924)	21.74433c (89082924)	18.54863c (89082924)	15.93692c (89082924)
300.0 |	20.48815c (89072324)	22.69524c (89091224)	22.57700c (89082924)	21.36108c (89082924)	19.87553c (89082924)
310.0 |	22.23177c (89091224)	24.92722c (89091224)	24.69581c (89091224)	23.19739c (89091224)	21.58817c (89091224)
320.0 |	30.68323c (89091424)	30.65295c (89091424)	28.87568c (89101124)	29.30584c (89101124)	28.65858c (89101124)
330.0 |	19.06007c (89091424)	17.86077c (89091424)	14.90016c (89091424)	12.50199c (89120824)	11.92290c (89120824)
340.0 |	15.62793c (89043024)	15.41325c (89043024)	13.63555c (89043024)	11.99208c (89043024)	10.87455c (89060824)
350.0 |	15.23917c (89010624)	16.58514c (89010624)	15.26864c (89010624)	13.22959c (89010624)	11.31331c (89010624)
360.0 |	21.89980c (89123124)	24.88676c (89123124)	24.64893c (89123124)	22.80764c (89123124)	20.71503c (89123124)

**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	98.87257	(89061315)	AT	(134277.00, 203441.00)	GP	6.	95.61001	(89072515)	AT	(133193.72, 202532.02)	GP
2.	96.09836	(89021515)	AT	(133324.38, 202891.00)	GP	7.	93.74021	(89061315)	AT	(134277.00, 203841.00)	GP
3.	96.04892	(89072515)	AT	(133292.19, 202514.64)	GP	8.	93.55163	(89072515)	AT	(133390.67, 202497.28)	GP
4.	95.73968	(89021515)	AT	(133410.97, 202841.00)	GP	9.	92.87557	(89110912)	AT	(135119.66, 203048.06)	GP
5.	95.64104	(89061315)	AT	(134277.00, 203341.00)	GP	10.	92.83234	(89021515)	AT	(133497.58, 202791.00)	GP

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

*** ISCST3 - VERSION 00101 ***

*** 1989 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:31:01
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**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	71.48409c	(89091416)	AT	(133569.94, 203183.66)	GP	6.	62.00867	(89041816)	AT	(133324.38, 201791.00)	GP
2.	69.40519c	(89091416)	AT	(133634.22, 203107.05)	GP	7.	61.99532	(89041816)	AT	(133497.58, 201891.00)	GP
3.	67.57380c	(89091416)	AT	(133312.81, 203490.06)	GP	8.	61.34450	(89012416)	AT	(134016.53, 200863.78)	GP
4.	65.04105c	(89091416)	AT	(133698.48, 203030.44)	GP	9.	60.93406	(89012416)	AT	(134085.98, 201257.72)	GP
5.	62.90509	(89041816)	AT	(133410.97, 201841.00)	GP	10.	58.49987	(89041816)	AT	(133584.19, 201941.00)	GP

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

*** ISCST3 - VERSION 00101 ***

*** 1989 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:31:01

**MODELOPTs:

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CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE
1.	30.68323c	(89091424)	AT	(133569.94, 203183.66)	GP	6.	28.65858c	(89101124)	AT	(132348.64, 204639.14)	GP
2.	30.65295c	(89091424)	AT	(133312.81, 203490.06)	GP	7.	28.58834c	(89091324)	AT	(133312.81, 203490.06)	GP
3.	29.42525c	(89091424)	AT	(133634.22, 203107.05)	GP	8.	27.47767c	(89091324)	AT	(133569.94, 203183.66)	GP
4.	29.30584c	(89101124)	AT	(132670.03, 204256.11)	GP	9.	27.34369c	(89101124)	AT	(132027.25, 205022.16)	GP
5.	28.87568c	(89101124)	AT	(132991.42, 203873.09)	GP	10.	27.25290c	(89091424)	AT	(133698.48, 203030.44)	GP

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

**MODELOPTs:
CONC

RURAL FLAT DFAULT

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	2.68492 AT (132977.97, 203091.00,	0.00, 0.00)	GP POL1
	2ND HIGHEST VALUE IS	2.61341 AT (132544.95, 203341.00,	0.00, 0.00)	GP POL1
	3RD HIGHEST VALUE IS	2.53052 AT (133324.38, 202891.00,	0.00, 0.00)	GP POL1
	4TH HIGHEST VALUE IS	2.45763 AT (132111.94, 203591.00,	0.00, 0.00)	GP POL1
	5TH HIGHEST VALUE IS	2.41412 AT (133410.97, 202841.00,	0.00, 0.00)	GP POL1
	6TH HIGHEST VALUE IS	2.40717 AT (132867.47, 202854.03,	0.00, 0.00)	GP POL1
	7TH HIGHEST VALUE IS	2.39086 AT (132777.00, 202341.00,	0.00, 0.00)	GP POL1
	8TH HIGHEST VALUE IS	2.33501 AT (132277.00, 202341.00,	0.00, 0.00)	GP POL1
	9TH HIGHEST VALUE IS	2.31611 AT (133243.34, 202717.22,	0.00, 0.00)	GP POL1
	10TH HIGHEST VALUE IS	2.31054 AT (131678.92, 203841.00,	0.00, 0.00)	GP POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1989 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:31:01
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**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE SUMMARY OF HIGHEST 3-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 98.87257	ON 89061315	AT (134277.00, 203441.00, 0.00, 0.00)	GP	POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1989 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:31:01
PAGE 23

**MODELOPTs:

CONC RURAL FLAT DFAULT

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR	(XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	71.48409c ON 89091416:	AT (	133569.94, 203183.66, 0.00,	0.00)	GP POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1989 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:31:01

**MODELOPTs:

PAGE 24

CONC RURAL FLAT DEFAULT

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 30.68323c	ON 89091424	AT (133569.94, 203183.66, 0.00,	0.00)	GP POL1

*** RECEPTOR TYPES:

- GC = GRIDCART
- GP = GRIDPOLR
- DC = DISCCART
- DP = DISCPOLR
- BD = BOUNDARY

*** ISCST3 - VERSION 00101 ***

*** 1989 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:31:01
PAGE 25

**MODELOPTs:

CONC RURAL FLAT DFAULT

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

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

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 1654 Informational Message(s)

A Total of 1654 Calm Hours Identified

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

***** WARNING MESSAGES *****
SO W320 12 PPARM :Input Parameter May Be Out-of-Range for Parameter VS

*** ISCST3 Finishes Successfully ***

1990

CO STARTING
TITLEONE 1990 Collier County Landfill SO2 Modeling 12/00
TITLETWO ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00
MODELOPT DFAULT CONC RURAL
AVERTIME 3 8 24 PERIOD
POLLUTID SO2
RUNORNOT RUN
CO FINISHED

SO STARTING
LOCATION FLARESTK POINT 134277 202341
SRCPARAM FLARESTK 50.4 20.8 1033. 67.4 0.76
SRCGROUP ALL
SO FINISHED

RE STARTING
GRIDPOLR POL1 STA
POL1 ORIG 134277.0 202341.0
POL1 DIST 200. 500. 800. 900. 1000. 1100. 1500. 2000.
POL1 DIST 2500. 3000. 3500.
POL1 GDIR 36 10. 10.
POL1 END
RE FINISHED

ME STARTING
INPUTFIL Fmypre90.asc (4I2,F9.4,F9.4,F6.1,I2,2(1X,F6.1))
ANEMHGHT 6.0 meters
SURFDATA 12835 1990 FTMYERS
UAIRDATA 12842 1990 TAMPA
ME FINISHED

OU STARTING
RECTABLE ALLAVE FIRST
MAXTABLE ALLAVE 10
OU FINISHED

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

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

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

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

***** WARNING MESSAGES *****

SO W320 12 PPARAM :Input Parameter May Be Out-of-Range for Parameter VS

**MODELOPTs:

PAGE 1

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 3 Short Term Average(s) of: 3-HR 8-HR 24-HR
and Calculates PERIOD Averages

**This Run Includes: 1 Source(s); 1 Source Group(s); and 396 Receptor(s)

**The Model Assumes A Pollutant Type of: SO2

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

**Output Options Selected:

- Model Outputs Tables of PERIOD Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- 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) = 6.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC
Output Units = MICROGRAMS/M**3

; Emission Rate Unit Factor = 0.10000E+07

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

**Input Runstream File: nlflat90.inp
**Output Print File: nlflat90.out

**MODELOPTs:

CONC

RURAL FLAT

DEFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	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
FLARESTK	0	0.50400E+02	134277.0	202341.0	0.0	20.80	1033.00	67.40	0.76	NO		

*** ISCST3 - VERSION 00101 ***

*** 1990 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:37:07

**MODELOPTs:

PAGE 3

CONC RURAL FLAT DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID SOURCE IDs

ALL FLARESTK,

**MODELOPTs:
CONC

RURAL FLAT DEFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

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

*** ORIGIN FOR POLAR NETWORK ***

X-ORIG = 134277.00 ; Y-ORIG = 202341.00 (METERS)

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

200.0, 500.0, 800.0, 900.0, 1000.0, 1100.0, 1500.0, 2000.0, 2500.0, 3000.0,
3500.0,

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

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

**MODELOPTs:

CONC RURAL FLAT DFAULT

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

FILE: Fmypre90.asc

FORMAT: (4I2,F9.4,F9.4,F6.1,I2,2(1X,F6.1))

SURFACE STATION NO.: 12835

UPPER AIR STATION NO.: 12842

NAME: FTMYERS

NAME: TAMPA

YEAR: 1990

YEAR: 1990

YR	MN	DY	HR	FLOW VECTOR	SPEED (M/S)	TEMP (K)	STAB CLASS	MIXING HEIGHT (M)		USTAR (M/S)	M-O LENGTH (M)	Z-O (M)	IPCODE	PRATE (mm/HR)
								RURAL	URBAN					
90	01	01	01	181.0	1.00	291.5	7	0.0	335.0	0.0000	0.0	0.0000	0	0.00
90	01	01	02	358.0	2.06	291.5	6	0.0	335.0	0.0000	0.0	0.0000	0	0.00
90	01	01	03	4.0	2.06	292.0	5	0.0	335.0	0.0000	0.0	0.0000	0	0.00
90	01	01	04	3.0	2.06	292.0	5	0.0	335.0	0.0000	0.0	0.0000	0	0.00
90	01	01	05	23.0	2.57	292.6	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	06	22.0	2.06	292.6	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	07	35.0	2.06	292.6	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	08	33.0	4.12	292.6	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	09	47.0	3.09	292.6	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	10	51.0	4.12	293.2	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	11	94.0	3.09	294.3	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	12	86.0	3.09	295.4	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	13	153.0	5.14	296.5	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	14	149.0	6.17	298.2	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	15	162.0	5.14	296.5	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	16	174.0	5.14	296.5	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	17	181.0	5.14	294.8	4	0.0	0.0	0.0000	0.0	0.0000	0	0.00
90	01	01	18	197.0	4.12	293.7	4	19.8	19.8	0.0000	0.0	0.0000	0	0.00
90	01	01	19	214.0	4.12	292.0	5	84.2	55.1	0.0000	0.0	0.0000	0	0.00
90	01	01	20	187.0	6.17	290.9	4	148.7	148.7	0.0000	0.0	0.0000	0	0.00
90	01	01	21	210.0	6.17	289.3	4	213.1	213.1	0.0000	0.0	0.0000	0	0.00
90	01	01	22	222.0	5.14	287.6	5	277.6	181.6	0.0000	0.0	0.0000	0	0.00
90	01	01	23	220.0	5.14	285.9	5	342.1	223.8	0.0000	0.0	0.0000	0	0.00
90	01	01	24	200.0	5.14	285.4	5	406.5	266.0	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.

**MODELOPTs:

CONC

RURAL FLAT DEFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL
 INCLUDING SOURCE(S): FLARESTK, ***

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)								
	200.00	500.00	800.00	900.00	1000.00	1100.00	1500.00	2000.00	2500.00
10.00 |	0.00022	0.28153	0.87401	0.97500	1.05419	1.09474	1.13294	1.06952	0.97585
20.00 |	0.00006	0.32474	0.98054	1.09947	1.19806	1.25271	1.33542	1.29054	1.18942
30.00 |	0.00008	0.31180	0.82679	0.89954	0.95692	0.98463	1.00552	0.94164	0.85129
40.00 |	0.00015	0.40268	1.05191	1.13763	1.19894	1.22512	1.21332	1.10551	0.98315
50.00 |	0.00010	0.52235	1.39859	1.50971	1.58083	1.60576	1.53754	1.34810	1.16603
60.00 |	0.00009	0.52354	1.47990	1.61281	1.70128	1.74121	1.69919	1.50525	1.30883
70.00 |	0.00007	0.41098	1.08846	1.16313	1.20564	1.21578	1.12948	0.95045	0.79072
80.00 |	0.00014	0.40271	0.98848	1.04891	1.08366	1.09128	1.02167	0.87693	0.74504
90.00 |	0.00037	0.44698	1.09894	1.17946	1.23366	1.25407	1.21985	1.09163	0.95802
100.00 |	0.00041	0.38134	1.05467	1.15847	1.23795	1.27415	1.29432	1.20527	1.08655
110.00 |	0.00014	0.31313	0.89092	0.98156	1.05381	1.08859	1.13083	1.08835	1.00830
120.00 |	0.00021	0.35962	1.06837	1.19545	1.29778	1.34960	1.41608	1.35592	1.24495
130.00 |	0.00036	0.30537	0.86974	0.96135	1.03387	1.06874	1.10798	1.06016	0.97668
140.00 |	0.00036	0.26340	0.81148	0.90766	0.98532	1.02626	1.08835	1.06886	1.00807
150.00 |	0.00028	0.24085	0.72429	0.80254	0.86264	0.89361	0.92602	0.89391	0.83563
160.00 |	0.00021	0.24452	0.73380	0.81501	0.87750	0.91072	0.94438	0.90520	0.84025
170.00 |	0.00010	0.24471	0.70745	0.77636	0.82708	0.85127	0.85418	0.78297	0.69838
180.00 |	0.00029	0.30116	0.88750	0.98936	1.07290	1.12115	1.20040	1.18560	1.11764
190.00 |	0.00069	0.29762	0.88637	0.98245	1.05759	1.09797	1.13843	1.07695	0.97994
200.00 |	0.00111	0.31914	1.06068	1.20177	1.31857	1.38759	1.50568	1.49667	1.42048
210.00 |	0.00150	0.37488	1.29102	1.47231	1.62288	1.71363	1.88100	1.90154	1.83338
220.00 |	0.00221	0.50276	1.71038	1.94607	2.13689	2.25047	2.44838	2.47496	2.40153
230.00 |	0.00246	0.64471	2.19204	2.49961	2.75253	2.90823	3.20286	3.27317	3.19899
240.00 |	0.00228	0.78636	2.70352	3.09246	3.41428	3.61101	3.98896	4.07459	3.97084
250.00 |	0.00162	0.77526	2.54866	2.88669	3.15793	3.31540	3.57613	3.58435	3.45270
260.00 |	0.00087	0.59268	1.93769	2.16901	2.34351	2.43374	2.50786	2.37523	2.18423
270.00 |	0.00077	0.57354	2.04773	2.34165	2.58014	2.72060	2.95147	2.92853	2.78172
280.00 |	0.00066	0.47103	1.59717	1.80306	1.96630	2.06121	2.19248	2.13135	1.99346
290.00 |	0.00091	0.49684	1.58556	1.77449	1.92051	2.00381	2.09813	2.01198	1.86720
300.00 |	0.00122	0.51941	1.61354	1.80364	1.95256	2.04093	2.16338	2.11105	1.98672
310.00 |	0.00092	0.42016	1.27901	1.41503	1.51672	1.57087	1.61415	1.52938	1.40930
320.00 |	0.00069	0.26791	0.79768	0.87319	0.92722	0.95491	0.96816	0.91650	0.84842
330.00 |	0.00037	0.18173	0.61456	0.68840	0.74467	0.77678	0.81085	0.77593	0.72090
340.00 |	0.00018	0.14859	0.53378	0.60533	0.66066	0.69186	0.72592	0.69349	0.64326
350.00 |	0.00039	0.17034	0.54566	0.60926	0.65593	0.67966	0.68651	0.62751	0.55950
360.00 |	0.00050	0.23956	0.78971	0.89281	0.97531	1.02161	1.08750	1.06115	0.99726

**MODELOPTs:
 CONC

RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
 (DEGREES) | 3000.00 3500.00

10.00 |	0.88744	0.80504
20.00 |	1.08262	0.98016
30.00 |	0.76425	0.68474
40.00 |	0.87490	0.78068
50.00 |	1.01666	0.89369
60.00 |	1.14690	1.01233
70.00 |	0.66557	0.56768
80.00 |	0.64026	0.55597
90.00 |	0.84568	0.75094
100.00 |	0.97644	0.87748
110.00 |	0.92771	0.84977
120.00 |	1.13451	1.02991
130.00 |	0.89300	0.81299
140.00 |	0.94301	0.87473
150.00 |	0.77883	0.72284
160.00 |	0.77852	0.71929
170.00 |	0.62379	0.55825
180.00 |	1.04235	0.96477
190.00 |	0.88773	0.80314
200.00 |	1.33608	1.24633
210.00 |	1.75073	1.65316
220.00 |	2.31810	2.21291
230.00 |	3.10346	2.97140
240.00 |	3.83463	3.65624
250.00 |	3.30570	3.13160
260.00 |	2.00899	1.84443
270.00 |	2.62314	2.45276
280.00 |	1.85831	1.72453
290.00 |	1.73402	1.60699
300.00 |	1.86634	1.74457
310.00 |	1.30178	1.19958
320.00 |	0.78931	0.73360
330.00 |	0.67090	0.62297
340.00 |	0.59704	0.55341
350.00 |	0.50197	0.45250
360.00 |	0.93256	0.86714

