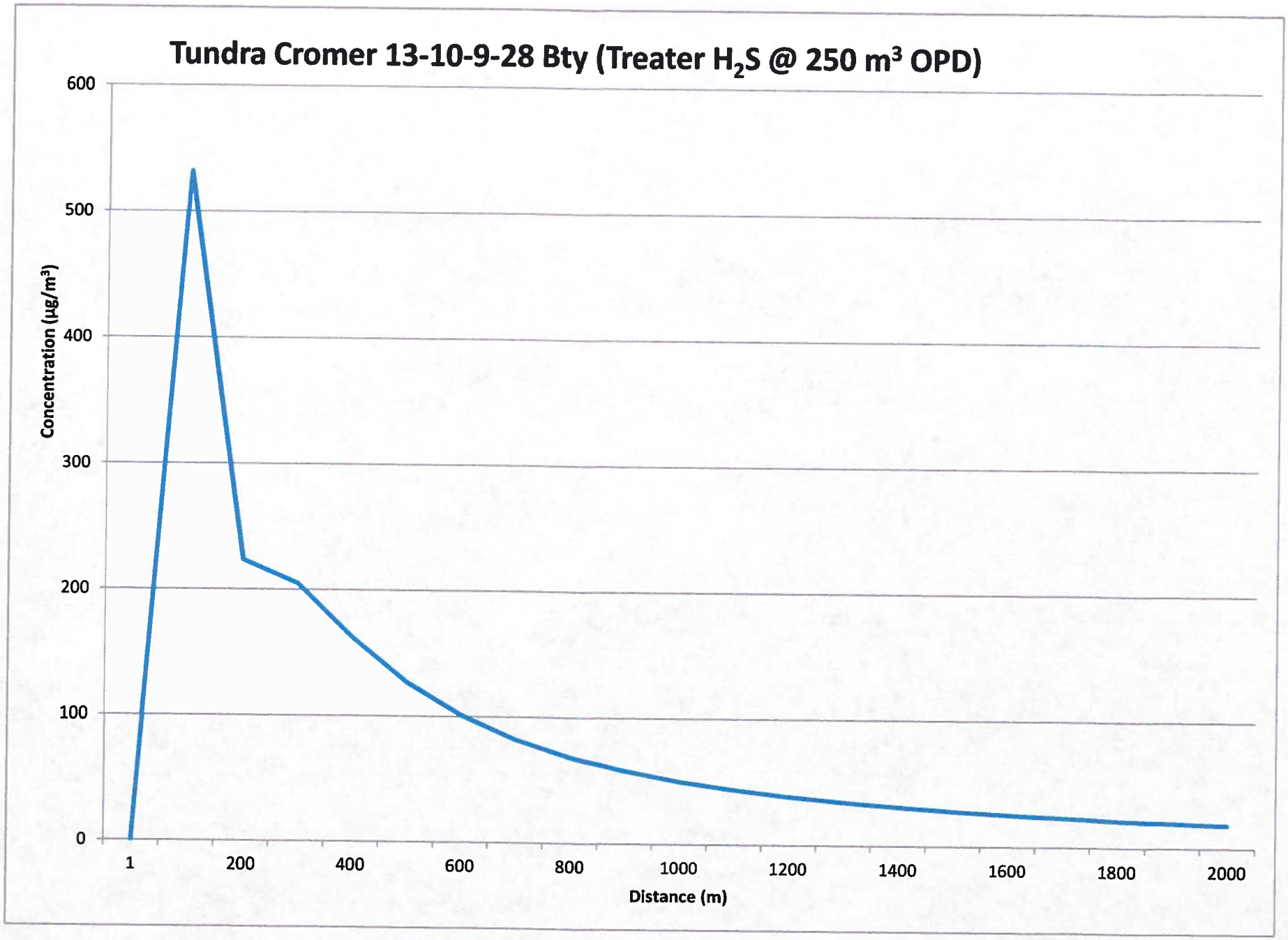
# Screen 3 Input Data (@ 250 $m^3$ OPD):

