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\*\*\* SUMMARY OF SCREEN MODEL RESULTS (Edited by Pilat)

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	MAX CONC (PPM)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	109.6	0.041956	1202.	0.

BUOY. FLUX = 617.035 M\*\*4/S\*\*3; MOM. FLUX = 2836.383 M\*\*4/S\*\*2.

\*\*\* FULL METEOROLOGY \*\*\*

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\*\*\* SCREEN AUTOMATED DISTANCES \*\*\*

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\*\*\* 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
10.	.0000	1	1.0	1.2	1663.5	1662.46	20.66	20.45	NO
100.	.0000	1	1.0	1.2	1663.5	1662.46	74.38	70.76	NO
200.	.9024E-05	5	1.0	2.6	10000.0	334.49	52.88	51.96	NO
300.	.2566E-04	5	1.0	2.6	10000.0	334.49	55.35	53.42	NO
400.	.3264E-04	5	1.0	2.6	10000.0	334.49	57.12	53.81	NO
500.	.1105E-02	1	3.0	3.6	960.0	654.15	131.72	124.59	NO
600.	.4752	1	3.0	3.6	960.0	654.15	153.25	171.83	NO
700.	7.556	1	3.0	3.6	960.0	654.15	174.23	229.50	NO
800.	27.13	1	3.0	3.6	960.0	654.15	194.76	297.73	NO
900.	56.23	1	2.5	3.0	800.0	754.98	224.91	382.46	NO
1000.	87.21	1	2.5	3.0	800.0	754.98	245.25	471.77	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND x = 10. M:

1202. 109.6 1 2.5 3.0 800.0 754.98 285.16 684.41 NO

- DIST = DISTANCE FROM THE SOURCE
- CONC = MAXIMUM GROUND LEVEL CONCENTRATION
- STAB = ATMOSPHERIC STABILITY CLASS (1=A, 2=B, 3=C, 4=D, 5=E, 6=F)
- U10M = WIND SPEED AT THE 10-M LEVEL
- USTK = WIND SPEED AT STACK HEIGHT
- MIX HT = MIXING HEIGHT
- PLUME HT = PLUME CENTERLINE HEIGHT
- SIGMA Y = LATERAL DISPERSION PARAMETER
- SIGMA Z = VERTICAL DISPERSION PARAMETER

\*\*\* USER SPECIFIED AVERAGING TIMES \*\*\*

ESTIMATED MAXIMUM CONCENTRATION FOR 24 HR AVERAGING TIME:

43.84 (+/- 21.92) UG/M\*\*3 0.016783 (+/- 0.008391) PPM

ESTIMATED MAXIMUM CONCENTRATION FOR ANNUAL AVERAGING TIME:

8.768 (+/- 2.192) UG/M\*\*3 0.003357 (+/- 0.000839) PPM

\*\*\* END OF SCREEN MODEL OUTPUT \*\*\*

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200 g/s SO2 Simple Elevated Terrain 10/4/07

SIMPLE TERRAIN INPUTS: (Simple Terrain = terrain below stack height h = 150 m)  
 (Note terrain has a "hill" Z = 1 m x = 0 to 1400m, Z = 149 m @ x = 1500 m)

SOURCE TYPE = POINT  
 EMISSION RATE (G/S) = 200.000  
 STACK HEIGHT (M) = 150.0000  
 STK INSIDE DIAM (M) = 7.0000  
 STK EXIT VELOCITY (M/S) = 18.0000  
 STK GAS EXIT TEMP (K) = 410.0000  
 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

\*\*\* SUMMARY OF SCREEN MODEL RESULTS \*\*\*

CALCULATION PROCEDURE	MAX CONC (UG/M**3)	MAX CONC (PPM)	DIST TO MAX (M)	TERRAIN HT (M)
SIMPLE TERRAIN	258.7	0.099034	1500.	149. (Z = 149 m)

BUOY. FLUX = 617.035 M\*\*4/S\*\*3; MOM. FLUX = 2836.383 M\*\*4/S\*\*2.