**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.16136 (90121921)	30.92643 (90040515)	64.75718 (90091612)	66.96793 (90091612)	66.37211 (90091612)
20.0 |	0.01924 (90121921)	34.80546 (90062015)	64.81898 (90051712)	67.03701 (90051712)	66.44340 (90051712)
30.0 |	0.10736 (90121921)	34.82528 (90062015)	51.51891 (90031518)	53.68397 (90041712)	54.80532 (90041712)
40.0 |	0.18079 (90121921)	44.89527 (90062015)	78.92762 (90041715)	80.80183 (90041715)	79.68991 (90041715)
50.0 |	0.02512 (90062015)	59.93668 (90062015)	86.57818 (90052815)	91.06668 (90052815)	92.71247 (90062315)
60.0 |	0.02553 (90083015)	47.53716 (90090812)	89.28173 (90062515)	95.61657 (90062515)	97.88775 (90062515)
70.0 |	0.02704 (90080912)	50.37570 (90080912)	65.42459 (90073015)	65.72561 (90073115)	66.17153 (90073115)
80.0 |	0.10128c(90062715)	49.24684 (90080912)	64.65515 (90080315)	68.33319 (90080315)	69.34554 (90080315)
90.0 |	0.22307c(90111321)	51.42125 (90081015)	87.04963 (90061112)	93.60471 (90061112)	96.38676 (90061112)
100.0 |	0.34091c(90111321)	34.08344 (90042915)	66.07243 (90082115)	68.62577 (90082115)	70.25552 (90062318)
110.0 |	0.06341c(90111321)	38.22939 (90032715)	77.17965 (90041615)	74.78762 (90041615)	70.68661 (90041615)
120.0 |	0.36045 (90010921)	62.51165 (90032715)	69.68423 (90032715)	66.97840 (90032015)	68.61796 (90032015)
130.0 |	0.74010 (90010921)	44.02643 (90032715)	58.84016 (90040312)	62.30650 (90040312)	64.29075 (90040312)
140.0 |	0.45775 (90010921)	31.35403 (90040512)	55.93043 (90061812)	66.54986 (90120812)	76.06948 (90120812)
150.0 |	0.39035c(90081221)	34.82613 (90082915)	56.01369 (90072812)	61.07674 (90072812)	63.05217 (90072812)
160.0 |	0.39038c(90081221)	33.91542 (90082915)	59.93051 (90040512)	61.55861 (90040512)	61.05754 (90040512)
170.0 |	0.08799c(90081221)	45.27791 (90061715)	61.42309 (90041215)	60.33758 (90041215)	57.44420 (90041215)
180.0 |	0.19761 (90101506)	59.95005 (90041815)	70.02637 (90061715)	64.07117 (90061715)	66.91648 (90030412)
190.0 |	0.41834 (90101521)	59.95018 (90041815)	62.60096 (90061715)	63.13785 (90061712)	65.79725 (90061712)
200.0 |	0.55563 (90100209)	33.58165 (90072515)	85.45316 (90061415)	91.79492 (90061415)	94.71133 (90061415)
210.0 |	0.70596 (90100209)	33.56944 (90080412)	71.55465 (90041312)	76.86321 (90041312)	79.10091 (90041312)
220.0 |	0.76946 (90112006)	47.52858 (90092715)	76.63018 (90092715)	73.58407 (90092715)	69.52171 (90092715)
230.0 |	0.87272 (90112006)	54.35143 (90041315)	105.54300 (90041315)	106.46704 (90041315)	103.79877 (90041315)
240.0 |	0.72751 (90112003)	38.63889 (90041315)	80.65041 (90090212)	84.22747 (90090212)	84.09097 (90090212)
250.0 |	0.32520 (90112218)	43.24886 (90041915)	82.96455 (90042012)	85.44852 (90042012)	85.42096 (90042012)
260.0 |	0.46085 (90100521)	38.04972 (90082712)	64.20528 (90082712)	62.91118 (90042615)	65.72861 (90042615)
270.0 |	0.19443c(90040603)	35.37150 (90072515)	81.65984 (90010315)	91.76514 (90010315)	98.15696 (90010315)
280.0 |	0.34137c(90111321)	32.92057 (90042715)	84.09856 (90042715)	90.88511 (90042715)	94.71046 (90042715)
290.0 |	0.29005c(90012409)	32.05267c(90082615)	68.07150 (90051212)	69.98512 (90051212)	69.48513 (90051212)
300.0 |	0.45658c(90012409)	39.15840 (90051915)	77.83334 (90051212)	79.74907 (90051212)	78.89960 (90051212)
310.0 |	0.45749 (90112718)	35.11911 (90051612)	73.72871 (90051612)	75.17340 (90051612)	73.88084 (90051612)
320.0 |	0.41803 (90080621)	36.82181 (90090112)	70.11852 (90090112)	69.36866 (90090112)	66.23212 (90090112)
330.0 |	0.38989 (90051421)	32.01932 (90091415)	75.85081 (90030212)	83.44718 (90030212)	87.54132 (90030212)
340.0 |	0.12331c(90120321)	26.74664 (90091415)	57.90235 (90031512)	63.69080 (90031512)	66.81440 (90031512)
350.0 |	0.45892 (90112012)	46.43065 (90112012)	47.08163 (90112012)	43.17919 (90112012)	43.79116 (90072012)
360.0 |	0.21749 (90112012)	27.68041 (90031715)	67.20654 (90031715)	73.42541 (90031715)	77.61414 (90031715)

**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	64.00620 (90091612)	65.22818 (90050918)	69.14193 (90050918)	66.19648 (90050918)	60.83729 (90050918)
20.0 |	64.07561 (90051712)	65.39101 (90030218)	68.58556 (90030218)	65.37373 (90030218)	59.96746 (90030218)
30.0 |	56.52559 (90040618)	59.79215 (90050915)	62.43774 (90050418)	63.97790 (90050418)	62.01907 (90050418)
40.0 |	76.76353 (90041715)	70.94167 (90062018)	64.10261 (90062018)	55.23233 (90062018)	48.42480 (90071318)
50.0 |	94.19120 (90062315)	88.22421 (90062315)	75.39422 (90062315)	65.05644 (90062315)	57.11575 (90062315)
60.0 |	97.23263 (90062515)	81.73225 (90062515)	62.50623 (90060615)	57.65703 (90050518)	54.09828 (90050518)
70.0 |	64.93200 (90073115)	63.93187 (90051015)	60.90805 (90051015)	54.83970 (90051015)	48.47433 (90051015)
80.0 |	68.49488 (90080315)	57.18596 (90080315)	41.88515 (90080315)	33.52629 (90091712)	29.08995 (90101818)
90.0 |	96.37936 (90061112)	83.19770 (90061112)	62.38911 (90061112)	60.15143 (90061918)	55.15349 (90061918)
100.0 |	75.25852 (90062318)	85.03620 (90062318)	85.27291 (90062318)	80.94477 (90062318)	75.37476 (90062318)
110.0 |	68.34839 (90102515)	73.82819 (90072718)	73.13893 (90072718)	66.90183 (90072718)	59.63487 (90072718)
120.0 |	67.86807 (90032015)	69.03203 (90102512)	64.49293 (90102512)	60.10461 (90030318)	57.25562 (90030318)
130.0 |	63.94818 (90040312)	61.08282 (90081815)	59.06717 (90022418)	52.95726 (90010818)	55.12328 (90010818)
140.0 |	80.51766 (90120812)	86.21740 (90120812)	80.17880 (90120812)	70.50240 (90120812)	61.11879 (90120812)
150.0 |	62.75056 (90072812)	51.66417 (90072812)	45.04144 (90102603)	42.50673 (90102603)	40.02668 (90032021)
160.0 |	59.53535 (90120912)	59.62835 (90120912)	63.85999 (90120424)	64.06207 (90120424)	60.95797 (90120424)
170.0 |	54.53040 (90110512)	49.86505 (90080612)	43.31400 (90121112)	37.49481 (90121112)	34.12897 (90102609)
180.0 |	68.17718 (90030412)	68.49689 (90011309)	69.73813 (90011309)	66.47103 (90111103)	64.77137 (90111103)
190.0 |	66.23934 (90061712)	60.87460 (90120506)	58.02873 (90120506)	51.89604 (90120506)	45.54344 (90120506)
200.0 |	95.08588 (90061415)	83.98627 (90061415)	64.58340 (90061415)	56.65546 (90022603)	60.47182 (90022603)
210.0 |	79.08067 (90041312)	68.41776 (90041312)	57.46264 (90092409)	54.75297 (90092409)	51.16219 (90111809)
220.0 |	67.05782 (90090215)	71.14262 (90022612)	66.71481 (90022612)	58.98862 (90022612)	53.73391 (90110203)
230.0 |	99.06982 (90041315)	82.47459 (90051115)	60.65855 (90090512)	55.64879 (90110112)	58.60608 (90110221)
240.0 |	87.31362 (90113015)	91.69730 (90113015)	86.27760 (90100812)	80.55640 (90022712)	73.32196 (90022712)
250.0 |	83.12957 (90042012)	73.73972 (90041918)	72.98507 (90041918)	67.03276 (90041918)	59.96592 (90041918)
260.0 |	66.49869 (90042615)	59.05423 (90042615)	52.99913 (90040912)	48.49077 (90040912)	45.05394 (90120118)
270.0 |	101.40918 (90010315)	95.91125 (90010315)	76.60167 (90010315)	63.82016 (90101021)	54.08847 (90101021)
280.0 |	95.32574 (90042715)	87.41775 (90042715)	72.64541 (90042715)	60.01604 (90042715)	50.13742 (90042715)
290.0 |	67.48151 (90051212)	65.04634 (90122015)	55.77555 (90031412)	51.58707 (90110912)	55.56660 (90042803)
300.0 |	76.35836 (90051212)	67.09444 (90020912)	54.69706 (90020912)	50.33014 (90122118)	46.92804 (90122118)
310.0 |	70.96297 (90051612)	63.48932 (90022115)	57.08360 (90020212)	50.94118 (90020212)	44.49466 (90020212)
320.0 |	61.91250 (90090112)	57.07541 (90013112)	48.61796 (90013112)	40.72791 (90062009)	38.69064 (90062009)
330.0 |	88.87064 (90030212)	79.69897 (90030212)	63.23918 (90101015)	55.37709 (90101015)	47.85712 (90101015)
340.0 |	67.83502 (90031512)	60.89666 (90031512)	54.58830 (90033012)	47.22984 (90033012)	45.63629 (90021009)
350.0 |	43.92620 (90072012)	45.53845 (90092915)	42.66964 (90092915)	37.50559 (90101103)	33.75856 (90101103)
360.0 |	78.57506 (90031715)	74.60014 (90031715)	64.29353 (90031715)	55.58665 (90042818)	50.72896 (90042818)

**MODELOPTs:

CONC

RURAL FLAT DEFAULT

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

*** NETWORK ID: POLL ; NETWORK TYPE: GRIDPOLR ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.08068c(90121924)	14.94299c(90091616)	33.56530c(90091616)	34.31086c(90091616)	39.50469 (90021016)
20.0 |	0.00962c(90121924)	15.00174c(90091616)	31.91727c(90091616)	32.15274c(90091616)	31.16500c(90091616)
30.0 |	0.05372c(90121924)	14.21571 (90062016)	24.70438 (90041716)	25.77259 (90041716)	25.84817 (90041716)
40.0 |	0.09059c(90121924)	25.14914 (90062016)	40.21787 (90062016)	38.87203 (90062016)	41.71960c(90112416)
50.0 |	0.01058c(90121924)	33.79457 (90062016)	52.33603 (90062016)	50.30455 (90062016)	47.51307 (90062016)
60.0 |	0.00957 (90083016)	20.90636 (90090816)	47.26694c(90062516)	52.28979c(90062516)	55.42329c(90062516)
70.0 |	0.01014 (90080916)	19.77553 (90080916)	34.79257 (90073116)	36.42593 (90073116)	36.66709 (90073116)
80.0 |	0.05064c(90062716)	22.64440c(90082216)	31.30321 (90080916)	33.02956 (90073016)	34.17574 (90073016)
90.0 |	0.10755c(90062716)	25.19180c(90042916)	34.40374c(90061016)	35.60027 (90061116)	36.67493 (90061116)
100.0 |	0.14610c(90111324)	31.49322c(90042916)	40.88726c(90042916)	37.02926 (90061116)	40.24728 (90061116)
110.0 |	0.02718c(90111324)	21.31831c(90042916)	33.07699c(90041616)	32.05184c(90041616)	33.36089 (90011216)
120.0 |	0.15448c(90010924)	23.45805 (90032716)	34.36414c(90072316)	37.37865c(90072316)	39.01846c(90072316)
130.0 |	0.31719c(90010924)	18.38584 (90040316)	40.43311 (90040316)	43.53476 (90040316)	45.44727 (90040316)
140.0 |	0.19618c(90010924)	11.87952c(90061816)	31.96849 (90120816)	38.75908 (90120816)	44.31527 (90120816)
150.0 |	0.19518c(90081224)	13.05980 (90082916)	26.70995 (90030416)	29.25784 (90030416)	30.50402 (90030416)
160.0 |	0.19519c(90081224)	13.70855 (90061716)	23.91193 (90081816)	25.86921 (90081816)	27.87598 (90120916)
170.0 |	0.04400c(90081224)	19.27625 (90061716)	30.06766 (90061716)	28.71490 (90061716)	27.05954 (90061716)
180.0 |	0.07410 (90101508)	26.38881c(90041816)	42.98635 (90061716)	42.26754 (90061716)	40.50817 (90061716)
190.0 |	0.16304c(90111224)	26.32062c(90041816)	45.50913 (90061716)	45.88345 (90061716)	44.86844 (90061716)
200.0 |	0.27782c(90100208)	16.79083c(90072516)	32.64131 (90061416)	35.02263 (90061416)	36.09851 (90061416)
210.0 |	0.35298c(90100208)	17.05919 (90092716)	36.14450 (90092416)	42.89495 (90092416)	48.30995 (90092416)
220.0 |	0.41404c(90112008)	21.65803 (90092716)	49.92797 (90061316)	53.02751 (90061316)	53.96758 (90061316)
230.0 |	0.55634c(90112008)	30.82070 (90051116)	76.01349 (90051116)	79.84789 (90051116)	80.49170 (90051116)
240.0 |	0.44527c(90112008)	19.64716 (90042016)	45.13091 (90090216)	48.17002 (90112116)	52.11885 (90110316)
250.0 |	0.20960c(90112908)	29.13409 (90041916)	59.59594 (90041916)	62.44925 (90041916)	63.43762 (90041916)
260.0 |	0.17282 (90100524)	15.56147c(90072516)	41.57076 (90063016)	44.97870 (90063016)	46.12889 (90063016)
270.0 |	0.09721c(90040608)	17.68575c(90072516)	47.02805 (90042616)	51.82737 (90042616)	57.08866 (90030816)
280.0 |	0.14630c(90111324)	19.06223 (90042716)	47.33814 (90042716)	50.79801 (90042716)	52.62316 (90042716)
290.0 |	0.13736c(90101908)	17.85549 (90051216)	37.44178 (90051216)	38.13367 (90041016)	39.61311 (90041016)
300.0 |	0.17124 (90012416)	23.07744 (90051216)	50.74290 (90051216)	52.13706 (90051216)	51.65863 (90051216)
310.0 |	0.17983c(90080624)	13.79073 (90050316)	29.82940 (90050316)	32.76118 (90022116)	35.00466 (90022116)
320.0 |	0.20901c(90080624)	16.26475 (90090116)	30.58526 (90090116)	29.41902 (90090116)	27.46172 (90090116)
330.0 |	0.14621 (90051424)	13.72499c(90091416)	28.44406 (90030216)	31.29270 (90030216)	32.82800 (90030216)
340.0 |	0.05285c(90120324)	11.46285c(90091416)	26.66521c(90072016)	29.79846c(90072016)	31.62083c(90072016)
350.0 |	0.22946c(90112016)	24.55256c(90112016)	27.95933c(90112016)	26.24561c(90112016)	24.24925c(90112016)
360.0 |	0.10875c(90112016)	14.55560 (90031716)	42.65739 (90031716)	48.01287 (90031716)	51.97984 (90031716)

**MODELOPTs:

CONC

RURAL FLAT DEFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	42.54077 (90021016)	47.94283 (90021016)	46.27765 (90021016)	41.57513 (90021016)	36.52617 (90021016)
20.0 |	29.48857c(90091616)	31.29907c(90021916)	34.59097c(90021916)	34.27532c(90021916)	32.35925c(90021916)
30.0 |	25.25199 (90041716)	22.42206 (90050916)	24.93006 (90051924)	25.00727 (90051924)	23.90141 (90051924)
40.0 |	44.49117c(90112416)	46.69247c(90112416)	40.52075c(90112416)	32.99681c(90112416)	26.61341c(90112416)
50.0 |	44.44647 (90062016)	36.10411 (90053116)	29.75736 (90052916)	26.11085c(90051624)	27.14320c(90051624)
60.0 |	56.90509c(90062516)	54.17179c(90062516)	44.55930c(90062516)	39.08451c(90050524)	39.79416c(90050524)
70.0 |	35.97112 (90073116)	29.49913 (90073116)	23.83694 (90091716)	22.46352 (90040308)	23.26979 (90040308)
80.0 |	34.40767 (90073016)	30.65282 (90073016)	23.69618 (90073016)	18.46831 (90072916)	17.67142 (90050624)
90.0 |	36.67014 (90061116)	34.29488 (90101216)	28.72574 (90101216)	22.87523 (90101216)	22.71582 (90050624)
100.0 |	41.56086 (90061116)	40.93887 (90061116)	35.53129 (90061116)	29.91567 (90061116)	26.42208c(90110524)
110.0 |	36.17793 (90011216)	42.01690 (90011216)	42.05801 (90011216)	38.96581 (90011216)	35.10545 (90011216)
120.0 |	41.18359 (90111016)	43.92094 (90111016)	40.67121 (90111016)	35.58510 (90111016)	31.18897 (90061124)
130.0 |	45.46088 (90040316)	41.72029 (90040316)	34.98087 (90040316)	28.95197 (90040316)	24.51805 (90031924)
140.0 |	46.90936 (90120816)	50.23248 (90120816)	46.71976 (90120816)	41.06224 (90120816)	35.55675 (90120816)
150.0 |	30.74842 (90030416)	30.40102 (90012608)	32.69402 (90032008)	32.58338 (90032008)	31.04362 (90032008)
160.0 |	29.64597 (90120916)	32.07075 (90120916)	30.53444 (90120424)	31.09617 (90120424)	29.93626 (90120424)
170.0 |	25.29080 (90061716)	21.45858 (90012616)	19.48384 (90121116)	17.20678 (90120916)	16.06273 (90120916)
180.0 |	38.19260 (90061716)	34.88988 (90011308)	43.26001 (90111108)	46.83556 (90111108)	47.50662 (90111108)
190.0 |	43.01606 (90061716)	40.04161 (90120508)	37.36707 (90120508)	32.91861 (90120508)	28.56147 (90120508)
200.0 |	36.20842 (90061416)	37.98588 (90113008)	38.05046 (90113008)	35.07380 (90113008)	31.38708 (90113008)
210.0 |	51.29241 (90092416)	54.32833 (90092416)	49.20418 (90092416)	42.26873 (90092416)	35.97284 (90092416)
220.0 |	53.37368 (90061316)	51.37828 (90022616)	47.56557 (90022616)	41.72350 (90022616)	36.12796 (90022616)
230.0 |	78.97512 (90051116)	64.44152 (90051116)	46.31091 (90051116)	38.62460 (90110224)	40.09161 (90110224)
240.0 |	53.99799 (90110316)	53.26495 (90110316)	47.26357 (90022716)	43.77441 (90022716)	41.03155 (90032808)
250.0 |	62.43161 (90041916)	53.77264 (90041916)	42.71158 (90042016)	39.81832 (90041924)	39.98206 (90041924)
260.0 |	45.64668 (90063016)	40.90960 (90112616)	34.04987 (90112616)	29.01266 (90050816)	26.29463 (90050816)
270.0 |	58.94575 (90030816)	58.63231 (90030816)	51.53802 (90030816)	43.70970 (90030816)	36.94611 (90030816)
280.0 |	52.69403 (90042716)	47.54613 (90042716)	38.93036 (90042716)	31.78475 (90042716)	26.63015 (90071716)
290.0 |	39.81161 (90041016)	37.72330 (90021316)	34.96001 (90050824)	34.10458 (90050824)	31.92037 (90050824)
300.0 |	50.02022 (90051216)	40.88799 (90070816)	35.84768 (90031316)	34.98861 (90022208)	37.88260 (90022208)
310.0 |	36.13180 (90022116)	34.08400 (90022116)	28.13460 (90020216)	25.34190 (90020216)	22.19289 (90020216)
320.0 |	25.23084 (90090116)	21.40328 (90013116)	18.23174 (90013116)	16.40829c(90062008)	18.19480c(90072208)
330.0 |	33.32649 (90030216)	35.28611 (90101016)	32.57586 (90101016)	28.47859 (90101016)	24.57409 (90101016)
340.0 |	32.37544c(90072016)	29.57465c(90072016)	22.86872c(90072016)	20.25177c(90041108)	20.54589c(90041108)
350.0 |	22.20413c(90112016)	22.48549 (90110916)	23.06782 (90110916)	21.65775 (90110916)	19.65439 (90110916)
360.0 |	53.49832 (90031716)	52.92604 (90031716)	46.65632 (90031716)	39.80093 (90031716)	33.83414 (90031716)