Company: **Tundra Oil and Gas Partnership**

| | |
|---|---|
| **Treater Data** | |
| Gas to Treater ($m^3$/day) | 408.79 |
| Gas to Treater ($m^3$/s) | 0.004731 |
| Stack Height (m) | 4.50 |
| Stack Diameter (m) | 0.4573 |
| Stack Gas Exit Velocity (m/s) | 0.0288 |
| Stack Gas Exit Temp. (K) | 373 |
| $H_2S$ Emission Rate (g/s) | 0.0838 |
| $SO_2$ Emission Rate (g/s) | 0.1210 |
| Ambient Temp. (K) | 293 |
| **Tank Vent Data** | |
| Gas to Tanks ($m^3$/day) | 125 |
| Gas to Tanks ($m^3$/s) | 0.001447 |
| Vent Height (m) | 9.15 |
| Vent Diameter (m) | 0.2032 |
| Vent Exit Velocity (m/s) | 0.0446 |
| Vent Exit Temp. (K) | 293 |
| $SO_2$ Emission Rate (g/s) | 0.047 |
| $H_2S$ Emission Rate (g/s) | 0.0256 |
| Ambient Temp. (K) | 293 |
| **Flare Data (w/ flame)** | |
| Gas to Flare ($m^3$/day) | 1966.21 |
| Gas toFlare ($m^3$/s) | 0.022757 |
| Flare Height (m) | 12.2 |
| Flare Diameter (m) | 0.1016 |
| Flare Gas Exit Velocity (m/s) | 2.807 |
| Flare Gas Exit Temp. (K) | 1273 |
| $SO_2$ Emission Rate (g/s) | 0.17 |
| $H_2S$ Emission Rate (g/s) | 0.4031 |
| Ambient Temp. (K) | 293 |
| **Flare Data (w/o flame)** | |
| Gas to Flare ($m^3$/day) | 1966.21 |
| Gas toFlare ($m^3$/s) | 0.022757 |
| Flare Height (m) | 12.2 |
| Flare Diameter (m) | 0.1016 |
| Flare Gas Exit Velocity (m/s) | 2.807 |
| Flare Gas Exit Temp. (K) | 293 |
| $SO_2$ Emission Rate (g/s) | 0.739 |
| $H_2S$ Emission Rate (g/s) | 0.4031 |
| Ambient Temp. (K) | 293 |


Tundra Cromer 13-10-9-28 Bty (Treater $H_2S$ @ 250 $m^3$ OPD)
600
500
400
300
200
100
0
Concentration (µg/m³)
1
200
400
600
800
1000
1200
1400
1600
1800
2000
Distance (m)

****** SCREEN3 MODEL ******

**** VERSION DATED 96043 ****

ENTER TITLE FOR THIS RUN (UP TO 79 CHARACTERS):

13-10-9-28 Treater H2S

ENTER SOURCE TYPE: P FOR POINT

F FOR FLARE

A FOR AREA

V FOR VOLUME

ALSO ENTER ANY OF THE FOLLOWING OPTIONS ON THE SAME LINE:

N - TO USE THE NON-REGULATORY BUT CONSERVATIVE BRODE 2 MIXING HEIGHT OPTION,

nn.n - TO USE AN ANEMOMETER HEIGHT OTHER THAN THE REGULATORY (DEFAULT) 10 METER HEIGHT.

SS - TO USE A NON-REGULATORY CAVITY CALCULATION ALTERNATIVE

Example - PN 7.0 SS (entry for a point source)

ENTER SOURCE TYPE AND ANY OF THE ABOVE OPTIONS:

P

ENTER EMISSION RATE (G/S):

0.0838

ENTER STACK HEIGHT (M):

4.5

ENTER STACK INSIDE DIAMETER (M):

0.4573

ENTER STACK GAS EXIT VELOCITY OR FLOW RATE:

OPTION 1 : EXIT VELOCITY (M/S):

DEFAULT - ENTER NUMBER ONLY

OPTION 2 : VOLUME FLOW RATE (M**3/S):

EXAMPLE "VM=20.00"

OPTION 3 : VOLUME FLOW RATE (ACFM):

EXAMPLE "VF=1000.00"

0.0288

ENTER STACK GAS EXIT TEMPERATURE (K):

373

ENTER AMBIENT AIR TEMPERATURE (USE 293 FOR DEFAULT) (K):

293

ENTER RECEPTOR HEIGHT ABOVE GROUND (FOR FLAGPOLE RECEPTOR) (M):

0

ENTER URBAN/RURAL OPTION (U=URBAN, R=RURAL):

r

CONSIDER BUILDING DOWNWASH IN CALCS? ENTER Y OR N:

n

USE COMPLEX TERRAIN SCREEN FOR TERRAIN ABOVE STACK HEIGHT?

ENTER Y OR N:

n

USE SIMPLE TERRAIN SCREEN WITH TERRAIN ABOVE STACK BASE?