\*\*\* FULL METEOROLOGY \*\*\*

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\*\*\* SCREEN AUTOMATED DISTANCES \*\*\*

\*\*\* TERRAIN HEIGHT OF 1. 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
5.	.0000	1	1.0	1.2	1662.5	1661.46	16.28	16.20	NO
100.	.0000	1	1.0	1.2	1662.5	1661.46	74.38	70.76	NO
200.	.1021E-04	5	1.0	2.6	10000.0	333.49	52.88	51.96	NO
300.	.2884E-04	5	1.0	2.6	10000.0	333.49	55.35	53.42	NO
400.	.3663E-04	5	1.0	2.6	10000.0	333.49	57.12	53.81	NO
500.	.1153E-02	1	3.0	3.6	960.0	653.15	131.72	124.59	NO
600.	.4859	1	3.0	3.6	960.0	653.15	153.25	171.83	NO
700.	7.650	1	3.0	3.6	960.0	653.15	174.23	229.50	NO
800.	27.33	1	3.0	3.6	960.0	653.15	194.76	297.73	NO
900.	56.29	1	2.5	3.0	800.0	753.98	224.91	382.46	NO
1000.	87.25	1	2.5	3.0	800.0	753.98	245.25	471.77	NO
1100.	104.8	1	2.5	3.0	800.0	753.98	265.25	572.00	NO
1200.	109.6	1	2.5	3.0	800.0	753.98	284.97	683.24	NO
1300.	107.7	1	2.0	2.4	906.2	905.23	325.43	813.75	NO
1400.	104.5	1	2.0	2.4	906.2	905.23	345.46	946.82	NO

MAX 1-HR CONCENTRATION AT OR BEYOND x = 5. M: (Note Z = 1 meter elevation)  
 1202. 109.6 1 2.5 3.0 800.0 753.98 285.16 684.41 NO

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\*\*\* SCREEN AUTOMATED DISTANCES \*\*\*

TERRAIN HEIGHT OF 140. 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
1400.	209.6	4	20.0	30.0	6400.0	58.29	93.96	43.03	NO
1500.	203.7	4	20.0	30.0	6400.0	58.29	100.00	45.00	NO

MAXIMUM 1-HR CONCENTRATION AT OR BEYOND 1400. M:

1400.	209.6	4	20.0	30.0	6400.0	58.29	93.96	43.03	NO
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TERRAIN HEIGHT OF 149. 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
1500.	258.7	4	20.0	30.0	6400.0	49.29	100.00	45.00	NO
1600.	245.7	4	20.0	30.0	6400.0	49.29	105.93	46.79	NO
1700.	233.4	4	20.0	30.0	6400.0	49.29	111.77	48.40	NO
1800.	221.9	4	20.0	30.0	6400.0	49.29	117.58	49.99	NO

MAX 1-HR CONCENTRATION AT OR BEYOND 1500. M: (Note Z = 149 meter elevation)

1500.	258.7	4	20.0	30.0	6400.0	49.29	100.00	45.00	NO
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DIST = DISTANCE FROM THE SOURCE

CONC = MAXIMUM GROUND LEVEL CONCENTRATION

(Pilat: Note Conc. = 1 hr ave in this output except for "User Specified Averaging Times" Shown Below)

STAB = ATMOSPHERIC STABILITY CLASS (1=A, 2=B, 3=C, 4=D, 5=E, 6=F)

U10M = WIND SPEED AT THE 10-M LEVEL

USTK = WIND SPEED AT STACK HEIGHT

MIX HT = MIXING HEIGHT

PLUME HT= PLUME CENTERLINE HEIGHT

SIGMA Y = LATERAL DISPERSION PARAMETER

SIGMA Z = VERTICAL DISPERSION PARAMETER

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 \* SUMMARY OF TERRAIN HEIGHTS ENTERED FOR \*  
 \* SIMPLE ELEVATED TERRAIN PROCEDURE \*  
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TERRAIN HT (M)	DISTANCE RANGE (M)	
	MINIMUM	MAXIMUM
1.	5.	1400.
140.	1400.	1500.
149.	1500.	50000.

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 \*\*\* USER SPECIFIED AVERAGING TIMES \*\*\*  
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ESTIMATED MAXIMUM CONCENTRATION FOR 24 HR AVERAGING TIME:  
 103.48 (+/- 51.74) UG/M\*\*3 0.039613 (+/- 0.019807) PPM

ESTIMATED MAXIMUM CONCENTRATION FOR ANNUAL AVERAGING TIME:  
 20.696 (+/- 5.174) UG/M\*\*3 0.007923 (+/- 0.001981) PPM

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 \*\*\* END OF SCREEN MODEL OUTPUT \*\*\*