**MODELOPTs:

CONC

RURAL FLAT DFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3500.00

10.0 |	31.94492 (90021016)
20.0 |	29.78251c(90021916)
30.0 |	22.24759 (90051924)
40.0 |	21.62707c(90112416)
50.0 |	27.03093c(90051624)
60.0 |	39.02725c(90050524)
70.0 |	23.12205 (90040308)
80.0 |	17.48268 (90050624)
90.0 |	22.36062 (90050624)
100.0 |	25.63053c(90110524)
110.0 |	31.30521 (90011216)
120.0 |	30.29246 (90061124)
130.0 |	23.64502 (90031924)
140.0 |	34.22465c(90032624)
150.0 |	28.91317 (90032008)
160.0 |	27.93908 (90120424)
170.0 |	14.78819 (90120916)
180.0 |	46.40398 (90111108)
190.0 |	24.77757 (90120508)
200.0 |	29.19447 (90022608)
210.0 |	34.14522 (90103108)
220.0 |	31.33218 (90022616)
230.0 |	40.07076 (90110224)
240.0 |	43.05703 (90032808)
250.0 |	38.93945 (90041924)
260.0 |	23.49513 (90050816)
270.0 |	31.47503 (90030816)
280.0 |	23.49422 (90052608)
290.0 |	31.02604c(90021324)
300.0 |	39.09365 (90022208)
310.0 |	19.32722 (90020216)
320.0 |	20.08160c(90072208)
330.0 |	21.23804 (90101016)
340.0 |	20.51476c(90041108)
350.0 |	17.58848 (90110916)
360.0 |	28.94091 (90110924)

**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.02690c(90121924)	5.81252c(90091624)	13.05369c(90091624)	13.34353c(90091624)	15.45411(90021024)
20.0 |	0.00321c(90121924)	5.86392c(90062024)	12.41227c(90091624)	12.50384c(90091624)	14.32158c(90030224)
30.0 |	0.01791c(90121924)	6.69107c(90062024)	11.68874c(90040624)	12.72186c(90040624)	13.34922c(90040624)
40.0 |	0.03020c(90121924)	12.13488c(90062024)	22.86717c(90062024)	23.38166c(90062024)	23.61516c(90062024)
50.0 |	0.00447c(90062024)	15.32736c(90062024)	24.60733c(90062024)	23.89074c(90062024)	22.77725c(90062024)
60.0 |	0.00403c(90083024)	9.23048c(90062024)	18.20412c(90062524)	20.16876c(90062524)	21.42177c(90062524)
70.0 |	0.00451c(90080924)	8.78912c(90080924)	16.22253c(90073124)	17.16366c(90073124)	17.49724c(90073124)
80.0 |	0.01519c(90062724)	9.89355c(90080924)	14.61428c(90073024)	15.97132c(90073024)	16.82887c(90073024)
90.0 |	0.03718c(90111324)	8.57021c(90081024)	14.74387c(90061124)	15.86185c(90061124)	16.34121c(90061124)
100.0 |	0.05682c(90111324)	10.49774c(90042924)	16.98232c(90061124)	19.60075c(90061124)	21.59849c(90061124)
110.0 |	0.01057c(90111324)	7.10610c(90042924)	13.22181c(90041624)	13.44358c(90011224)	15.98900c(90011224)
120.0 |	0.04915c(90010924)	10.46367c(90032724)	18.56231c(90072324)	21.23462c(90072324)	23.35279c(90072324)
130.0 |	0.10092c(90010924)	7.41519c(90032724)	15.80967(90040324)	17.40279(90040324)	18.52178(90040324)
140.0 |	0.06242c(90010924)	5.22595c(90040524)	13.93492c(90120824)	17.10056c(90120824)	19.83319c(90120824)
150.0 |	0.06506c(90081224)	5.50814c(90082924)	11.24629c(90030424)	12.31909c(90030424)	12.84380c(90030424)
160.0 |	0.06506c(90081224)	6.09279c(90061724)	11.59283c(90081824)	12.89221c(90081824)	13.67629c(90081824)
170.0 |	0.01467c(90081224)	8.56722c(90061724)	13.36341c(90061724)	12.76218c(90061724)	12.02646c(90061724)
180.0 |	0.03840(90101524)	10.61549c(90061724)	19.10507c(90061724)	18.78558c(90061724)	18.00364c(90061724)
190.0 |	0.06087(90101524)	10.50966c(90061724)	20.24357c(90061724)	20.40803c(90061724)	19.95563c(90061724)
200.0 |	0.07577c(90100224)	5.72542c(90072524)	12.43546c(90061424)	13.41699c(90032524)	14.07558c(90032524)
210.0 |	0.09627c(90100224)	7.58758c(90092724)	13.52459(90092424)	16.21871(90092424)	18.45638(90092424)
220.0 |	0.13801c(90112024)	9.65723c(90092724)	18.05697(90061324)	19.53452(90061324)	20.34124(90061324)
230.0 |	0.18545c(90112024)	13.05266c(90051124)	32.76470c(90051124)	34.61370c(90051124)	35.12651c(90051124)
240.0 |	0.14842c(90112024)	8.38133c(90051124)	20.45743(90042024)	22.81131(90042024)	24.61027c(90042424)
250.0 |	0.06619c(90112924)	10.40562(90041924)	24.76676(90041924)	27.18709(90041924)	29.00134(90041924)
260.0 |	0.06284c(90100524)	6.41022c(90092624)	15.29553c(90063024)	16.56596c(90063024)	17.01700c(90063024)
270.0 |	0.03240c(90040624)	6.05019c(90072524)	17.87798(90042624)	20.92318(90030824)	23.42712(90030824)
280.0 |	0.05690c(90111324)	6.45002(90042724)	16.05370(90042724)	17.28722(90042724)	17.99341(90042724)
290.0 |	0.04835c(90012424)	6.82933c(90051224)	14.31250c(90051224)	15.94039c(90021324)	18.18949c(90021324)
300.0 |	0.07613c(90012424)	8.90455c(90051224)	19.83500c(90051224)	20.51383c(90051224)	20.50231c(90051224)
310.0 |	0.06102c(90112724)	5.57410c(90050224)	13.21429c(90050224)	13.15268c(90050224)	12.79629c(90050224)
320.0 |	0.06967c(90080624)	7.22879c(90090124)	13.59345c(90090124)	13.07512c(90090124)	12.20521c(90090124)
330.0 |	0.06156c(90051424)	5.33749c(90091424)	11.37762c(90030224)	12.51708c(90030224)	13.13120c(90030224)
340.0 |	0.01682c(90120324)	4.45777c(90091424)	8.88840c(90072024)	9.93282c(90072024)	10.54028c(90072024)
350.0 |	0.07649c(90112024)	8.18419c(90112024)	9.31977c(90112024)	8.74854c(90112024)	8.08309c(90112024)
360.0 |	0.03625c(90112024)	4.85885(90031724)	14.26131(90031724)	16.05219(90031724)	17.37887(90031724)

**MODELOPTs:

CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	16.84658 (90021024)	20.08346 (90021024)	20.96064 (90021024)	20.18963 (90021024)	18.95606 (90021024)
20.0 |	15.54740c(90030224)	18.38726c(90030224)	19.25390c(90030224)	18.71061c(90030224)	17.66614c(90030224)
30.0 |	13.50521c(90040624)	12.59760c(90040624)	13.01100c(90020424)	12.62992c(90020424)	11.77753c(90020424)
40.0 |	23.50140c(90062024)	21.67397c(90062024)	18.56383c(90062024)	15.62867c(90062024)	13.22948c(90062024)
50.0 |	21.48645c(90062024)	16.38621 (90052924)	15.84616 (90052924)	14.92132 (90052924)	14.11613 (90052924)
60.0 |	22.03027c(90062524)	21.15995c(90062524)	17.83408c(90072224)	14.87060c(90072224)	15.06582c(90050524)
70.0 |	17.35007c(90073124)	15.03163c(90073124)	11.93323c(90073124)	10.05378c(90073024)	8.76952c(90073024)
80.0 |	17.20298c(90073024)	16.58023c(90073024)	14.56185c(90073024)	12.65148c(90073024)	11.16290c(90073024)
90.0 |	16.33828c(90061124)	18.23795c(90061924)	18.40214c(90061924)	17.08568c(90061924)	15.30743c(90061924)
100.0 |	22.49262c(90061124)	22.82121c(90061124)	20.34315c(90061124)	17.44332c(90061124)	14.88089c(90061124)
110.0 |	17.48742c(90011224)	21.13761c(90011224)	22.35493c(90011224)	21.66724c(90011224)	20.35475c(90011224)
120.0 |	24.53372c(90072324)	25.93500c(90072324)	24.53816c(90072324)	22.26665c(90072324)	20.07046c(90072324)
130.0 |	18.77613 (90040324)	17.96235 (90040324)	15.56625 (90040324)	13.78845c(90072324)	12.33563c(90072324)
140.0 |	21.28101c(90120824)	24.16318c(90120824)	24.20081c(90120824)	22.57843c(90120824)	20.61742c(90120824)
150.0 |	13.94953 (90032024)	17.44243 (90032024)	19.39011 (90032024)	19.52145 (90032024)	18.90135 (90032024)
160.0 |	13.91198c(90081824)	15.35820c(90120924)	15.73877c(90120924)	14.96722c(90120924)	13.93306c(90120924)
170.0 |	11.24036c(90061724)	11.51652 (90102624)	10.55095 (90102624)	9.17784 (90102624)	8.43773 (90022424)
180.0 |	19.04119 (90111124)	23.06797 (90111124)	24.18968 (90111124)	23.43113 (90111124)	22.12299 (90111124)
190.0 |	19.13103c(90061724)	14.98541 (90120524)	13.61690 (90120524)	11.80408 (90120524)	10.47853 (90102724)
200.0 |	14.27766c(90032524)	13.65839 (90120524)	13.15238c(90111224)	13.45533c(90111224)	13.17218c(90111224)
210.0 |	19.72313 (90092424)	21.44170 (90092424)	19.96972 (90092424)	17.53491 (90092424)	16.01439c(90111224)
220.0 |	20.61376 (90061324)	23.15248 (90110124)	25.38724 (90110124)	25.28946 (90110124)	24.37709 (90110124)
230.0 |	34.64943c(90051124)	29.00441c(90051124)	22.80634 (90110224)	22.38191 (90110224)	21.33980 (90110224)
240.0 |	26.03741c(90042424)	29.33949c(90092024)	28.65820c(90092024)	26.28880c(90092024)	23.83338c(90092024)
250.0 |	29.69359 (90041924)	30.11250 (90041924)	28.91696 (90041924)	27.01310 (90041924)	25.18298 (90041924)
260.0 |	16.87324c(90063024)	17.64167 (90042524)	16.37506 (90042524)	15.63379 (90050824)	14.38996 (90050824)
270.0 |	24.45652 (90030824)	25.23735 (90030824)	22.91740 (90030824)	19.88059 (90030824)	17.76135c(90031124)
280.0 |	18.11831 (90042724)	17.12148 (90071724)	17.96938 (90052624)	18.44319 (90052624)	18.16852 (90052624)
290.0 |	19.65734c(90021324)	22.55163c(90021324)	22.94262c(90021324)	21.99134c(90021324)	20.79961c(90021324)
300.0 |	20.01621c(90051224)	18.16768c(90070824)	18.27714c(90122124)	17.08423c(90122124)	15.47084c(90122124)
310.0 |	12.64295c(90121724)	12.92598 (90021524)	12.34960 (90021524)	11.25238 (90021524)	10.98333c(90033024)
320.0 |	11.21371c(90090124)	9.51257c(90013124)	8.10299c(90013124)	7.05327c(90082524)	7.01581c(90082524)
330.0 |	13.33060c(90030224)	11.95484c(90030224)	10.85938 (90101024)	10.09950c(90052124)	9.86700c(90052124)
340.0 |	10.79181c(90072024)	9.85822c(90072024)	9.49127 (90051924)	9.23958 (90051924)	8.96926 (90051924)
350.0 |	8.66973 (90110924)	10.76303 (90110924)	11.43442 (90110924)	11.02651 (90110924)	10.21037 (90110924)
360.0 |	17.88589 (90031724)	17.69101 (90031724)	15.59161 (90031724)	13.29756 (90031724)	12.76092c(90021924)

**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3500.00

10.0 |	17.52801 (90021024)
20.0 |	16.43233c(90030224)
30.0 |	10.74189c(90020424)
40.0 |	11.31383c(90062024)
50.0 |	13.26116 (90052924)
60.0 |	14.74905c(90050524)
70.0 |	7.70735 (90040324)
80.0 |	9.99267c(90073024)
90.0 |	13.50714c(90061924)
100.0 |	12.75886c(90061124)
110.0 |	18.81990c(90011224)
120.0 |	18.09886c(90072324)
130.0 |	11.00085c(90072324)
140.0 |	18.70202c(90120824)
150.0 |	17.92134 (90032024)
160.0 |	12.84646c(90120924)
170.0 |	7.87299 (90022424)
180.0 |	20.62566 (90111124)
190.0 |	10.13363 (90102724)
200.0 |	12.58564c(90111224)
210.0 |	14.91842c(90111224)
220.0 |	23.02382 (90110124)
230.0 |	20.07549 (90110224)
240.0 |	21.56279c(90092024)
250.0 |	23.34082 (90041924)
260.0 |	14.06384 (90122924)
270.0 |	16.71491c(90031124)
280.0 |	17.43917 (90052624)
290.0 |	19.48002c(90021324)
300.0 |	13.83084c(90122124)
310.0 |	10.79824c(90033024)
320.0 |	6.91614c(90082524)
330.0 |	9.43046c(90052124)
340.0 |	8.60926 (90051924)
350.0 |	9.26951 (90110924)
360.0 |	11.98657c(90021924)

*** ISCST3 - VERSION 00101 ***

*** 1990 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:37:07

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**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE
1.	106.46704	(90041315)	AT	(133587.56, 201762.48)	GP	6.	98.25537	(90051115)	AT	(133510.95, 201698.22)	GP
2.	105.54300	(90041315)	AT	(133664.17, 201826.77)	GP	7.	98.15696	(90010315)	AT	(133277.00, 202341.00)	GP
3.	103.79877	(90041315)	AT	(133510.95, 201698.22)	GP	8.	97.88775	(90062515)	AT	(135143.03, 202841.00)	GP
4.	101.40918	(90010315)	AT	(133177.00, 202341.00)	GP	9.	97.74595	(90051115)	AT	(133434.34, 201633.94)	GP
5.	99.06982	(90041315)	AT	(133434.34, 201633.94)	GP	10.	97.23263	(90062515)	AT	(135229.63, 202891.00)	GP

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

*** ISCST3 - VERSION 00101 ***

*** 1990 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:37:07
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**MODELOPTs:

CONC

RURAL FLAT DFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR,YR)	OF TYPE
1.	80.49170	(90051116)	AT	(133510.95, 201698.22)	GP	6.	63.43762	(90041916)	AT	(133337.31, 201998.98)	GP
2.	79.84789	(90051116)	AT	(133587.56, 201762.48)	GP	7.	62.44925	(90041916)	AT	(133431.28, 202033.19)	GP
3.	78.97512	(90051116)	AT	(133434.34, 201633.94)	GP	8.	62.43161	(90041916)	AT	(133243.34, 201964.78)	GP
4.	76.01349	(90051116)	AT	(133664.17, 201826.77)	GP	9.	60.02843	(90042016)	AT	(133337.31, 201998.98)	GP
5.	64.44152	(90051116)	AT	(133127.94, 201376.81)	GP	10.	59.95729	(90042016)	AT	(133243.34, 201964.78)	GP

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

*** ISCST3 - VERSION 00101 ***

*** 1990 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:37:07
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**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE	RANK	CONC	(YYMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE
1.	35.12651c	(90051124)	AT	(133510.95, 201698.22)	GP	6.	29.69359	(90041924)	AT	(133243.34, 201964.78)	GP
2.	34.64943c	(90051124)	AT	(133434.34, 201633.94)	GP	7.	29.33949c	(90092024)	AT	(132977.97, 201591.00)	GP
3.	34.61370c	(90051124)	AT	(133587.56, 201762.48)	GP	8.	29.00441c	(90051124)	AT	(133127.94, 201376.81)	GP
4.	32.76470c	(90051124)	AT	(133664.17, 201826.77)	GP	9.	29.00134	(90041924)	AT	(133337.31, 201998.98)	GP
5.	30.11250	(90041924)	AT	(132867.47, 201827.97)	GP	10.	28.91696	(90041924)	AT	(132397.61, 201656.95)	GP

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

**MODELOPTs:

CONC RURAL FLAT DFAULT

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	4.07459 AT (132544.95, 201341.00,	0.00, 0.00)	GP POL1
	2ND HIGHEST VALUE IS	3.98896 AT (132977.97, 201591.00,	0.00, 0.00)	GP POL1
	3RD HIGHEST VALUE IS	3.97084 AT (132111.94, 201091.00,	0.00, 0.00)	GP POL1
	4TH HIGHEST VALUE IS	3.83463 AT (131678.92, 200841.00,	0.00, 0.00)	GP POL1
	5TH HIGHEST VALUE IS	3.65624 AT (131245.91, 200591.00,	0.00, 0.00)	GP POL1
	6TH HIGHEST VALUE IS	3.61101 AT (133324.38, 201791.00,	0.00, 0.00)	GP POL1
	7TH HIGHEST VALUE IS	3.58435 AT (132397.61, 201656.95,	0.00, 0.00)	GP POL1
	8TH HIGHEST VALUE IS	3.57613 AT (132867.47, 201827.97,	0.00, 0.00)	GP POL1
	9TH HIGHEST VALUE IS	3.45270 AT (131927.77, 201485.95,	0.00, 0.00)	GP POL1
	10TH HIGHEST VALUE IS	3.41428 AT (133410.97, 201841.00,	0.00, 0.00)	GP POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1990 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:37:07