ENTER Y OR N:

n

ENTER CHOICE OF METEOROLOGY;

1 - FULL METEOROLOGY (ALL STABILITIES & WIND SPEEDS)

2 - INPUT SINGLE STABILITY CLASS

3 - INPUT SINGLE STABILITY CLASS AND WIND SPEED

1

USE AUTOMATED DISTANCE ARRAY? ENTER Y OR N:

y

ENTER MIN AND MAX DISTANCES TO USE (M):

0,2000

**********

*** 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 | 320.0 | 3.44 | .42 | .19 | NO |
| 100. | 531.9 | 4 | 1.0 | 1.0 | 320.0 | 3.44 | 8.20 | 4.65 | NO |
| 200. | 223.5 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 7.80 | 4.22 | NO |
| 300. | 204.9 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 11.28 | 5.72 | NO |
| 400. | 162.3 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 14.67 | 7.12 | NO |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 500. | 127.1 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 18.00 | 8.46 | NO |
| 600. | 101.1 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 21.26 | 9.74 | NO |
| 700. | 82.04 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 24.48 | 10.98 | NO |
| 800. | 68.45 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 27.65 | 12.02 | NO |
| 900. | 58.09 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 30.79 | 13.02 | NO |
| 1000. | 50.01 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 33.90 | 13.99 | NO |
| 1100. | 43.76 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 36.98 | 14.86 | NO |
| 1200. | 38.69 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 40.03 | 15.69 | NO |
| 1300. | 34.51 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 43.05 | 16.50 | NO |
| 1400. | 31.02 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 46.06 | 17.29 | NO |
| 1500. | 28.07 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 49.04 | 18.06 | NO |
| 1600. | 25.56 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 52.00 | 18.81 | NO |
| 1700. | 23.39 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 54.95 | 19.54 | NO |
| 1800. | 21.51 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 57.88 | 20.26 | NO |
| 1900. | 19.87 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 60.79 | 20.96 | NO |
| 2000. | 18.42 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 63.68 | 21.65 | NO |

ITERATING TO FIND MAXIMUM CONCENTRATION . . .

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 21. | 888.1 | 2 | 1.0 | 1.0 | 320.0 | 3.44 | 4.82 | 2.59 | NO |

USE DISCRETE DISTANCES? ENTER Y OR N:

n

**********

*** SUMMARY OF SCREEN MODEL RESULTS ***

**********

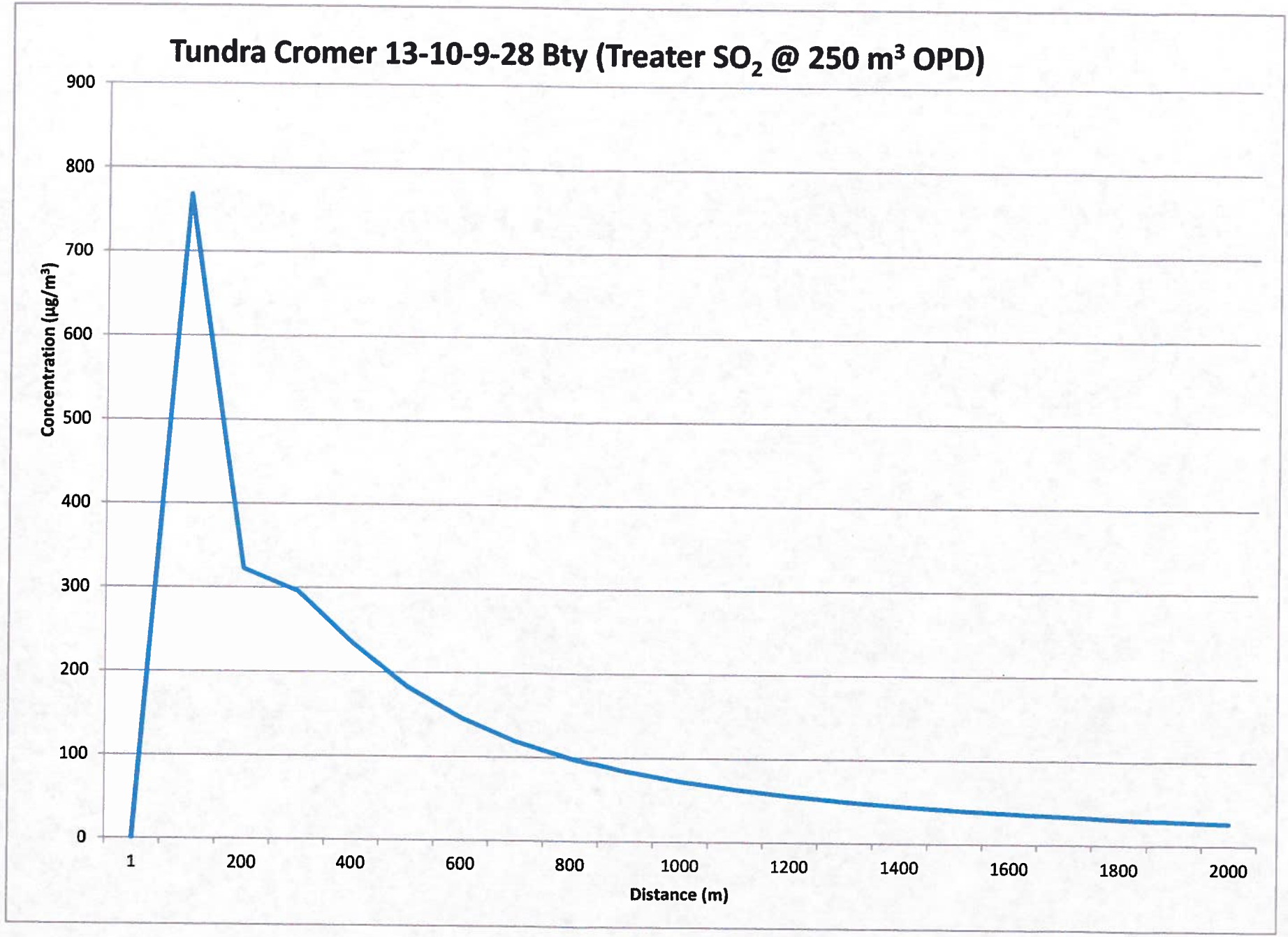
| CALCULATION PROCEDURE | MAX CONC (UG/M**3) | DIST TO MAX (M) | TERRAIN HT (M) |
|---|---|---|---|
| SIMPLE TERRAIN | 888.1 | 21. | 0. |