**MODELOPTs:

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CONC

RURAL FLAT

DEFAULT

*** THE SUMMARY OF HIGHEST 3-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3

**

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 106.46704	ON 90041315: AT (	133587.56, 201762.48, 0.00,	0.00) GP	POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1990 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:37:07
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**MODELOPTs:

CONC

RURAL FLAT

DEFAULT

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

** CONC OF SO2 IN MICROGRAMS/M**3

**

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 80.49170	ON 90051116:	AT (133510.95, 201698.22, 0.00,	0.00) GP	POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1990 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:37:07
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**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YMMDDHH)	RECEPTOR	(XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS	35.12651c ON 90051124:	AT (	133510.95, 201698.22,	0.00, 0.00)	GP POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1990 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:37:07
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**MODELOPTs:

CONC RURAL FLAT DFAULT

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

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

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 1424 Informational Message(s)

A Total of 1407 Calm Hours Identified

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

***** WARNING MESSAGES *****
SO W320 12 PPARAM :Input Parameter May Be Out-of-Range for Parameter VS

*** ISCST3 Finishes Successfully ***

1991

CO STARTING
TITLEONE 1991 Collier County Landfill SO2 Modeling 12/00
TITLETWO ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00
MODELOPT DFAULT CONC RURAL
AVERTIME 3 8 24 PERIOD
POLLUTID SO2
RUNORNOT RUN
CO FINISHED

SO STARTING
LOCATION FLARESTK POINT 134277 202341
SRCPARAM FLARESTK 50.4 20.8 1033. 67.4 0.76
SRCGROUP ALL
SO FINISHED

RE STARTING
GRIDPOLR POL1 STA
POL1 ORIG 134277.0 202341.0
POL1 DIST 200. 500. 800. 900. 1000. 1100. 1500. 2000.
POL1 DIST 2500. 3000. 3500.
POL1 GDIR 36 10. 10.
POL1 END
RE FINISHED

ME STARTING
INPUTFIL Fmypre91.asc (4I2,F9.4,F9.4,F6.1,I2,2(1X,F6.1))
ANEMHIGHT 6.0 meters
SURFDATA 12835 1991 FTMYERS
UAIRDATA 12842 1991 TAMPA
ME FINISHED

OU STARTING
RECTABLE ALLAVE FIRST
MAXTABLE ALLAVE 10
OU FINISHED

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

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

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

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

***** WARNING MESSAGES *****

SO W320 12 PPARM :Input Parameter May Be Out-of-Range for Parameter VS

**MODELOPTs:

CONC RURAL FLAT DEFAULT

*** 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 3 Short Term Average(s) of: 3-HR 8-HR 24-HR
and Calculates PERIOD Averages

**This Run Includes: 1 Source(s); 1 Source Group(s); and 396 Receptor(s)

**The Model Assumes A Pollutant Type of: SO2

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

**Output Options Selected:

- Model Outputs Tables of PERIOD Averages by Receptor
- Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE Keyword)
- 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) = 6.00 ; Decay Coef. = 0.000 ; Rot. Angle = 0.0

Emission Units = GRAMS/SEC
Output Units = MICROGRAMS/M**3

; Emission Rate Unit Factor = 0.10000E+07

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

**Input Runstream File: nlflat91.inp
**Output Print File: nlflat91.out

**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** POINT SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	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
FLARESTK	0	0.50400E+02	134277.0	202341.0	0.0	20.80	1033.00	67.40	0.76	NO	

*** ISCST3 - VERSION 00101 ***

*** 1991 Collier County Landfill SO2 Modeling 12/00

12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

15:43:27

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**MODELOPTs:

CONC

RURAL FLAT

DFAULT

*** SOURCE IDs DEFINING SOURCE GROUPS ***

GROUP ID

SOURCE IDs

ALL

FLARESTK,

**MODELOPTs:
CONC

RURAL FLAT DEFAULT

*** GRIDDED RECEPTOR NETWORK SUMMARY ***

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

*** ORIGIN FOR POLAR NETWORK ***

X-ORIG = 134277.00 ; Y-ORIG = 202341.00 (METERS)

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

200.0, 500.0, 800.0, 900.0, 1000.0, 1100.0, 1500.0, 2000.0, 2500.0, 3000.0,
3500.0,

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

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

**MODELOPTs:

CONC RURAL FLAT DEFAULT

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

FILE: Fmypre91.asc

FORMAT: (4I2,F9.4,F9.4,F6.1,I2,2(1X,F6.1))

SURFACE STATION NO.: 12835

UPPER AIR STATION NO.: 12842

NAME: FTMYERS

NAME: TAMPA

YEAR: 1991

YEAR: 1991

YR	MN	DY	HR	FLOW	SPEED	TEMP	STAB	MIXING HEIGHT (M)		USTAR	M-O LENGTH	Z-0	IPCODE	PRATE
				VECTOR	(M/S)	(K)	CLASS	RURAL	URBAN	(M/S)	(M)	(M)	(mm/HR)	
91	01	01	01	181.0	1.00	292.6	7	1597.7	383.0	0.0000	0.0	0.0000	0	0.00
91	01	01	02	178.0	0.00	291.5	7	1612.5	383.0	0.0000	0.0	0.0000	0	0.00
91	01	01	03	184.0	0.00	291.5	7	1627.4	383.0	0.0000	0.0	0.0000	0	0.00
91	01	01	04	183.0	0.00	290.9	7	1642.3	383.0	0.0000	0.0	0.0000	0	0.00
91	01	01	05	183.0	0.00	290.4	7	1657.2	383.0	0.0000	0.0	0.0000	0	0.00
91	01	01	06	182.0	0.00	290.4	7	1672.0	383.0	0.0000	0.0	0.0000	0	0.00
91	01	01	07	235.0	2.06	290.4	6	1686.9	383.0	0.0000	0.0	0.0000	0	0.00
91	01	01	08	223.0	2.57	290.9	5	178.7	523.5	0.0000	0.0	0.0000	0	0.00
91	01	01	09	227.0	3.09	292.6	4	447.4	734.7	0.0000	0.0	0.0000	0	0.00
91	01	01	10	241.0	4.12	295.9	3	716.1	946.0	0.0000	0.0	0.0000	0	0.00
91	01	01	11	304.0	4.12	298.7	3	984.9	1157.2	0.0000	0.0	0.0000	0	0.00
91	01	01	12	266.0	5.14	301.5	3	1253.6	1368.5	0.0000	0.0	0.0000	0	0.00
91	01	01	13	303.0	4.12	302.0	3	1522.3	1579.7	0.0000	0.0	0.0000	0	0.00
91	01	01	14	319.0	5.14	302.6	3	1791.0	1791.0	0.0000	0.0	0.0000	0	0.00
91	01	01	15	282.0	4.12	302.6	3	1791.0	1791.0	0.0000	0.0	0.0000	0	0.00
91	01	01	16	244.0	3.09	301.5	3	1791.0	1791.0	0.0000	0.0	0.0000	0	0.00
91	01	01	17	281.0	2.06	300.4	4	1791.0	1791.0	0.0000	0.0	0.0000	0	0.00
91	01	01	18	27.0	3.09	298.2	5	1787.5	1726.2	0.0000	0.0	0.0000	0	0.00
91	01	01	19	84.0	2.57	297.6	4	1776.3	1776.3	0.0000	0.0	0.0000	0	0.00
91	01	01	20	117.0	3.60	298.2	4	1765.0	1765.0	0.0000	0.0	0.0000	0	0.00
91	01	01	21	80.0	1.54	297.0	4	1753.7	1753.7	0.0000	0.0	0.0000	0	0.00
91	01	01	22	312.0	1.54	295.9	5	1742.4	880.7	0.0000	0.0	0.0000	0	0.00
91	01	01	23	300.0	2.06	295.4	5	1731.2	669.4	0.0000	0.0	0.0000	0	0.00
91	01	01	24	300.0	0.00	294.8	6	1719.9	458.0	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.

**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)								
	200.00	500.00	800.00	900.00	1000.00	1100.00	1500.00	2000.00	2500.00
10.00 |	0.00127	0.41753	1.21846	1.34515	1.44417	1.49435	1.54643	1.46487	1.33688
20.00 |	0.00120	0.41103	1.18180	1.29392	1.37470	1.41038	1.40865	1.28901	1.14992
30.00 |	0.00072	0.40775	1.16018	1.26364	1.33384	1.35963	1.32398	1.18702	1.04760
40.00 |	0.00064	0.38616	1.10796	1.20575	1.27213	1.29770	1.26605	1.13650	1.00425
50.00 |	0.00051	0.47165	1.32210	1.43016	1.49784	1.52271	1.45744	1.27346	1.09985
60.00 |	0.00034	0.58801	1.66293	1.80976	1.90193	1.94119	1.85926	1.59864	1.35279
70.00 |	0.00027	0.46649	1.25693	1.34902	1.40194	1.41976	1.33136	1.12360	0.93479
80.00 |	0.00018	0.35595	0.91064	0.96629	0.99927	1.00840	0.95517	0.83440	0.72067
90.00 |	0.00009	0.40486	1.05568	1.12992	1.17706	1.19252	1.14160	1.00150	0.86488
100.00 |	0.00014	0.36840	0.94134	0.99871	1.03246	1.03915	0.97828	0.84697	0.72269
110.00 |	0.00044	0.38244	1.08395	1.18213	1.25231	1.28051	1.27132	1.15420	1.01770
120.00 |	0.00052	0.34988	1.08145	1.20001	1.29119	1.33807	1.38589	1.31477	1.20251
130.00 |	0.00018	0.26825	0.83087	0.92124	0.99400	1.03340	1.09423	1.07060	1.00376
140.00 |	0.00008	0.18969	0.57538	0.63683	0.69188	0.72425	0.80398	0.82941	0.80561
150.00 |	0.00020	0.17895	0.50585	0.55625	0.60102	0.62894	0.69353	0.70610	0.67711
160.00 |	0.00025	0.17298	0.50610	0.56583	0.62010	0.65339	0.73473	0.76826	0.75552
170.00 |	0.00029	0.16692	0.54294	0.61684	0.68252	0.72223	0.81097	0.83759	0.81448
180.00 |	0.00051	0.16412	0.59232	0.67942	0.75667	0.80457	0.91342	0.95425	0.94034
190.00 |	0.00027	0.19848	0.71143	0.81031	0.89489	0.94427	1.03975	1.04986	1.00674
200.00 |	0.00032	0.32177	1.10938	1.26428	1.39569	1.47405	1.62653	1.64896	1.58810
210.00 |	0.00099	0.44029	1.47030	1.67217	1.84360	1.94828	2.15955	2.21126	2.15303
220.00 |	0.00147	0.51587	1.71731	1.94842	2.14380	2.26774	2.52041	2.59491	2.54493
230.00 |	0.00214	0.64501	2.01522	2.26435	2.47275	2.60422	2.86847	2.94349	2.88218
240.00 |	0.00299	0.76142	2.26805	2.52783	2.74513	2.88054	3.15399	3.22155	3.14064
250.00 |	0.00284	0.78997	2.32167	2.57801	2.78789	2.91772	3.15455	3.17031	3.05109
260.00 |	0.00283	0.67713	1.93493	2.11893	2.25943	2.33758	2.41764	2.31138	2.14137
270.00 |	0.00354	0.61758	1.79213	1.97489	2.12036	2.20505	2.33874	2.31568	2.21093
280.00 |	0.00294	0.60641	1.68299	1.83053	1.94220	2.00116	2.07261	2.02849	1.92961
290.00 |	0.00276	0.64896	1.73874	1.87009	1.95894	1.99758	1.99041	1.88592	1.75992
300.00 |	0.00202	0.73766	1.99756	2.15812	2.26407	2.30939	2.27432	2.10584	1.92798
310.00 |	0.00159	0.69941	1.81604	1.94077	2.01419	2.03765	1.94628	1.74454	1.55912
320.00 |	0.00198	0.58202	1.46513	1.55376	1.60231	1.61302	1.51841	1.33898	1.18030
330.00 |	0.00217	0.47330	1.21872	1.30118	1.35107	1.36982	1.32016	1.18984	1.06662
340.00 |	0.00195	0.40105	1.08324	1.16897	1.22667	1.25322	1.24059	1.14549	1.04055
350.00 |	0.00167	0.42855	1.18821	1.29402	1.36916	1.40169	1.39966	1.30279	1.19022
360.00 |	0.00145	0.46425	1.34322	1.48828	1.60358	1.66273	1.74439	1.69664	1.58816

**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** THE PERIOD (8760 HRS) AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3000.00 3500.00

10.00 |	1.21233	1.09723
20.00 |	1.02870	0.92338
30.00 |	0.93063	0.83211
40.00 |	0.89306	0.79867
50.00 |	0.96043	0.84693
60.00 |	1.15827	1.00456
70.00 |	0.78757	0.67336
80.00 |	0.62954	0.55561
90.00 |	0.75256	0.66064
100.00 |	0.62229	0.54127
110.00 |	0.89685	0.79310
120.00 |	1.09578	0.99703
130.00 |	0.93295	0.86122
140.00 |	0.76568	0.71640
150.00 |	0.63770	0.59399
160.00 |	0.72796	0.69042
170.00 |	0.77675	0.73106
180.00 |	0.90909	0.86460
190.00 |	0.95058	0.88718
200.00 |	1.50614	1.41053
210.00 |	2.06598	1.95581
220.00 |	2.46834	2.35986
230.00 |	2.79489	2.67298
240.00 |	3.02853	2.88142
250.00 |	2.91424	2.75809
260.00 |	1.98531	1.83729
270.00 |	2.10624	1.99164
280.00 |	1.83437	1.73199
290.00 |	1.65317	1.54943
300.00 |	1.78461	1.65680
310.00 |	1.41879	1.30067
320.00 |	1.06144	0.96393
330.00 |	0.97390	0.89544
340.00 |	0.95247	0.87437
350.00 |	1.09264	1.00306
360.00 |	1.47433	1.36100

**MODELOPTs:
CONC

RURAL FLAT DEFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.37684c (91053103)	48.57602 (91081515)	73.20921 (91071715)	70.72329 (91071715)	67.32158 (91071715)
20.0 |	0.39368 (91070203)	33.76111 (91071412)	64.40091 (91071412)	64.05340 (91071412)	65.13415 (91033012)
30.0 |	0.39059c (91051421)	37.61119 (91042715)	95.68209 (91042715)	102.04266 (91042715)	104.40476 (91042715)
40.0 |	0.44068 (91050521)	43.43769 (91042315)	79.67280 (91042315)	82.72866 (91042315)	83.74159 (91042315)
50.0 |	0.34296c (91060303)	45.04593 (91041515)	84.45724 (91070215)	83.84303 (91070215)	82.07475 (91070212)
60.0 |	0.22509c (91060303)	66.10310 (91041515)	94.10629 (91071112)	96.97207 (91071112)	96.65707 (91071112)
70.0 |	0.20579 (91060406)	43.24349 (91062215)	67.27911 (91053115)	66.86276 (91053115)	64.14890 (91053115)
80.0 |	0.17773 (91061703)	50.66855 (91062215)	60.42082c (91070912)	53.47715 (91060212)	53.51862 (91060212)
90.0 |	0.06672 (91081315)	40.09915c (91070912)	62.15015c (91070912)	61.31689 (91060412)	64.41425 (91060412)
100.0 |	0.16551 (91052921)	33.88146 (91072815)	63.97865 (91050515)	68.33064 (91050515)	69.75295 (91050515)
110.0 |	0.60165 (91052921)	69.66254 (91042115)	90.85876 (91042115)	86.63723 (91042115)	92.65676 (91030415)
120.0 |	0.67778 (91052921)	31.33804 (91081215)	73.81059 (91092715)	80.47706 (91092715)	83.32211 (91092715)
130.0 |	0.23436 (91052921)	37.73157 (91063012)	63.47028 (91092715)	68.88680 (91092715)	71.01963 (91092715)
140.0 |	0.04188 (91021006)	43.48238 (91060112)	50.70973 (91063012)	41.23051 (91112415)	47.80119 (91112415)
150.0 |	0.19995 (91021006)	38.84510 (91060112)	53.63533 (91060112)	55.33905 (91081712)	59.31700 (91081712)
160.0 |	0.18845 (91092709)	33.12980 (91081615)	40.10889 (91031912)	44.49691 (91030924)	53.04465 (91030924)
170.0 |	0.32514c (91062406)	47.16379 (91081615)	44.81499 (91080412)	46.96124 (91080412)	46.92184 (91080412)
180.0 |	0.43989c (91062406)	48.14682 (91081615)	59.47688 (91080412)	62.92626 (91080412)	63.41600 (91080412)
190.0 |	0.16880c (91010103)	37.61256 (91081615)	41.71416 (91081615)	38.11604 (91011715)	42.20951 (91121606)
200.0 |	0.16104 (91090903)	34.99055 (91020215)	92.69034 (91020215)	98.78601 (91020215)	100.85415 (91020215)
210.0 |	0.37327 (91090903)	42.95676 (91062418)	73.43742 (91040115)	80.43002 (91040115)	85.52887 (91040115)
220.0 |	0.64028 (91121509)	30.85810 (91042615)	54.65572 (91091612)	60.13598 (91101812)	63.85250 (91101812)
230.0 |	0.82523 (91062506)	37.71864 (91062812)	58.20711 (91102012)	64.49873 (91102012)	68.13953 (91102012)
240.0 |	1.01976 (91062506)	49.80346 (91062512)	75.47085 (91101815)	84.72541 (91101815)	90.47182 (91101815)
250.0 |	0.54348 (91050724)	43.77172 (91062512)	89.70950 (91060612)	92.73443 (91060612)	92.55740 (91060612)
260.0 |	0.38845 (91062706)	49.15145 (91062415)	66.58105 (91091815)	69.13113 (91091815)	71.26694 (91111815)
270.0 |	0.53685 (91040706)	50.13451 (91062415)	78.93836 (91091912)	82.82760 (91091912)	83.24239 (91091912)
280.0 |	0.48223c (91060206)	38.61282 (91041315)	73.50141 (91041315)	74.67094 (91041315)	73.41197 (91041315)
290.0 |	0.41796 (91070309)	32.35950 (91071812)	60.02044 (91041412)	62.99242 (91041412)	63.29910 (91041412)
300.0 |	0.37706c (91053024)	41.11035 (91040712)	101.55450 (91040712)	107.10447 (91040712)	108.46000 (91040712)
310.0 |	0.46158c (91010124)	44.77138 (91080615)	75.40234 (91050815)	73.47726 (91050815)	69.36787 (91050815)
320.0 |	0.44358 (91062606)	38.94926 (91070712)	75.00694 (91042912)	80.08726 (91042912)	82.63392 (91042912)
330.0 |	0.44101 (91081321)	47.46245 (91070712)	61.68194 (91061412)	63.59866 (91061412)	62.72205 (91061412)
340.0 |	0.45696 (91063024)	35.60119 (91070712)	52.04767 (91061412)	53.42343 (91061412)	52.72245 (91041612)
350.0 |	0.44013 (91091921)	54.35708 (91080212)	79.56043 (91042312)	82.19791 (91042312)	82.80915 (91042312)
360.0 |	0.44010 (91092609)	52.24771 (91080212)	71.72498 (91030312)	76.28802 (91030312)	77.96996 (91030312)