**********

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

**********

DO YOU WANT TO PRINT A HARDCOPY OF THE RESULTS? ENTER Y OR N:


Tundra Cromer 13-10-9-28 Bty (Treater $SO_2$ @ 250 $m^3$ OPD)
Concentration (µg/m³)
900
800
700
600
500
400
300
200
100
0
1
200
400
600
800
1000
1200
1400
1600
1800
2000
Distance (m)

****** SCREEN3 MODEL ******

**** VERSION DATED 96043 ****

ENTER TITLE FOR THIS RUN (UP TO 79 CHARACTERS):

13-10-9-28 Treater SO2

ENTER SOURCE TYPE: P FOR POINT

F FOR FLARE

A FOR AREA

V FOR VOLUME

ALSO ENTER ANY OF THE FOLLOWING OPTIONS ON THE SAME LINE:

N - TO USE THE NON-REGULATORY BUT CONSERVATIVE BRODE 2 MIXING HEIGHT OPTION,

nn.n - TO USE AN ANEMOMETER HEIGHT OTHER THAN THE REGULATORY (DEFAULT) 10 METER HEIGHT.

SS - TO USE A NON-REGULATORY CAVITY CALCULATION ALTERNATIVE

Example - PN 7.0 SS (entry for a point source)

ENTER SOURCE TYPE AND ANY OF THE ABOVE OPTIONS:

P

ENTER EMISSION RATE (G/S):

0.1210

ENTER STACK HEIGHT (M):

4.5

ENTER STACK INSIDE DIAMETER (M):

0.4573

ENTER STACK GAS EXIT VELOCITY OR FLOW RATE:

OPTION 1 : EXIT VELOCITY (M/S):

DEFAULT - ENTER NUMBER ONLY

OPTION 2 : VOLUME FLOW RATE (M**3/S):

EXAMPLE "VM=20.00"

OPTION 3 : VOLUME FLOW RATE (ACFM):

EXAMPLE "VF=1000.00"

0.0288

ENTER STACK GAS EXIT TEMPERATURE (K):

373

ENTER AMBIENT AIR TEMPERATURE (USE 293 FOR DEFAULT) (K):

293

ENTER RECEPTOR HEIGHT ABOVE GROUND (FOR FLAGPOLE RECEPTOR) (M):

0

ENTER URBAN/RURAL OPTION (U=URBAN, R=RURAL):

r

CONSIDER BUILDING DOWNWASH IN CALCS? ENTER Y OR N:

n

USE COMPLEX TERRAIN SCREEN FOR TERRAIN ABOVE STACK HEIGHT?

ENTER Y OR N:

n

USE SIMPLE TERRAIN SCREEN WITH TERRAIN ABOVE STACK BASE?

ENTER Y OR N:

n

ENTER CHOICE OF METEOROLOGY;

1 - FULL METEOROLOGY (ALL STABILITIES & WIND SPEEDS)

2 - INPUT SINGLE STABILITY CLASS

3 - INPUT SINGLE STABILITY CLASS AND WIND SPEED

1

USE AUTOMATED DISTANCE ARRAY? ENTER Y OR N:

y

ENTER MIN AND MAX DISTANCES TO USE (M):

0,2000

**********

*** 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 | 320.0 | 3.44 | .42 | .19 | NO |
| 100. | 768.0 | 4 | 1.0 | 1.0 | 320.0 | 3.44 | 8.20 | 4.65 | NO |
| 200. | 322.7 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 7.80 | 4.22 | NO |
| 300. | 295.9 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 11.28 | 5.72 | NO |
| 400. | 234.4 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 14.67 | 7.12 | NO |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 500. | 183.6 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 18.00 | 8.46 | NO |
| 600. | 146.0 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 21.26 | 9.74 | NO |
| 700. | 118.5 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 24.48 | 10.98 | NO |
| 800. | 98.84 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 27.65 | 12.02 | NO |
| 900. | 83.88 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 30.79 | 13.02 | NO |
| 1000. | 72.22 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 33.90 | 13.99 | NO |
| 1100. | 63.19 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 36.98 | 14.86 | NO |
| 1200. | 55.86 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 40.03 | 15.69 | NO |
| 1300. | 49.82 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 43.05 | 16.50 | NO |
| 1400. | 44.79 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 46.06 | 17.29 | NO |
| 1500. | 40.53 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 49.04 | 18.06 | NO |
| 1600. | 36.90 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 52.00 | 18.81 | NO |
| 1700. | 33.77 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 54.95 | 19.54 | NO |
| 1800. | 31.06 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 57.88 | 20.26 | NO |
| 1900. | 28.69 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 60.79 | 20.96 | NO |
| 2000. | 26.60 | 6 | 1.0 | 1.0 | 10000.0 | 6.78 | 63.68 | 21.65 | NO |

ITERATING TO FIND MAXIMUM CONCENTRATION . . .

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 21. | 1282. | 2 | 1.0 | 1.0 | 320.0 | 3.44 | 4.82 | 2.59 | NO |

USE DISCRETE DISTANCES? ENTER Y OR N:

n

**********

*** SUMMARY OF SCREEN MODEL RESULTS ***

**********

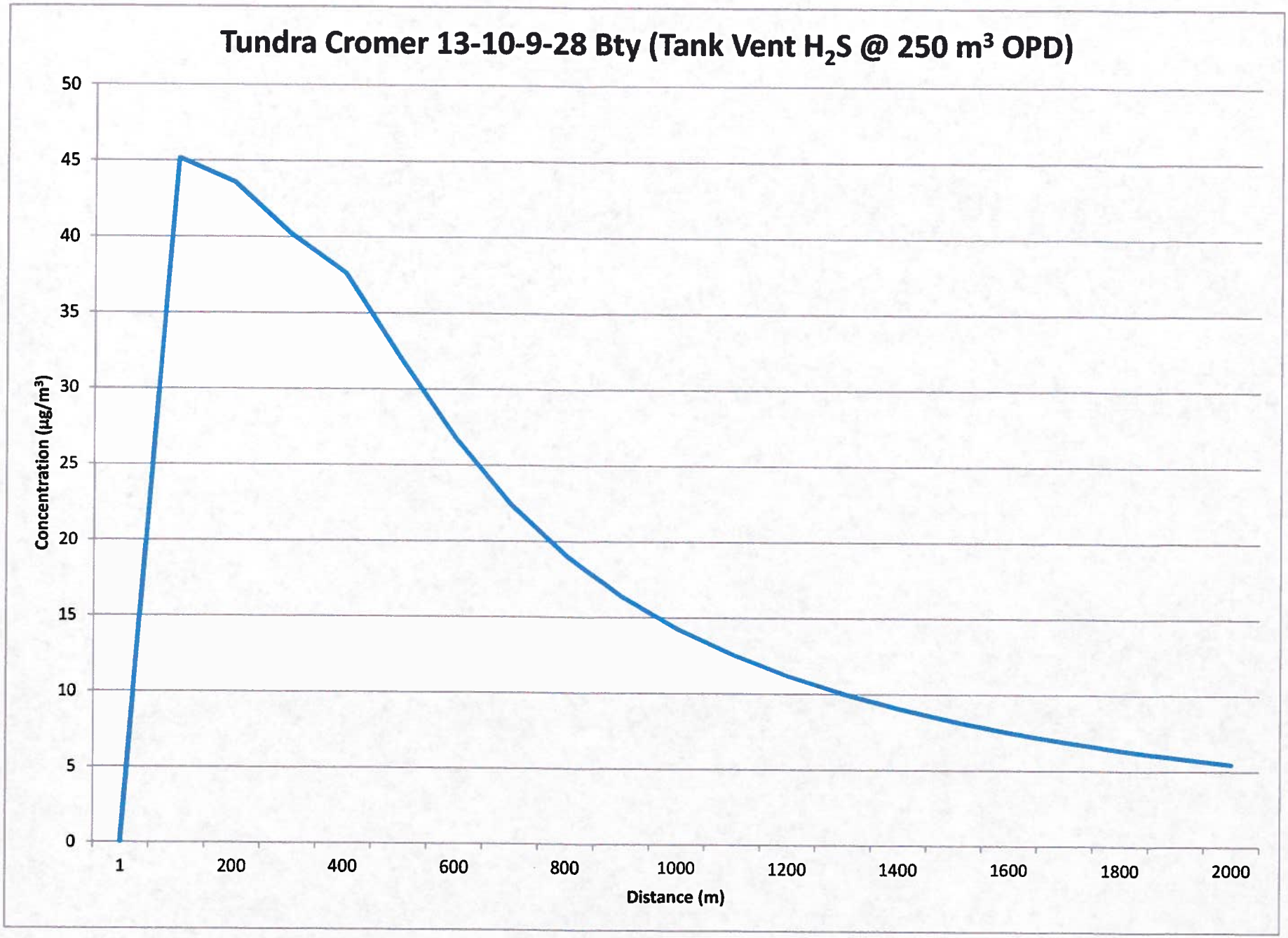
| CALCULATION PROCEDURE | MAX CONC (UG/M**3) | DIST TO MAX (M) | TERRAIN HT (M) |
|---|---|---|---|
| SIMPLE TERRAIN | 1282. | 21. | 0. |