**MODELOPTs:
 CONC

RURAL FLAT DEFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	69.34982 (91022218)	80.19259 (91022218)	79.28288 (91022218)	72.50546 (91022218)	64.56033 (91022218)
20.0 |	68.40946 (91033012)	71.51056 (91033012)	65.25930 (91033012)	56.74162 (91033012)	48.85409 (91033012)
30.0 |	103.88235 (91042715)	88.71281 (91042715)	66.26662 (91042715)	49.53897 (91042715)	43.51874 (91012818)
40.0 |	82.21689 (91042315)	71.34361 (91042315)	59.66304 (91030818)	56.39319 (91030818)	51.46015 (91030818)
50.0 |	81.09511 (91070212)	68.79548 (91080115)	58.68852 (91011615)	58.17725 (91041924)	56.33965 (91041924)
60.0 |	94.42043 (91071112)	79.05930 (91071112)	61.15623 (91071112)	48.67140 (91071112)	44.09331 (91080518)
70.0 |	60.24169 (91053115)	61.33536 (91062518)	59.24504 (91062518)	53.09029 (91062518)	46.14426 (91062518)
80.0 |	51.94093 (91060212)	56.58979 (91080318)	55.28962 (91080318)	49.91413 (91080318)	44.26981 (91080318)
90.0 |	65.36067 (91060412)	57.86438 (91060412)	44.73146 (91060415)	42.40063 (91121018)	42.96513 (91121018)
100.0 |	69.11566 (91050515)	57.81615 (91050515)	45.36424 (91030518)	46.93595 (91030518)	45.67058 (91030518)
110.0 |	94.15735 (91030415)	89.22137 (91030415)	78.40509 (91042018)	72.17873 (91042018)	64.16016 (91042018)
120.0 |	83.31378 (91092715)	70.26017 (91092715)	60.40533 (91080918)	51.55936 (91080918)	43.77266 (91080918)
130.0 |	70.71924 (91092715)	64.39798 (91030424)	70.72430 (91030424)	69.63413 (91030424)	65.41801 (91030424)
140.0 |	51.98457 (91120403)	67.80867 (91120403)	74.55540 (91120403)	73.36362 (91120403)	68.85078 (91120403)
150.0 |	61.79553 (91081712)	61.97190 (91081712)	53.15496 (91081712)	48.24919 (91100706)	46.18325 (91100706)
160.0 |	57.91113 (91030924)	68.35979 (91030924)	68.82996 (91030924)	63.70172 (91030924)	57.17410 (91030924)
170.0 |	46.15218 (91031003)	56.17704 (91031003)	58.08244 (91031003)	55.83202 (91020824)	54.15004 (91020824)
180.0 |	61.91263 (91080412)	55.48192 (91011715)	53.83117 (91110324)	49.86775 (91110324)	47.93248 (91022703)
190.0 |	45.75990 (91121609)	54.09795 (91121609)	58.11903 (91112503)	56.68242 (91112503)	52.85637 (91112503)
200.0 |	100.06821 (91020215)	84.48801 (91020215)	62.42723 (91020215)	55.05650 (91120509)	51.26778 (91120509)
210.0 |	87.04630 (91040115)	85.14875 (91040115)	76.11291 (91040115)	66.18282 (91040115)	57.27410 (91040115)
220.0 |	65.63258 (91101812)	63.77507 (91060809)	52.54812 (91021212)	49.97943 (91120718)	54.26731 (91102603)
230.0 |	69.62440 (91102012)	63.59429 (91102012)	54.65778 (91061115)	52.02457 (91061209)	51.87034 (91061209)
240.0 |	93.26879 (91101815)	87.34574 (91101815)	69.02539 (91101815)	63.74524 (91093018)	58.48396 (91093018)
250.0 |	90.32056 (91060612)	74.56992 (91111415)	73.13462 (91020315)	70.27486 (91020315)	65.55076 (91111424)
260.0 |	72.55897 (91111815)	65.68118 (91111815)	56.61547 (91102215)	48.28128 (91102412)	47.67975 (91061124)
270.0 |	81.30347 (91091912)	65.22131 (91102112)	55.94493 (91102112)	50.52495 (91020415)	47.94065 (91052209)
280.0 |	70.67989 (91041315)	68.29676 (91111915)	60.90615 (91052115)	55.43245 (91052115)	49.14522 (91052115)
290.0 |	63.80954 (91052818)	58.45049 (91052818)	48.82779 (91120915)	44.97362 (91120112)	42.47802 (91120112)
300.0 |	106.93203 (91040712)	88.97147 (91040712)	65.28368 (91040712)	48.76715 (91112112)	47.41930 (91080103)
310.0 |	70.35565 (91032015)	64.17432 (91032015)	50.04210 (91032015)	46.13634c (91030609)	48.91774c (91030609)
320.0 |	82.43863 (91042912)	75.38716 (91010712)	61.32844 (91042912)	50.76672 (91042912)	44.06415 (91121412)
330.0 |	60.14394 (91061412)	48.78326 (91081412)	45.70346 (91031309)	40.47071 (91031309)	35.03917 (91031309)
340.0 |	51.12976 (91011112)	50.21910 (91011112)	47.42017 (91072915)	42.70270 (91072915)	42.44234c (91122324)
350.0 |	80.92986 (91042312)	69.39381 (91042312)	57.42914 (91032924)	55.17851 (91042309)	52.92958 (91042309)
360.0 |	79.59041 (91122315)	83.05835 (91122315)	73.42295 (91012415)	67.71520 (91031315)	60.62951 (91031315)

**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE 1ST HIGHEST 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3500.00

10.0	|	57.02913	(91022218)
20.0	|	42.22085	(91033012)
30.0	|	40.66957	(91013118)
40.0	|	46.24524	(91030818)
50.0	|	53.09411	(91041924)
60.0	|	42.87439	(91080518)
70.0	|	39.68899	(91062518)
80.0	|	42.83953c	(91041721)
90.0	|	42.11627	(91121018)
100.0	|	42.94895	(91030518)
110.0	|	56.40234	(91042018)
120.0	|	43.25739	(91041821)
130.0	|	60.02501	(91030424)
140.0	|	63.12064	(91120403)
150.0	|	42.94144	(91100706)
160.0	|	51.98859	(91031906)
170.0	|	50.80056	(91020824)
180.0	|	50.02942	(91031103)
190.0	|	48.25914	(91112503)
200.0	|	50.19923	(91112703)
210.0	|	49.78206	(91110512)
220.0	|	57.12286	(91102603)
230.0	|	50.42537	(91061209)
240.0	|	52.83452	(91093018)
250.0	|	70.82001	(91111424)
260.0	|	50.50145	(91061124)
270.0	|	46.99138c	(91050721)
280.0	|	45.67829	(91120109)
290.0	|	45.74372	(91072621)
300.0	|	50.82919	(91080103)
310.0	|	49.91034c	(91030609)
320.0	|	40.18155	(91121412)
330.0	|	33.82655	(91042306)
340.0	|	45.70039c	(91122324)
350.0	|	49.37932	(91042309)
360.0	|	53.72570	(91031315)

**MODELOPTs:

CONC RURAL FLAT DFAULT

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

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

 ** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.19241c(91092608)	24.28801c(91081516)	39.22792c(91122316)	45.00181c(91122316)	49.16727c(91122316)
20.0 |	0.19684c(91070208)	16.75876 (91062316)	36.21737 (91062316)	37.25711 (91062316)	37.00990 (91062316)
30.0 |	0.19529c(91051424)	19.02131 (91042716)	48.99217 (91042716)	52.31692 (91042716)	53.57077 (91042716)
40.0 |	0.16525 (91050524)	16.36062 (91042316)	30.63297 (91042916)	32.40448 (91051316)	34.22337 (91051316)
50.0 |	0.17148c(91060308)	32.32374 (91070216)	75.24105 (91070216)	78.04116 (91070216)	77.91577 (91070216)
60.0 |	0.11254c(91060308)	31.46773 (91070216)	68.88300 (91070216)	69.94843 (91070216)	68.31103 (91070216)
70.0 |	0.07874 (91060408)	21.20826c(91070916)	43.16644c(91070916)	41.41890 (91082116)	44.37051 (91082116)
80.0 |	0.06665 (91061708)	29.51083c(91070916)	57.21775c(91070916)	53.95155c(91070916)	50.60598c(91070916)
90.0 |	0.02502 (91081316)	28.16541c(91070916)	52.05787c(91070916)	48.24454c(91070916)	49.41897 (91060416)
100.0 |	0.06207 (91052924)	23.63347c(91081216)	40.75473c(91081216)	38.14312c(91081216)	34.89900c(91081216)
110.0 |	0.22562 (91052924)	35.67583 (91042116)	58.50753 (91030416)	67.90681 (91030416)	74.72509 (91030416)
120.0 |	0.25417 (91052924)	15.71581c(91081216)	29.85916 (91021516)	33.85049c(91021116)	36.78975c(91021116)
130.0 |	0.08788 (91052924)	14.14934 (91063016)	25.36744 (91012216)	28.71327 (91012216)	30.91260 (91012216)
140.0 |	0.02137c(91021008)	18.63531c(91060116)	23.48834 (91020916)	28.87082 (91020916)	33.72728 (91020916)
150.0 |	0.10414c(91021008)	16.95072c(91081616)	30.09805 (91081716)	32.59724 (91081716)	33.91437 (91081716)
160.0 |	0.09423c(91092708)	28.04234c(91081616)	26.20290c(91081616)	24.45712 (91081716)	26.52341 (91030924)
170.0 |	0.16257c(91062408)	31.67704c(91081616)	29.48091c(91081616)	28.66515 (91031916)	29.23453 (91031916)
180.0 |	0.21995c(91062408)	25.61843c(91081616)	26.87301c(91080416)	28.37477c(91080416)	28.54360c(91080416)
190.0 |	0.08440c(91010108)	17.20705c(91081616)	26.07968 (91011716)	31.64748 (91121608)	37.93139 (91121608)
200.0 |	0.08052c(91090908)	16.62133 (91020216)	47.98801 (91101016)	53.40258 (91101016)	56.52413 (91101016)
210.0 |	0.18664c(91090908)	22.50765 (91040116)	47.27515 (91101016)	51.84658 (91101016)	54.10212 (91101016)
220.0 |	0.32020c(91121508)	17.76961 (91042616)	34.19743 (91101816)	38.79142 (91101816)	41.91726 (91101816)
230.0 |	0.41262c(91062508)	21.45107 (91042616)	37.24656 (91061116)	41.34311 (91061116)	44.12610 (91061116)
240.0 |	0.50988c(91062508)	30.65945 (91062516)	47.45311c(91091116)	49.30327 (91111416)	53.11756 (91111416)
250.0 |	0.23378c(91091108)	28.83905c(91091116)	51.76863 (91061016)	54.45320 (91061016)	54.87223 (91061016)
260.0 |	0.23606 (91040608)	26.66108 (91062416)	36.26456 (91062416)	38.04314 (91102416)	41.43214 (91102416)
270.0 |	0.27021 (91040708)	27.16760 (91062416)	35.91993 (91091916)	38.22820 (91091916)	38.90874 (91091916)
280.0 |	0.24111c(91060208)	17.95841c(91070516)	40.30963 (91111916)	47.47102 (91111916)	53.07503 (91111916)
290.0 |	0.20898c(91070308)	18.07982 (91040716)	45.39187 (91052816)	49.40159 (91052816)	51.37024 (91052816)
300.0 |	0.18853c(91053024)	25.02643 (91051016)	55.91117 (91051016)	58.04873 (91051016)	58.07322 (91051016)
310.0 |	0.19782c(91010124)	20.65625 (91052416)	51.15015 (91052416)	53.83445 (91052416)	54.44640 (91052416)
320.0 |	0.23072c(91081008)	16.43099c(91072516)	38.00812 (91042916)	40.54919 (91042916)	41.71346 (91042916)
330.0 |	0.19506c(91053008)	18.02791 (91070716)	32.58304 (91061416)	33.36909 (91061416)	33.13373 (91050916)
340.0 |	0.22848c(91063024)	17.66417 (91042516)	31.52023c(91072916)	34.27410c(91072916)	35.92313c(91072916)
350.0 |	0.19496c(91091308)	22.25428 (91080216)	38.25010 (91073016)	42.11452 (91073016)	44.23862 (91073016)
360.0 |	0.25784c(91092608)	25.67051 (91080216)	41.05836 (91032916)	45.25548 (91032916)	48.53856 (91032916)

**MODELOPTs:

CONC RURAL FLAT DEFAULT

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

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	51.97776 (91030616)	55.30036 (91030616)	51.16479 (91030616)	45.03072 (91030616)	39.17738 (91030616)
20.0 |	35.94760 (91062316)	36.58681 (91070316)	34.41715 (91070316)	29.54401 (91070316)	24.68797 (91070316)
30.0 |	53.32786 (91042716)	45.56713 (91042716)	34.03893 (91042716)	26.10175 (91012816)	26.60566c(91011624)
40.0 |	35.12181 (91051316)	33.10661 (91051316)	28.48705c(91032624)	30.02116c(91032624)	29.85187c(91032624)
50.0 |	75.90280 (91070216)	61.11644 (91070216)	43.78510 (91070216)	31.86648 (91070216)	23.94092 (91070216)
60.0 |	65.10872 (91070216)	49.47799 (91071116)	37.76050 (91071116)	29.79069 (91042416)	24.73268c(91070224)
70.0 |	45.90797 (91082116)	43.96253 (91082116)	36.04131 (91082116)	28.65299 (91082116)	22.87273 (91082116)
80.0 |	47.50595c(91070916)	39.22491 (91041916)	33.75925 (91041916)	27.83566 (91041916)	22.88864 (91041916)
90.0 |	50.80560 (91060416)	48.97873 (91060416)	41.77906 (91060416)	34.98339 (91060416)	29.51428 (91060416)
100.0 |	32.21189 (91041816)	25.92512 (91041816)	20.85009c(91072716)	17.33752 (91030516)	15.68116 (91021508)
110.0 |	77.03496 (91030416)	76.47467 (91030416)	67.33033 (91030416)	57.27560 (91030416)	48.56923 (91030416)
120.0 |	38.23622c(91021116)	38.34149c(91021116)	33.68119c(91021116)	32.86639c(91041824)	32.64718c(91041824)
130.0 |	32.10974 (91012216)	37.72434 (91030424)	39.98409 (91030424)	38.55227 (91030424)	35.72523 (91030424)
140.0 |	36.54573 (91020916)	43.38831 (91120408)	45.63157 (91120408)	43.60476 (91120408)	40.09483 (91120408)
150.0 |	34.35496 (91081716)	31.60887 (91081716)	25.49531 (91081716)	23.08276 (91100708)	21.71984 (91100708)
160.0 |	28.83394 (91030924)	33.54589 (91030924)	33.34708 (91030924)	30.57568 (91030924)	27.24527 (91030924)
170.0 |	29.02590 (91031916)	24.75938 (91031916)	25.87664 (91031008)	26.99177 (91112424)	28.05032 (91112424)
180.0 |	29.11020 (91011716)	29.72356 (91011716)	27.70625 (91110916)	26.79366 (91110324)	26.04065 (91022708)
190.0 |	41.66992 (91121608)	50.70282 (91121608)	53.14674 (91121608)	50.82041 (91121608)	46.92546 (91121608)
200.0 |	57.78633 (91101016)	52.60526 (91101016)	41.87264 (91121516)	37.72301 (91121516)	33.83250 (91121516)
210.0 |	54.57708 (91101016)	47.93623 (91040116)	40.74877 (91040116)	35.51386 (91110516)	35.92422 (91100808)
220.0 |	43.74090 (91101816)	42.69524 (91101816)	37.16723 (91060816)	32.34308 (91060816)	27.90812 (91060816)
230.0 |	45.74812 (91061116)	46.07496 (91121924)	47.28095 (91121924)	44.60555 (91121924)	40.89889 (91121924)
240.0 |	55.17560 (91111416)	55.32249 (91093016)	50.15948 (91093016)	43.60063 (91093016)	37.65701 (91093016)
250.0 |	53.76159 (91061016)	50.96244 (91111416)	43.19356 (91111416)	38.88081 (91113008)	43.10965 (91113008)
260.0 |	43.26239 (91102416)	43.18955 (91102416)	37.06345 (91102416)	30.65927 (91102416)	26.53497 (91061124)
270.0 |	38.41547 (91091916)	43.91769 (91052216)	44.78326 (91052216)	41.86164 (91052216)	37.87162 (91052216)
280.0 |	56.01213 (91111916)	58.47346 (91111916)	52.45016 (91111916)	44.61768 (91111916)	37.55688 (91111916)
290.0 |	51.75600 (91052816)	45.32222 (91052816)	34.02477 (91052816)	28.38069 (91120116)	27.74957 (91120116)
300.0 |	57.05723 (91040716)	48.67362 (91040716)	37.91172 (91040716)	29.97614 (91040716)	24.29080 (91040716)
310.0 |	53.64132 (91052416)	44.62228 (91052416)	32.73618 (91052416)	24.16845 (91052416)	22.86493c(91080108)
320.0 |	41.54720 (91042916)	36.74588 (91042916)	29.55440 (91042916)	23.86635 (91042916)	21.76024 (91032908)
330.0 |	32.86391 (91050916)	28.05458c(91010716)	23.08013c(91010716)	20.74589 (91031316)	18.17982 (91031316)
340.0 |	36.44628c(91072916)	34.18438c(91072916)	28.85277c(91072916)	26.94729 (91030208)	29.15304 (91030208)
350.0 |	44.97823 (91073016)	40.69609 (91073016)	34.92201 (91032924)	30.80294 (91032924)	26.72706 (91032924)
360.0 |	49.64569 (91032916)	49.94610 (91032916)	46.17128 (91032916)	41.22539 (91032916)	36.41777 (91032916)

**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	200.00	500.00	800.00	900.00	1000.00
10.0 |	0.06281c(91053124)	8.09600c(91081524)	16.85812c(91030624)	19.87629c(91030624)	22.33536c(91030624)
20.0 |	0.06511c(91051424)	7.13023c(91062324)	15.35933c(91062324)	15.81102c(91062324)	15.72285c(91062324)
30.0 |	0.06510c(91051424)	7.84237c(91042724)	21.37877c(91042724)	23.08807c(91042724)	23.87860c(91042724)
40.0 |	0.06958c(91050524)	5.94932c(91042324)	12.40756c(91051324)	13.64399c(91051324)	14.40984c(91051324)
50.0 |	0.05840c(91060324)	13.86782c(91070224)	32.98128c(91070224)	34.39862c(91070224)	34.54324c(91070224)
60.0 |	0.03837c(91060324)	13.83061c(91070224)	32.30056c(91070224)	33.54173c(91070224)	33.60330c(91070224)
70.0 |	0.02635 (91060424)	7.53702c(91053124)	17.85980c(91053124)	18.82157c(91053124)	19.72023c(91082124)
80.0 |	0.02962c(91061724)	9.83714c(91070924)	19.07345c(91070924)	17.98468c(91070924)	16.86944c(91070924)
90.0 |	0.01001c(91081324)	9.45445c(91070924)	19.39248c(91041824)	20.47426c(91041824)	20.71593c(91041824)
100.0 |	0.02758c(91052924)	9.19082c(91081224)	15.84912c(91081224)	14.83348c(91081224)	14.90011c(91041824)
110.0 |	0.10028c(91052924)	13.26349c(91042124)	33.48282 (91021524)	37.50391 (91021524)	40.15702 (91021524)
120.0 |	0.11296c(91052924)	6.69569 (91021524)	21.58452 (91021524)	24.22330 (91021524)	26.00034 (91021524)
130.0 |	0.03906c(91052924)	5.58566c(91060124)	10.09435c(91021124)	11.53491c(91021124)	12.65522c(91021124)
140.0 |	0.00723c(91021024)	7.25356c(91060124)	9.64834 (91020924)	12.02900 (91020924)	14.29836 (91020924)
150.0 |	0.03177c(91021024)	6.76840c(91081624)	13.37691c(91081724)	14.48766c(91081724)	15.07305c(91081724)
160.0 |	0.02827c(91092724)	10.90791c(91081624)	13.20881 (91031024)	15.70925 (91031024)	17.81051 (91031024)
170.0 |	0.05419c(91062424)	12.31885c(91081624)	11.46480c(91081624)	13.63412 (91031024)	15.90072 (91031024)
180.0 |	0.07332c(91062424)	9.96272c(91081624)	10.60671c(91080424)	12.06677c(91110324)	14.24032c(91110324)
190.0 |	0.02813c(91010124)	6.69163c(91081624)	14.06099c(91121624)	17.22093c(91121624)	20.01631c(91121624)
200.0 |	0.02197c(91090924)	5.84992 (91020224)	18.33101 (91020224)	20.43180 (91020224)	21.95522 (91020224)
210.0 |	0.05166c(91090924)	7.63282c(91062424)	16.68383 (91040124)	18.02976 (91040124)	18.98302 (91040124)
220.0 |	0.08733c(91121524)	6.27240c(91092024)	16.90728c(91021224)	19.12090c(91021224)	20.76161c(91021224)
230.0 |	0.11267c(91062524)	8.25027c(91091224)	16.13525c(91072124)	17.28293 (91121924)	20.07491 (91121924)
240.0 |	0.13936c(91062524)	11.40527c(91062524)	16.05770 (91093024)	18.99312 (91093024)	21.51692 (91093024)
250.0 |	0.09292c(91040624)	9.98337c(91062524)	22.67993 (91061024)	24.96964 (91061024)	26.40152 (91061024)
260.0 |	0.10311c(91040624)	11.84946c(91062424)	16.11797c(91062424)	15.19740 (91061024)	15.71602 (91061024)
270.0 |	0.09013 (91040724)	12.07449c(91062424)	15.49598c(91062424)	15.65721c(91091924)	17.29008 (91052224)
280.0 |	0.08037c(91060224)	7.82249c(91062424)	13.70589 (91111924)	16.17019 (91111924)	18.12269 (91111924)
290.0 |	0.06990c(91062224)	8.10900c(91052824)	23.98289c(91052824)	26.17531c(91052824)	27.28280c(91052824)
300.0 |	0.07620c(91062224)	10.07711c(91051024)	22.57697c(91051024)	23.48091c(91051024)	23.54987c(91051024)
310.0 |	0.07693c(91010124)	8.85556c(91080624)	17.20071c(91080624)	17.96972 (91052424)	18.17584 (91052424)
320.0 |	0.07691c(91081024)	6.82206c(91070724)	14.54530c(91080624)	14.86243c(91080624)	14.93176c(91042924)
330.0 |	0.06670c(91081324)	7.59070c(91070724)	11.84838c(91061424)	12.45364c(91050924)	12.68721c(91050924)
340.0 |	0.06543c(91091324)	7.06567c(91042524)	12.73285c(91041624)	12.99611c(91041624)	13.41620c(91072924)
350.0 |	0.06602c(91091924)	7.74064c(91080224)	15.78181c(91042324)	17.56466c(91042324)	19.02819c(91042324)
360.0 |	0.07847c(91092624)	8.92888c(91080224)	22.05033 (91032924)	25.18696 (91032924)	27.68797 (91032924)

**MODELOPTs:

CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | (DEGREES) |	DISTANCE (METERS)				
	1100.00	1500.00	2000.00	2500.00	3000.00
10.0 |	23.70092c(91030624)	25.45894c(91030624)	23.90598c(91030624)	21.31505c(91030624)	18.77230c(91030624)
20.0 |	15.95528c(91070324)	18.88012c(91070324)	18.61921c(91070324)	16.89893c(91070324)	15.06917c(91070324)
30.0 |	23.97842c(91042724)	21.00292c(91042724)	16.64462c(91012824)	15.75015c(91033024)	15.13427c(91033024)
40.0 |	14.78813c(91051324)	13.93963c(91051324)	11.31890c(91031424)	10.93433c(91022524)	10.68247c(91022524)
50.0 |	33.83906c(91070224)	27.78650c(91070224)	20.26182c(91070224)	14.92451c(91070224)	11.51316c(91032324)
60.0 |	32.85764c(91070224)	27.43122c(91070224)	21.38874c(91070224)	17.33287c(91070224)	14.65775c(91070224)
70.0 |	20.40354c(91082124)	19.53890c(91082124)	16.01836c(91082124)	12.73466c(91082124)	10.16566c(91082124)
80.0 |	16.71948c(91041924)	16.98462c(91041924)	14.79632c(91041924)	12.35974c(91041924)	10.29186c(91041924)
90.0 |	20.37707c(91041824)	18.04782 (91060424)	16.22119 (91060424)	14.86280 (91060524)	13.82086 (91060524)
100.0 |	14.62759c(91041824)	12.36015c(91030524)	12.54276c(91030524)	11.79952c(91030524)	10.80040c(91030524)
110.0 |	40.68908 (91021524)	38.83554 (91021524)	33.72825 (91021524)	28.67574 (91021524)	24.44591 (91021524)
120.0 |	26.37074 (91021524)	25.18407 (91021524)	23.07729c(91021124)	21.15660c(91021124)	19.02721c(91021124)
130.0 |	13.25314c(91021124)	15.66959 (91030424)	17.18112 (91030424)	16.95778 (91030424)	16.01592 (91030424)
140.0 |	15.74354 (91020924)	19.62901 (91020924)	21.60506 (91020924)	21.62844 (91020924)	20.86917 (91020924)
150.0 |	15.26887c(91081724)	14.04839c(91081724)	12.43144 (91020924)	11.83823 (91020924)	10.97074 (91020924)
160.0 |	19.03697 (91031024)	20.99555 (91031024)	20.29824 (91031024)	18.50456 (91031024)	16.59887 (91031024)
170.0 |	17.14729 (91031024)	19.63458 (91031024)	19.54952 (91031024)	18.07026 (91031024)	16.27840 (91031024)
180.0 |	15.65391c(91110324)	18.41609c(91110324)	18.20698c(91110324)	16.79785c(91110324)	15.21488c(91110324)
190.0 |	21.61197c(91121624)	24.77534c(91121624)	24.69777c(91121624)	22.88005c(91121624)	20.66917c(91121624)
200.0 |	22.64649 (91020224)	22.77903 (91020224)	21.05674 (91020224)	19.08774 (91020224)	17.24140 (91020224)
210.0 |	20.45617 (91021624)	23.17880 (91021624)	22.45241 (91021624)	20.63839 (91110524)	20.19028 (91110524)
220.0 |	21.62687c(91021224)	21.96284c(91021224)	19.73016c(91021224)	17.09156c(91021224)	15.45718c(91060624)
230.0 |	21.54106 (91121924)	24.33260 (91121924)	24.03691 (91121924)	22.15774 (91121924)	19.97907 (91121924)
240.0 |	22.95912 (91093024)	25.75903 (91093024)	25.99821 (91093024)	24.74547 (91093024)	23.18779 (91093024)
250.0 |	26.86225 (91061024)	25.25125 (91061024)	22.65998 (91111424)	21.89294 (91111424)	21.04159 (91111424)
260.0 |	15.76992 (91061024)	15.18649 (91102424)	14.63702 (91102424)	12.70564 (91102424)	12.00213 (91061124)
270.0 |	19.08631 (91052224)	23.66310 (91052224)	25.27194 (91052224)	24.58870 (91052224)	23.00351 (91052224)
280.0 |	19.16162 (91111924)	23.51941 (91052124)	25.11664 (91052124)	24.46194 (91052124)	22.93841 (91052124)
290.0 |	27.54455c(91052824)	24.28326c(91052824)	19.08973 (91050824)	17.51952 (91050824)	16.00580 (91050824)
300.0 |	23.06435c(91051024)	22.61070c(91041124)	20.66731c(91041124)	18.39520c(91041124)	16.50221c(91041124)
310.0 |	17.90814 (91052424)	14.90211 (91052424)	13.02197c(91041124)	11.74926c(91100424)	11.59760c(91030624)
320.0 |	14.94977c(91042924)	13.61528c(91042924)	11.53353c(91042924)	9.83581c(91042924)	8.54887c(91042924)
330.0 |	12.58971c(91050924)	11.82153c(91012924)	9.84108c(91012924)	8.67088 (91031324)	8.21907 (91031324)
340.0 |	13.62520c(91072924)	12.83795c(91072924)	10.89771c(91072924)	11.28310 (91030224)	11.88421 (91030224)
350.0 |	19.63849c(91042324)	20.37819c(91042324)	19.44271c(91042324)	17.80321c(91042324)	16.07906c(91042324)
360.0 |	28.68202 (91032924)	29.41596 (91032924)	27.03705 (91032924)	23.80693 (91032924)	20.72883 (91032924)

**MODELOPTs:

CONC

RURAL FLAT DFAULT

*** THE 1ST HIGHEST 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

DIRECTION | DISTANCE (METERS)
(DEGREES) | 3500.00

10.0 |	16.67962c(91022224)
20.0 |	13.45517c(91070324)
30.0 |	14.31557c(91033024)
40.0 |	10.13995c(91022524)
50.0 |	9.85165c(91032324)
60.0 |	12.76479c(91070224)
70.0 |	9.84873 (91060424)
80.0 |	8.62596c(91041924)
90.0 |	12.82001 (91060524)
100.0 |	9.74850c(91030524)
110.0 |	21.04372 (91021524)
120.0 |	16.99636c(91021124)
130.0 |	14.79177 (91030424)
140.0 |	19.66664 (91020924)
150.0 |	10.03027 (91020924)
160.0 |	14.81347 (91031024)
170.0 |	14.52771 (91031024)
180.0 |	13.68369c(91110324)
190.0 |	18.49517c(91121624)
200.0 |	15.51163 (91020224)
210.0 |	19.16538 (91110524)
220.0 |	14.29926 (91020124)
230.0 |	17.89521 (91121924)
240.0 |	21.50807 (91093024)
250.0 |	20.15626 (91111424)
260.0 |	11.62039 (91061124)
270.0 |	21.08994 (91052224)
280.0 |	21.09265 (91052124)
290.0 |	14.61105 (91050824)
300.0 |	14.85583c(91041124)
310.0 |	12.03795c(91030624)
320.0 |	8.82717c(91073124)
330.0 |	7.70256 (91031324)
340.0 |	11.93837 (91030224)
350.0 |	14.43032c(91042324)
360.0 |	18.04377 (91032924)

*** ISCST3 - VERSION 00101 ***

*** 1991 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:43:27
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**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE MAXIMUM 10 3-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	108.46000	(91040712) AT	(133410.97, 202841.00) GP	6.	102.04266	(91042715) AT	(134727.00, 203120.42) GP
2.	107.10447	(91040712) AT	(133497.58, 202791.00) GP	7.	101.55450	(91040712) AT	(133584.17, 202741.00) GP
3.	106.93203	(91040712) AT	(133324.38, 202891.00) GP	8.	100.85415	(91020215) AT	(133934.98, 201401.31) GP
4.	104.40476	(91042715) AT	(134777.00, 203207.03) GP	9.	100.06821	(91020215) AT	(133900.78, 201307.34) GP
5.	103.88235	(91042715) AT	(134827.00, 203293.63) GP	10.	98.78601	(91020215) AT	(133969.19, 201495.28) GP

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

*** ISCST3 - VERSION 00101 ***

*** 1991 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

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**MODELOPTs:

CONC

RURAL FLAT

DFAULT

*** THE MAXIMUM 10 8-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE	RANK	CONC	(YMMDDHH)	AT	RECEPTOR (XR, YR)	OF TYPE
1.	78.04116	(91070216)	AT	(134966.44, 202919.52)	GP	6.	75.24105	(91070216)	AT	(134889.83, 202855.23)	GP
2.	77.91577	(91070216)	AT	(135043.05, 202983.78)	GP	7.	74.72509	(91030416)	AT	(135216.69, 201998.98)	GP
3.	77.03496	(91030416)	AT	(135310.66, 201964.78)	GP	8.	69.94843	(91070216)	AT	(135056.42, 202791.00)	GP
4.	76.47467	(91030416)	AT	(135686.53, 201827.97)	GP	9.	68.88300	(91070216)	AT	(134969.83, 202741.00)	GP
5.	75.90280	(91070216)	AT	(135119.66, 203048.06)	GP	10.	68.31103	(91070216)	AT	(135143.03, 202841.00)	GP

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

**MODELOPTs:

CONC RURAL FLAT DEFAULT

*** THE MAXIMUM 10 24-HR AVERAGE CONCENTRATION VALUES FOR SOURCE GROUP: ALL ***
 INCLUDING SOURCE(S): FLARESTK,

** CONC OF SO2 IN MICROGRAMS/M**3 **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
1.	40.68908	(91021524) AT	(135310.66, 201964.78) GP	6.	34.39862c	(91070224) AT	(134966.44, 202919.52) GP
2.	40.15702	(91021524) AT	(135216.69, 201998.98) GP	7.	33.83906c	(91070224) AT	(135119.66, 203048.06) GP
3.	38.83554	(91021524) AT	(135686.53, 201827.97) GP	8.	33.72825	(91021524) AT	(136156.39, 201656.95) GP
4.	37.50391	(91021524) AT	(135122.72, 202033.19) GP	9.	33.60330c	(91070224) AT	(135143.03, 202841.00) GP
5.	34.54324c	(91070224) AT	(135043.05, 202983.78) GP	10.	33.54173c	(91070224) AT	(135056.42, 202791.00) GP

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

**MODELOPTs:

CONC RURAL FLAT DEFAULT

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	1ST HIGHEST VALUE IS	3.22155 AT (132544.95, 201341.00, 0.00, 0.00)	GP	POL1
	2ND HIGHEST VALUE IS	3.17031 AT (132397.61, 201656.95, 0.00, 0.00)	GP	POL1
	3RD HIGHEST VALUE IS	3.15455 AT (132867.47, 201827.97, 0.00, 0.00)	GP	POL1
	4TH HIGHEST VALUE IS	3.15399 AT (132977.97, 201591.00, 0.00, 0.00)	GP	POL1
	5TH HIGHEST VALUE IS	3.14064 AT (132111.94, 201091.00, 0.00, 0.00)	GP	POL1
	6TH HIGHEST VALUE IS	3.05109 AT (131927.77, 201485.95, 0.00, 0.00)	GP	POL1
	7TH HIGHEST VALUE IS	3.02853 AT (131678.92, 200841.00, 0.00, 0.00)	GP	POL1
	8TH HIGHEST VALUE IS	2.94349 AT (132744.91, 201055.42, 0.00, 0.00)	GP	POL1
	9TH HIGHEST VALUE IS	2.91772 AT (133243.34, 201964.78, 0.00, 0.00)	GP	POL1
	10TH HIGHEST VALUE IS	2.91424 AT (131457.92, 201314.94, 0.00, 0.00)	GP	POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1991 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:43:27
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**MODELOPTs:

CONC RURAL FLAT DFAULT

*** THE SUMMARY OF HIGHEST 3-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 108.46000	ON 91040712: AT (	133410.97, 202841.00, 0.00,	0.00)	GP POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1991 Collier County Landfill SO2 Modeling 12/00

*** 12/15/00

*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 15:43:27

**MODELOPTs:

PAGE 23

CONC

RURAL FLAT

DEFAULT

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

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 78.04116	ON 91070216:	AT (134966.44, 202919.52, 0.00, 0.00)	GP	POL1

*** RECEPTOR TYPES:

- GC = GRIDCART
- GP = GRIDPOLR
- DC = DISCCART
- DP = DISCPOLR
- BD = BOUNDARY

*** ISCST3 - VERSION 00101 ***

*** 1991 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:43:27
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**MODELOPTs:
CONC

RURAL FLAT DFAULT

*** THE SUMMARY OF HIGHEST 24-HR RESULTS ***

** CONC OF SO2 IN MICROGRAMS/M**3 **

GROUP ID	AVERAGE CONC	DATE (YYMMDDHH)	RECEPTOR (XR, YR, ZELEV, ZFLAG)	OF TYPE	NETWORK GRID-ID
ALL	HIGH 1ST HIGH VALUE IS 40.68908	ON 91021524	AT (135310.66, 201964.78, 0.00, 0.00)	GP	POL1

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

*** ISCST3 - VERSION 00101 ***

*** 1991 Collier County Landfill SO2 Modeling 12/00
*** ISCST3 Code from EPA 11/00, Met Data from FDEP 11/00

*** 12/15/00
*** 15:43:27
PAGE 25

**MODELOPTs:

CONC RURAL FLAT DFAULT

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

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

A Total of 0 Fatal Error Message(s)
A Total of 1 Warning Message(s)
A Total of 1522 Informational Message(s)

A Total of 1522 Calm Hours Identified

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

***** WARNING MESSAGES *****
SO W320 12 PPARAM :Input Parameter May Be Out-of-Range for Parameter VS

*** ISCST3 Finishes Successfully ***

ATTACHMENT 2

PLOT PLAN OF THE COLLIER COUNTY LANDFILL

ATTACHMENT 4

LANDFILL GAS ANALYSIS FOR A 3 MONTH PERIOD

TABLE 1
 NAPLES LANDFILL BLOWER/FLARE DATA
 NOVEMBER 2000

LOCATION	DATE	TIME	METHANE (%vol)	CARBON DIOXIDE (%vol)	OXYGEN (%vol)	BALANCE GAS (%vol)	RESIDUAL BALANCE GAS	FLARE INLET PRESSURE (in-W.C.)	BLOWER INLET PRESSURE (in-W.C.)	FIELD FLOW (scfm)	GAS TEMP (Deg F)	COMMENTS
Flare Inlet	09/07/2000	9:09 am	45.7	36.5	2.3	15.5	6.9	4.4	-54.3	1501	132	
	09/15/2000	9:30 am	44.1	36.0	2.2	17.7	8.2	2.5	-44.0	1514	130	
	09/26/2000	1:23 pm	43.4	34.1	2.4	20.1	11.1	6.8	-44.0	1621	133	
	09/28/2000	10:20 am	42.0	31.3	2.0	24.7	16.8	7.0	-50.1	1497	130	
	10/03/2000	1:03 am	46.2	35.5	2.1	15.2	7.2	5.0	-50.0	1505	132	
	10/11/2000	1:02 am	41.2	31.7	2.6	24.5	7.9	4.9	-50.0	1363	128	
	10/19/2000	1:50 am	41.6	34.2	2.7	20.7	8.2	7.1	-49.1	1640	136	
	10/26/2000	8:05 am	41.5	31.9	2.4	24.2	7.6	5.0	-49.6	1496	128	
	11/01/2000	9:23 am	40.8	31.6	2.1	25.5	13.1	5.5	-47.7	1471	127	
	11/09/2000	7:26 am	42.0	33.2	2.5	22.3	8.1	5.0	-50.0	1471	127	
	11/15/2000	7:07 am	39.0	31.0	2.9	26.1	8.1	5.0	-50.0	1471	127	
	11/22/2000	8:52 am	38.0	31.0	2.9	28.1	8.6	5.2	-52.8	1488	128	
	Average:			42.2	33.6	3.3	21.0	8.6	5.2	-50.1	1565	129

% vol Percent by volume
 in-W.C. Inches of water column
 0.0 None Detected
 cfm Cubic feet per minute
 Deg F Degrees in Fahrenheit

ATTACHMENT 3

**DRAWING OF THE EXISTING FLARE SYSTEM
AND PERTINENT MANUFACTURER INFORMATION**

ATTACHMENT 5
RESULTS OF SCREEN3 MODELING ANALYSIS

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Collier County Landfill SO2 Modeling - Flare, No Downwash, 10.4 m Stack

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = FLARE
EMISSION RATE (G/S) = 13.5000
FLARE STACK HEIGHT (M) = 10.4000
TOT HEAT RLS (CAL/S) = .479000E+07
RECEPTOR HEIGHT (M) = .0000
URBAN/RURAL OPTION = RURAL
EFF RELEASE HEIGHT (M) = 17.5148
BUILDING HEIGHT (M) = .0000
MIN HORIZ BLDG DIM (M) = .0000
MAX HORIZ BLDG DIM (M) = .0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = 79.420 M**4/S**3; MOM. FLUX = 48.429 M**4/S**2.