**********

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

**********

DO YOU WANT TO PRINT A HARDCOPY OF THE RESULTS? ENTER Y OR N:


Tundra Cromer 13-10-9-28 Bty (Tank Vent $H_2S$ @ 250 $m^3$ OPD)
Concentration (µg/m³)
50
45
40
35
30
25
20
15
10
5
0
1
200
400
600
800
1000
1200
1400
1600
1800
2000
Distance (m)

****** SCREEN3 MODEL ******

**** VERSION DATED 96043 ****

ENTER TITLE FOR THIS RUN (UP TO 79 CHARACTERS):

13-10-9-28 TANK VENT H2S

ENTER SOURCE TYPE: P FOR POINT

F FOR FLARE

A FOR AREA

V FOR VOLUME

ALSO ENTER ANY OF THE FOLLOWING OPTIONS ON THE SAME LINE:

N - TO USE THE NON-REGULATORY BUT CONSERVATIVE BRODE 2 MIXING HEIGHT OPTION,

nn.n - TO USE AN ANEMOMETER HEIGHT OTHER THAN THE REGULATORY (DEFAULT) 10 METER HEIGHT.

SS - TO USE A NON-REGULATORY CAVITY CALCULATION ALTERNATIVE

Example - PN 7.0 SS (entry for a point source)

ENTER SOURCE TYPE AND ANY OF THE ABOVE OPTIONS:

P

ENTER EMISSION RATE (G/S):

0.0256

ENTER STACK HEIGHT (M):

9.15

ENTER STACK INSIDE DIAMETER (M):

0.2032

ENTER STACK GAS EXIT VELOCITY OR FLOW RATE:

OPTION 1 : EXIT VELOCITY (M/S):

DEFAULT - ENTER NUMBER ONLY

OPTION 2 : VOLUME FLOW RATE (M**3/S):

EXAMPLE "VM=20.00"

OPTION 3 : VOLUME FLOW RATE (ACFM):

EXAMPLE "VF=1000.00"

0.0446

ENTER STACK GAS EXIT TEMPERATURE (K):

293

ENTER AMBIENT AIR TEMPERATURE (USE 293 FOR DEFAULT) (K):

293

ENTER RECEPTOR HEIGHT ABOVE GROUND (FOR FLAGPOLE RECEPTOR) (M):

0

ENTER URBAN/RURAL OPTION (U=URBAN, R=RURAL):

r

CONSIDER BUILDING DOWNWASH IN CALCS? ENTER Y OR N:

n

USE COMPLEX TERRAIN SCREEN FOR TERRAIN ABOVE STACK HEIGHT?

ENTER Y OR N:

n

USE SIMPLE TERRAIN SCREEN WITH TERRAIN ABOVE STACK BASE?