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.0	532.3	531.25	2.79	2.77	NO
100.	1.029	5	1.0	1.2	10000.0	137.19	34.74	34.37	NO
200.	1.165	5	1.0	1.2	10000.0	137.19	36.11	34.76	NO
300.	4.472	4	20.0	21.8	6400.0	40.39	22.97	12.75	NO
400.	17.45	3	10.0	10.6	3200.0	68.03	45.77	28.30	NO
500.	30.55	4	20.0	21.8	6400.0	40.39	36.59	19.16	NO
600.	39.21	4	20.0	21.8	6400.0	40.39	43.20	22.16	NO
700.	43.22	4	20.0	21.8	6400.0	40.39	49.69	25.04	NO
800.	43.95	4	20.0	21.8	6400.0	40.39	56.01	27.69	NO
900.	43.04	4	20.0	21.8	6400.0	40.39	62.28	30.29	NO
1000.	41.23	4	20.0	21.8	6400.0	40.39	68.49	32.85	NO
1100.	38.79	4	20.0	21.8	6400.0	40.39	74.64	34.84	NO
1200.	36.39	4	20.0	21.8	6400.0	40.39	80.74	36.77	NO
1300.	34.79	4	15.0	16.3	4800.0	49.47	87.02	39.14	NO
1400.	33.33	4	15.0	16.3	4800.0	49.47	93.02	40.94	NO
1500.	31.86	4	15.0	16.3	4800.0	49.47	98.99	42.71	NO
1600.	30.40	4	15.0	16.3	4800.0	49.47	104.91	44.43	NO
1700.	29.00	4	15.0	16.3	4800.0	49.47	110.80	46.13	NO
1800.	27.65	4	15.0	16.3	4800.0	49.47	116.66	47.79	NO
1900.	26.65	4	10.0	10.9	3200.0	66.64	122.93	50.51	NO
2000.	25.99	4	10.0	10.9	3200.0	66.64	128.71	52.08	NO
2100.	25.32	4	10.0	10.9	3200.0	66.64	134.46	53.62	NO
2200.	24.62	4	10.0	10.9	3200.0	66.64	140.19	55.14	NO
2300.	23.93	4	10.0	10.9	3200.0	66.64	145.89	56.64	NO

2400.	23.24	4	10.0	10.9	3200.0	66.64	151.56	58.12	NO
2500.	22.57	4	10.0	10.9	3200.0	66.64	157.22	59.58	NO
2600.	21.90	4	10.0	10.9	3200.0	66.64	162.85	61.02	NO
2700.	21.25	4	8.0	8.7	2560.0	78.92	168.79	63.32	NO
2800.	20.81	4	8.0	8.7	2560.0	78.92	174.37	64.71	NO
2900.	20.36	4	8.0	8.7	2560.0	78.92	179.93	66.08	NO
3000.	20.30	5	2.5	3.0	10000.0	105.69	140.41	49.17	NO
3500.	22.49	5	1.5	1.8	10000.0	122.06	161.54	54.94	NO
4000.	24.49	5	1.5	1.8	10000.0	122.06	181.53	58.04	NO
4500.	25.80	5	1.0	1.2	10000.0	137.19	202.00	62.92	NO
5000.	26.96	5	1.0	1.2	10000.0	137.19	221.52	65.36	NO
5500.	27.82	5	1.0	1.2	10000.0	137.19	240.86	67.72	NO
6000.	28.44	5	1.0	1.2	10000.0	137.19	260.03	70.00	NO
6500.	28.84	5	1.0	1.2	10000.0	137.19	279.04	72.21	NO
7000.	29.07	5	1.0	1.2	10000.0	137.19	297.91	74.36	NO
7500.	29.16	5	1.0	1.2	10000.0	137.19	316.63	76.45	NO
8000.	29.13	5	1.0	1.2	10000.0	137.19	335.22	78.48	NO
8500.	29.01	5	1.0	1.2	10000.0	137.19	353.68	80.46	NO
9000.	28.81	5	1.0	1.2	10000.0	137.19	372.02	82.40	NO
9500.	28.56	5	1.0	1.2	10000.0	137.19	390.24	84.29	NO
10000.	28.25	5	1.0	1.2	10000.0	137.19	408.36	86.15	NO
15000.	24.07	6	1.0	1.4	10000.0	113.18	389.39	61.31	NO
20000.	22.04	6	1.0	1.4	10000.0	113.18	501.69	66.20	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:
786. 43.96 4 20.0 21.8 6400.0 40.39 55.20 27.34 NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
----- SIMPLE TERRAIN	----- 43.96	----- 786.	----- 0.

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

12/19/00
15:54:28

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Collier County Landfill SO2 Modeling - Flare, No Downwash, 15.6 m Stack

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = FLARE
EMISSION RATE (G/S) = 13.5000
FLARE STACK HEIGHT (M) = 15.6000
TOT HEAT RLS (CAL/S) = .479000E+07
RECEPTOR HEIGHT (M) = .0000
URBAN/RURAL OPTION = RURAL
EFF RELEASE HEIGHT (M) = 22.7148
BUILDING HEIGHT (M) = .0000
MIN HORIZ BLDG DIM (M) = .0000
MAX HORIZ BLDG DIM (M) = .0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = 79.420 M**4/S**3; MOM. FLUX = 48.429 M**4/S**2.

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.1	528.2	527.19	2.76	2.73	NO
100.	.3028	6	1.0	1.6	10000.0	113.93	26.38	26.16	NO
200.	.5773	5	1.0	1.3	10000.0	138.81	35.15	33.75	NO
300.	2.315	3	10.0	10.9	3200.0	71.94	35.24	21.89	NO
400.	11.89	3	10.0	10.9	3200.0	71.94	45.72	28.21	NO
500.	23.51	1	3.0	3.2	960.0	190.87	119.56	111.67	NO
600.	30.47	3	10.0	10.9	3200.0	71.94	65.98	40.43	NO
700.	33.74	3	10.0	10.9	3200.0	71.94	75.81	46.31	NO
800.	34.15	3	10.0	10.9	3200.0	71.94	85.31	51.80	NO
900.	34.92	1	1.0	1.1	528.2	527.19	238.63	390.69	NO
1000.	36.58	1	1.0	1.1	528.2	527.19	253.64	476.19	NO
1100.	35.59	1	1.0	1.1	528.2	527.19	268.89	573.70	NO
1200.	33.85	1	1.0	1.1	528.2	527.19	284.31	682.97	NO
1300.	32.11	1	1.0	1.1	528.2	527.19	299.85	803.86	NO
1400.	30.52	1	1.0	1.1	528.2	527.19	315.48	936.30	NO
1500.	29.07	1	1.0	1.1	528.2	527.19	331.16	1080.26	NO
1600.	27.75	1	1.0	1.1	528.2	527.19	346.88	1235.74	NO
1700.	26.55	1	1.0	1.1	528.2	527.19	362.62	1402.77	NO
1800.	25.45	1	1.0	1.1	528.2	527.19	378.36	1581.37	NO
1900.	24.43	1	1.0	1.1	528.2	527.19	394.09	1771.59	NO
2000.	23.49	1	1.0	1.1	528.2	527.19	409.80	1973.49	NO
2100.	22.63	1	1.0	1.1	528.2	527.19	425.49	2187.09	NO
2200.	21.96	4	10.0	11.3	3200.0	69.96	140.13	55.01	NO

2300.	21.43	4	10.0	11.3	3200.0	69.96	145.84	56.51	NO
2400.	20.89	4	10.0	11.3	3200.0	69.96	151.52	57.99	NO
2500.	20.35	4	10.0	11.3	3200.0	69.96	157.17	59.45	NO
2600.	19.81	4	10.0	11.3	3200.0	69.96	162.80	60.90	NO
2700.	19.28	4	10.0	11.3	3200.0	69.96	168.42	62.32	NO
2800.	19.13	2	1.0	1.1	528.2	527.19	411.11	367.65	NO
2900.	19.24	2	1.0	1.1	528.2	527.19	422.49	379.90	NO
3000.	19.27	2	1.0	1.1	528.2	527.19	433.86	392.25	NO
3500.	18.63	2	1.0	1.1	528.2	527.19	490.48	455.44	NO
4000.	20.16	5	1.5	2.0	10000.0	124.14	181.39	57.59	NO
4500.	21.53	5	1.0	1.3	10000.0	138.81	201.83	62.37	NO
5000.	22.71	5	1.0	1.3	10000.0	138.81	221.36	64.84	NO
5500.	23.62	5	1.0	1.3	10000.0	138.81	240.71	67.21	NO
6000.	24.30	5	1.0	1.3	10000.0	138.81	259.90	69.51	NO
6500.	24.78	5	1.0	1.3	10000.0	138.81	278.92	71.73	NO
7000.	25.10	5	1.0	1.3	10000.0	138.81	297.79	73.90	NO
7500.	25.28	5	1.0	1.3	10000.0	138.81	316.52	76.00	NO
8000.	25.35	5	1.0	1.3	10000.0	138.81	335.11	78.04	NO
8500.	25.32	5	1.0	1.3	10000.0	138.81	353.58	80.04	NO
9000.	25.22	5	1.0	1.3	10000.0	138.81	371.92	81.98	NO
9500.	25.06	5	1.0	1.3	10000.0	138.81	390.15	83.89	NO
10000.	24.84	5	1.0	1.3	10000.0	138.81	408.27	85.75	NO
15000.	21.28	5	1.0	1.3	10000.0	138.81	584.33	101.15	NO
20000.	18.46	6	1.0	1.6	10000.0	113.93	501.63	65.69	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:
998. 36.58 1 1.0 1.1 528.2 527.19 253.49 475.27 NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
----- SIMPLE TERRAIN	----- 36.58	----- 998.	----- 0.

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

12/19/00
15:58:35

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

Collier County Landfill SO2 Modeling - Flare, No Downwash, 20.8 m Stack

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = FLARE
EMISSION RATE (G/S) = 13.5000
FLARE STACK HEIGHT (M) = 20.8000
TOT HEAT RLS (CAL/S) = .479000E+07
RECEPTOR HEIGHT (M) = .0000
URBAN/RURAL OPTION = RURAL
EFF RELEASE HEIGHT (M) = 27.9148
BUILDING HEIGHT (M) = .0000
MIN HORIZ BLDG DIM (M) = .0000
MAX HORIZ BLDG DIM (M) = .0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = 79.420 M**4/S**3; MOM. FLUX = 48.429 M**4/S**2.

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.1	526.2	525.16	2.73	2.70	NO
100.	.4388E-01	6	1.0	1.8	10000.0	115.75	24.41	24.18	NO
200.	.2744	5	1.0	1.4	10000.0	141.25	34.41	32.98	NO
300.	1.151	3	10.0	11.1	3200.0	76.13	35.20	21.83	NO
400.	8.216	1	3.0	3.2	960.0	193.66	98.44	78.48	NO
500.	22.15	1	3.0	3.2	960.0	193.66	119.38	111.47	NO
600.	28.65	1	3.0	3.2	960.0	193.66	139.77	159.93	NO
700.	28.53	3	10.0	11.1	3200.0	76.13	75.75	46.22	NO
800.	29.76	3	10.0	11.1	3200.0	76.13	85.26	51.72	NO
900.	34.79	1	1.0	1.1	526.2	525.16	237.39	389.93	NO
1000.	36.39	1	1.0	1.1	526.2	525.16	252.47	475.57	NO
1100.	35.37	1	1.0	1.1	526.2	525.16	267.79	573.18	NO
1200.	33.61	1	1.0	1.1	526.2	525.16	283.27	682.54	NO
1300.	31.87	1	1.0	1.1	526.2	525.16	298.86	803.49	NO
1400.	30.29	1	1.0	1.1	526.2	525.16	314.54	935.98	NO
1500.	28.84	1	1.0	1.1	526.2	525.16	330.27	1079.99	NO
1600.	27.53	1	1.0	1.1	526.2	525.16	346.03	1235.50	NO
1700.	26.33	1	1.0	1.1	526.2	525.16	361.80	1402.56	NO
1800.	25.23	1	1.0	1.1	526.2	525.16	377.58	1581.18	NO
1900.	24.22	1	1.0	1.1	526.2	525.16	393.34	1771.43	NO
2000.	23.29	1	1.0	1.1	526.2	525.16	409.08	1973.34	NO
2100.	22.43	1	1.0	1.1	526.2	525.16	424.80	2186.96	NO
2200.	21.63	1	1.0	1.1	526.2	525.16	440.48	2412.34	NO

2300.	20.88	1	1.0	1.1	526.2	525.16	456.13	2649.54	NO
2400.	20.19	1	1.0	1.1	526.2	525.16	471.75	2898.61	NO
2500.	19.55	1	1.0	1.1	526.2	525.16	487.32	3159.60	NO
2600.	18.94	1	1.0	1.1	526.2	525.16	502.85	3432.55	NO
2700.	18.81	2	1.0	1.1	526.2	525.16	398.99	354.69	NO
2800.	19.00	2	1.0	1.1	526.2	525.16	410.40	366.85	NO
2900.	19.10	2	1.0	1.1	526.2	525.16	421.79	379.12	NO
3000.	19.13	2	1.0	1.1	526.2	525.16	433.18	391.50	NO
3500.	18.47	2	1.0	1.1	526.2	525.16	489.88	454.79	NO
4000.	17.16	2	1.0	1.1	526.2	525.16	546.12	519.98	NO
4500.	17.85	5	1.0	1.4	10000.0	141.25	201.70	61.96	NO
5000.	19.04	5	1.0	1.4	10000.0	141.25	221.24	64.44	NO
5500.	19.98	5	1.0	1.4	10000.0	141.25	240.61	66.83	NO
6000.	20.72	5	1.0	1.4	10000.0	141.25	259.80	69.14	NO
6500.	21.27	5	1.0	1.4	10000.0	141.25	278.83	71.37	NO
7000.	21.67	5	1.0	1.4	10000.0	141.25	297.70	73.54	NO
7500.	21.93	5	1.0	1.4	10000.0	141.25	316.44	75.65	NO
8000.	22.08	5	1.0	1.4	10000.0	141.25	335.04	77.71	NO
8500.	22.15	5	1.0	1.4	10000.0	141.25	353.51	79.71	NO
9000.	22.14	5	1.0	1.4	10000.0	141.25	371.86	81.67	NO
9500.	22.06	5	1.0	1.4	10000.0	141.25	390.09	83.58	NO
10000.	21.93	5	1.0	1.4	10000.0	141.25	408.21	85.45	NO
15000.	19.10	5	1.0	1.4	10000.0	141.25	584.28	100.90	NO
20000.	16.22	5	1.0	1.4	10000.0	141.25	753.02	114.00	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:
 996. 36.39 1 1.0 1.1 526.2 525.16 252.02 472.82 NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
 DWASH=NO MEANS NO BUILDING DOWNWASH USED
 DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
 DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
 DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

 *** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
----- SIMPLE TERRAIN	----- 36.39	----- 996.	----- 0.

 ** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

*** SCREEN3 MODEL RUN ***
*** VERSION DATED 96043 ***

test case 3

SIMPLE TERRAIN INPUTS:

SOURCE TYPE = POINT
EMISSION RATE (G/S) = 13.5000
STACK HEIGHT (M) = 20.8000
STK INSIDE DIAM (M) = .7600
STK EXIT VELOCITY (M/S) = 67.4000
STK GAS EXIT TEMP (K) = 1033.0000
AMBIENT AIR TEMP (K) = 293.0000
RECEPTOR HEIGHT (M) = .0000
URBAN/RURAL OPTION = RURAL
BUILDING HEIGHT (M) = .0000
MIN HORIZ BLDG DIM (M) = .0000
MAX HORIZ BLDG DIM (M) = .0000

THE REGULATORY (DEFAULT) MIXING HEIGHT OPTION WAS SELECTED.
THE REGULATORY (DEFAULT) ANEMOMETER HEIGHT OF 10.0 METERS WAS ENTERED.

BUOY. FLUX = 68.369 M**4/S**3; MOM. FLUX = 186.061 M**4/S**2.