ENTER Y OR N:

n

ENTER CHOICE OF METEOROLOGY;

1 - FULL METEOROLOGY (ALL STABILITIES & WIND SPEEDS)

2 - INPUT SINGLE STABILITY CLASS

3 - INPUT SINGLE STABILITY CLASS AND WIND SPEED

1

USE AUTOMATED DISTANCE ARRAY? ENTER Y OR N:

y

ENTER MIN AND MAX DISTANCES TO USE (M):

0,2000

**********

*** 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 | 320.0 | 8.59 | .41 | .18 | NO |
| 100. | 45.16 | 3 | 1.0 | 1.0 | 320.0 | 8.59 | 12.46 | 7.44 | NO |
| 200. | 43.58 | 5 | 1.0 | 1.0 | 10000.0 | 8.59 | 11.63 | 6.24 | NO |
| 300. | 40.23 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 11.23 | 5.62 | NO |
| 400. | 37.61 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 14.64 | 7.05 | NO |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 500. | 32.03 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 17.97 | 8.40 | NO |
| 600. | 26.75 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 21.24 | 9.69 | NO |
| 700. | 22.39 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 24.46 | 10.93 | NO |
| 800. | 19.04 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 27.63 | 11.98 | NO |
| 900. | 16.39 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 30.78 | 12.98 | NO |
| 1000. | 14.26 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 33.88 | 13.95 | NO |
| 1100. | 12.58 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 36.96 | 14.82 | NO |
| 1200. | 11.19 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 40.01 | 15.66 | NO |
| 1300. | 10.03 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 43.04 | 16.47 | NO |
| 1400. | 9.059 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 46.05 | 17.26 | NO |
| 1500. | 8.230 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 49.03 | 18.03 | NO |
| 1600. | 7.517 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 51.99 | 18.78 | NO |
| 1700. | 6.899 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 54.94 | 19.52 | NO |
| 1800. | 6.360 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 57.87 | 20.23 | NO |
| 1900. | 5.887 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 60.78 | 20.94 | NO |
| 2000. | 5.469 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 63.68 | 21.63 | NO |

ITERATING TO FIND MAXIMUM CONCENTRATION . . .

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 80. | 48.68 | 3 | 1.0 | 1.0 | 320.0 | 8.59 | 10.26 | 6.14 | NO |

USE DISCRETE DISTANCES? ENTER Y OR N:

n

**********

*** SUMMARY OF SCREEN MODEL RESULTS ***

**********

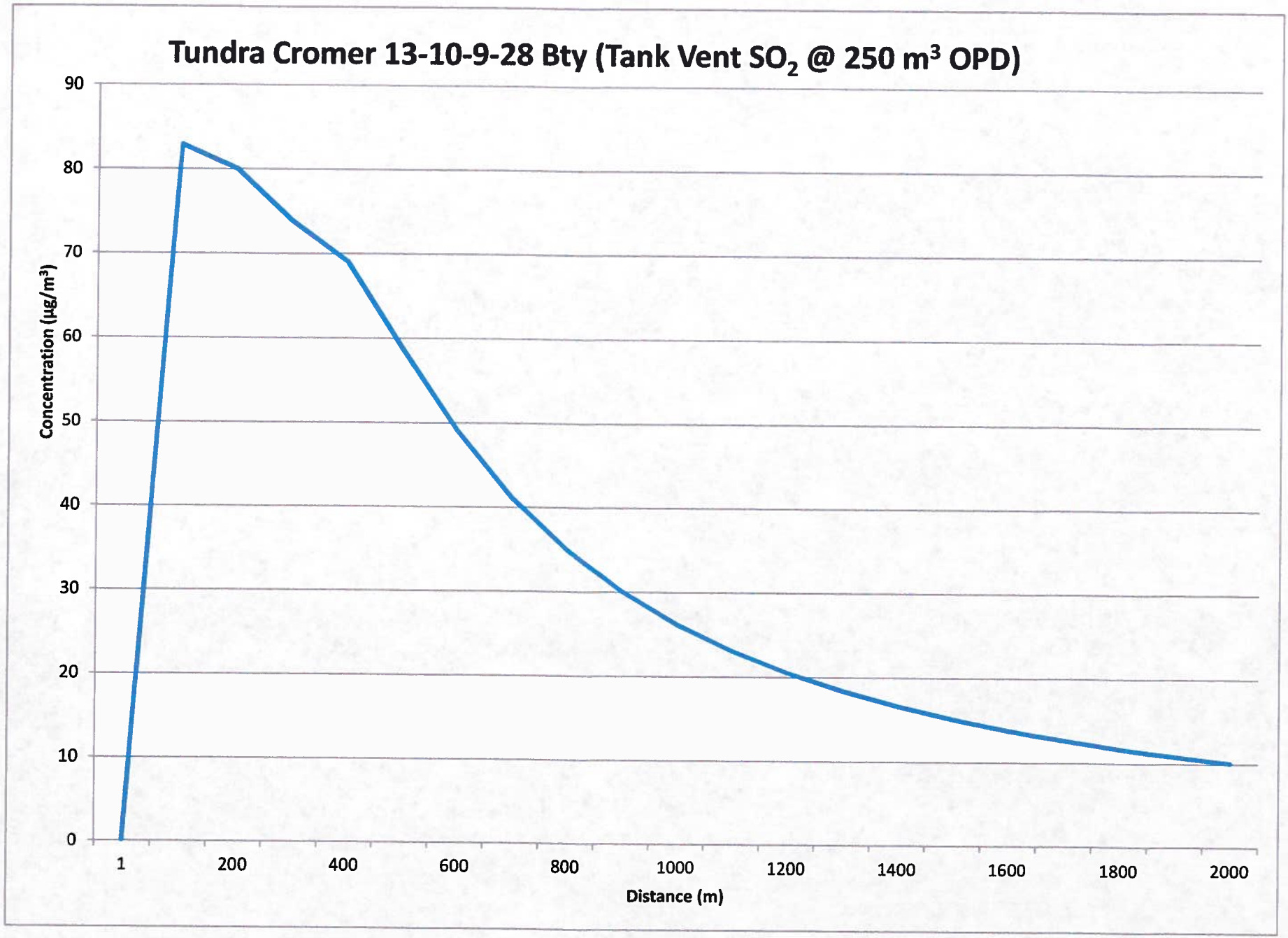
| CALCULATION PROCEDURE | MAX CONC (UG/M**3) | DIST TO MAX (M) | TERRAIN HT (M) |
|---|---|---|---|
| SIMPLE TERRAIN | 48.68 | 80. | 0. |