*** FULL METEOROLOGY ***

*** SCREEN AUTOMATED DISTANCES ***

*** TERRAIN HEIGHT OF 0. M ABOVE STACK BASE USED FOR FOLLOWING DISTANCES ***

DIST (M)	CONC (UG/M**3)	STAB	U10M (M/S)	USTK (M/S)	MIX HT (M)	PLUME HT (M)	SIGMA Y (M)	SIGMA Z (M)	DWASH
1.	.0000	1	1.0	1.1	485.8	484.75	4.61	4.59	NO
100.	.4522	5	1.0	1.3	10000.0	132.38	31.76	31.37	NO
200.	.7472	5	1.0	1.3	10000.0	132.38	33.93	32.49	NO
300.	5.126	3	10.0	10.8	3200.0	66.19	35.16	21.77	NO
400.	19.37	3	10.0	10.8	3200.0	66.19	45.63	28.08	NO
500.	32.22	3	10.0	10.8	3200.0	66.19	55.85	34.23	NO
600.	38.99	3	10.0	10.8	3200.0	66.19	65.88	40.26	NO
700.	40.77	3	10.0	10.8	3200.0	66.19	75.61	45.99	NO
800.	39.89	3	10.0	10.8	3200.0	66.19	85.14	51.51	NO
900.	41.45	1	1.0	1.1	485.8	484.75	231.82	386.57	NO
1000.	41.81	1	1.0	1.1	485.8	484.75	247.24	472.81	NO
1100.	39.98	1	1.0	1.1	485.8	484.75	262.86	570.90	NO
1200.	37.80	1	1.0	1.1	485.8	484.75	278.62	680.62	NO
1300.	35.77	1	1.0	1.1	485.8	484.75	294.46	801.87	NO
1400.	33.94	1	1.0	1.1	485.8	484.75	310.36	934.59	NO
1500.	32.28	1	1.0	1.1	485.8	484.75	326.29	1078.78	NO
1600.	30.78	1	1.0	1.1	485.8	484.75	342.23	1234.44	NO
1700.	29.41	1	1.0	1.1	485.8	484.75	358.17	1401.62	NO
1800.	28.16	1	1.0	1.1	485.8	484.75	374.10	1580.36	NO
1900.	27.29	4	10.0	11.2	3200.0	64.56	122.77	50.11	NO
2000.	26.56	4	10.0	11.2	3200.0	64.56	128.55	51.69	NO

2100.	25.82	4	10.0	11.2	3200.0	64.56	134.31	53.24	NO
2200.	25.06	4	10.0	11.2	3200.0	64.56	140.04	54.77	NO
2300.	24.31	4	10.0	11.2	3200.0	64.56	145.75	56.28	NO
2400.	23.59	4	8.0	8.9	2560.0	75.49	151.72	58.52	NO
2500.	23.09	4	8.0	8.9	2560.0	75.49	157.37	59.97	NO
2600.	22.58	4	8.0	8.9	2560.0	75.49	163.00	61.41	NO
2700.	22.57	2	1.0	1.1	485.8	484.75	395.70	350.98	NO
2800.	22.59	2	1.0	1.1	485.8	484.75	407.20	363.27	NO
2900.	22.53	2	1.0	1.1	485.8	484.75	418.68	375.66	NO
3000.	22.39	2	1.0	1.1	485.8	484.75	430.15	388.15	NO
3500.	22.92	5	1.5	1.9	10000.0	118.28	161.18	53.87	NO
4000.	25.18	5	1.0	1.3	10000.0	132.38	181.87	59.10	NO
4500.	26.75	5	1.0	1.3	10000.0	132.38	201.62	61.70	NO
5000.	27.92	5	1.0	1.3	10000.0	132.38	221.17	64.19	NO
5500.	28.77	5	1.0	1.3	10000.0	132.38	240.54	66.58	NO
6000.	29.34	5	1.0	1.3	10000.0	132.38	259.73	68.90	NO
6500.	29.69	5	1.0	1.3	10000.0	132.38	278.77	71.15	NO
7000.	29.86	5	1.0	1.3	10000.0	132.38	297.65	73.33	NO
7500.	29.88	5	1.0	1.3	10000.0	132.38	316.39	75.44	NO
8000.	29.78	5	1.0	1.3	10000.0	132.38	334.99	77.50	NO
8500.	29.59	5	1.0	1.3	10000.0	132.38	353.46	79.51	NO
9000.	29.32	5	1.0	1.3	10000.0	132.38	371.81	81.47	NO
9500.	29.00	5	1.0	1.3	10000.0	132.38	390.05	83.38	NO
10000.	28.62	5	1.0	1.3	10000.0	132.38	408.17	85.26	NO
15000.	23.98	6	1.0	1.5	10000.0	108.98	389.24	60.39	NO
20000.	21.81	6	1.0	1.5	10000.0	108.98	501.58	65.35	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1. M:
956. 42.09 1 1.0 1.1 485.8 484.75 240.58 434.26 NO

DWASH= MEANS NO CALC MADE (CONC = 0.0)
DWASH=NO MEANS NO BUILDING DOWNWASH USED
DWASH=HS MEANS HUBER-SNYDER DOWNWASH USED
DWASH=SS MEANS SCHULMAN-SCIRE DOWNWASH USED
DWASH=NA MEANS DOWNWASH NOT APPLICABLE, X<3*LB

*** SUMMARY OF SCREEN MODEL RESULTS ***

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	42.09	956.	0.

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

RECEIVED

NOV 06 2002

**DIVISION OF AIR
RESOURCES MANAGEMENT**

Date: November 4, 2002

To: Alex Ming

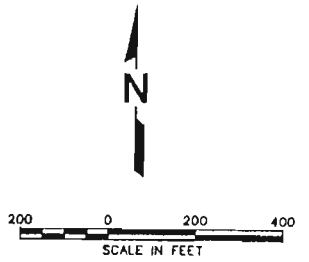
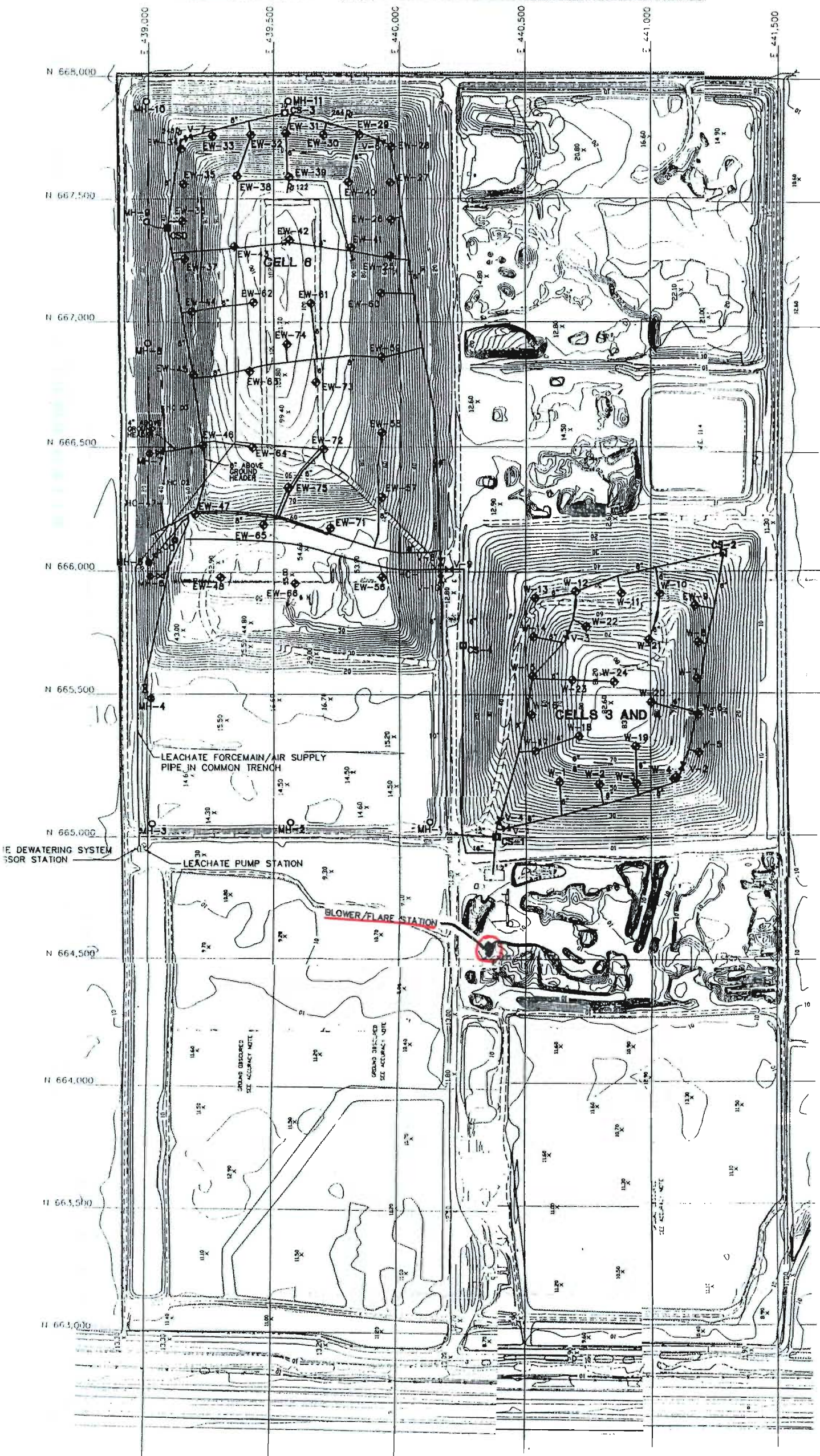
From: Mara G. Nasca *MGN*

Re: Naples Landfill Proposed Project- Facility I.D. 0210051

Alex,

In February 2001, you reviewed the modeling for Naples Landfill for a flare upgrade. The facility has sent a request to relocate that flare. I would appreciate if you could review their request since there were specific conditions in their TV permit based on the modeling analysis. I have enclosed a copy of their request.

Thanks for your help.



LEGEND

- ◆ EW-1 LFG EXTRACTION WELL
- AIR SUPPLY LINE AND LEACHATE FORCEMAIN IN COMMON TRENCH
- EXISTING LFG HEADER AND LATERAL
- HORIZONTAL COLLECTOR
- CO CLEANOUT W/ LFG WELLHEAD
- ⊕ MH LEACHATE MANHOLE W/ LFG WELLHEAD
- CS CONDENSATE SUMP WITH ELECTRIC PUMP
- CSD CONDENSATE SUMP WITH DRIPLEG TO MANHOLE
- BLIND FLANGE
- MH LEACHATE COLLECTION SYSTEM MANHOLE
- 248p LOCATION OF SURFACE EMISSIONS MONITORING

NOTES:

1. THE TOPOGRAPHIC CONTOURS ARE BASED ON DATA OBTAINED USING AERIAL PHOTOGRAMMETRY METHODS AND ARE BASED ON PHOTOGRAPHS 1 DECEMBER 1999 BY AIR SURVEY CORP.
2. THE VERTICAL DATUM IS BASED ON THE NATIONAL GEODESIC VERTICAL DATUM ESTABLISHED IN 1929. THE GRID IS BASED ON FLORIDA STATE PLAN COORDINATE SYSTEM, EAST ZONE NAD 1983/1990.

LE DEWATERING SYSTEM
PUMP STATION

LEACHATE PUMP STATION

BLOWER/FLARE STATION

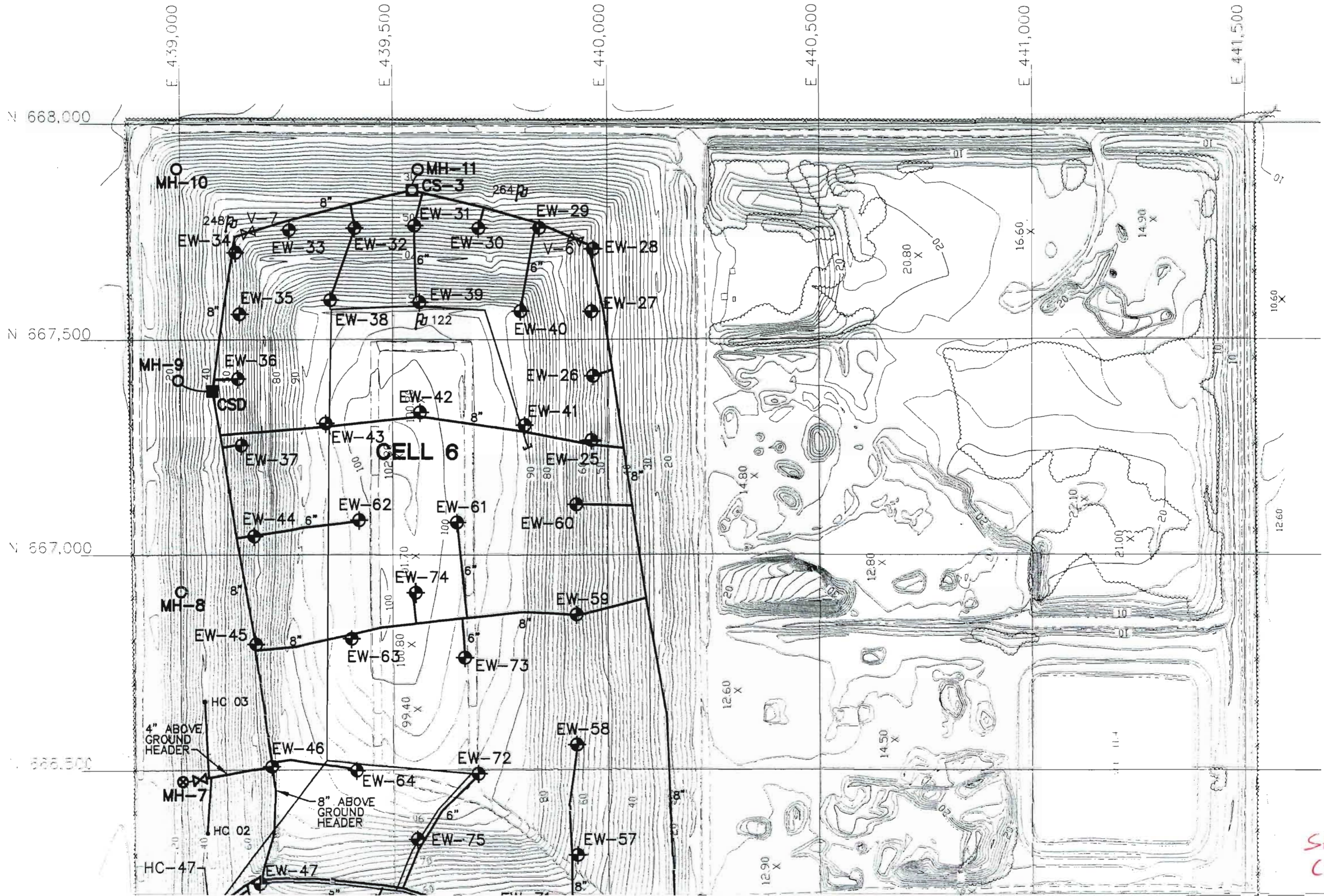
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SEE ACCURACY NOTE

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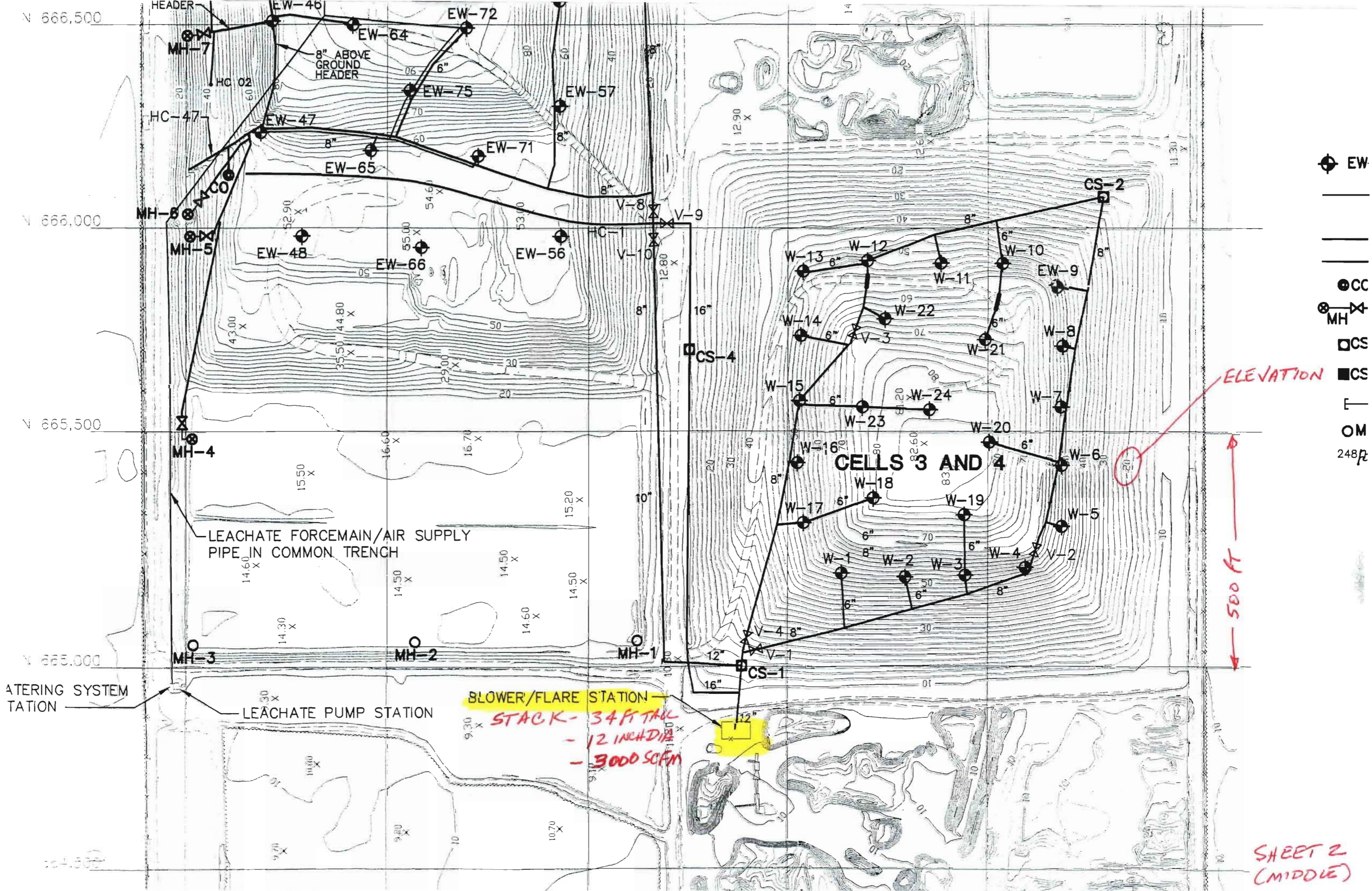
CELL 8

CELLS 3 AND 4

COLLIER COUNTY LANDFILL, NAPLES, FLORIDA



SHEET 1
(TOP)



- EW
- CC
- MH
- CS
- CS
- OM
- 248P

ELEVATION

500 FT

BLOWER/FLARE STATION
 STACK - 34 FT TALL
 - 12 INCH DIA
 - 3000 SCFM

LEACHATE FORCEMAIN/AIR SUPPLY
 PIPE IN COMMON TRENCH

LEACHATE PUMP STATION

WATERING SYSTEM
 TATION

SHEET 2
 (MIDDLE)

WATERING SYSTEM
STATION

LEACHATE PUMP STATION

BLOWER/FLARE STATION

CS-1

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