**********

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

**********

DO YOU WANT TO PRINT A HARDCOPY OF THE RESULTS? ENTER Y OR N:


Tundra Cromer 13-10-9-28 Bty (Tank Vent $SO_2$ @ 250 $m^3$ OPD)
Concentration (µg/m³)
90
80
70
60
50
40
30
20
10
0
1
200
400
600
800
1000
1200
1400
1600
1800
2000
Distance (m)

****** SCREEN3 MODEL ******

**** VERSION DATED 96043 ****

ENTER TITLE FOR THIS RUN (UP TO 79 CHARACTERS):

13-10-09-28 Tank Vent SO2

ENTER SOURCE TYPE: P FOR POINT

F FOR FLARE

A FOR AREA

V FOR VOLUME

ALSO ENTER ANY OF THE FOLLOWING OPTIONS ON THE SAME LINE:

N - TO USE THE NON-REGULATORY BUT CONSERVATIVE BRODE 2 MIXING HEIGHT OPTION,

nn.n - TO USE AN ANEMOMETER HEIGHT OTHER THAN THE REGULATORY (DEFAULT) 10 METER HEIGHT.

SS - TO USE A NON-REGULATORY CAVITY CALCULATION ALTERNATIVE

Example - PN 7.0 SS (entry for a point source)

ENTER SOURCE TYPE AND ANY OF THE ABOVE OPTIONS:

P

ENTER EMISSION RATE (G/S):

0.047

ENTER STACK HEIGHT (M):

9.15

ENTER STACK INSIDE DIAMETER (M):

0.2032

ENTER STACK GAS EXIT VELOCITY OR FLOW RATE:

OPTION 1 : EXIT VELOCITY (M/S):

DEFAULT - ENTER NUMBER ONLY

OPTION 2 : VOLUME FLOW RATE (M**3/S):

EXAMPLE "VM=20.00"

OPTION 3 : VOLUME FLOW RATE (ACFM):

EXAMPLE "VF=1000.00"

0.0446

ENTER STACK GAS EXIT TEMPERATURE (K):

293

ENTER AMBIENT AIR TEMPERATURE (USE 293 FOR DEFAULT) (K):

293

ENTER RECEPTOR HEIGHT ABOVE GROUND (FOR FLAGPOLE RECEPTOR) (M):

0

ENTER URBAN/RURAL OPTION (U=URBAN, R=RURAL):

r

CONSIDER BUILDING DOWNWASH IN CALCS? ENTER Y OR N:

n

USE COMPLEX TERRAIN SCREEN FOR TERRAIN ABOVE STACK HEIGHT?

ENTER Y OR N:

n

USE SIMPLE TERRAIN SCREEN WITH TERRAIN ABOVE STACK BASE?

ENTER Y OR N:

n

ENTER CHOICE OF METEOROLOGY;

1 - FULL METEOROLOGY (ALL STABILITIES & WIND SPEEDS)

2 - INPUT SINGLE STABILITY CLASS

3 - INPUT SINGLE STABILITY CLASS AND WIND SPEED

1

USE AUTOMATED DISTANCE ARRAY? ENTER Y OR N:

yu

ENTER MIN AND MAX DISTANCES TO USE (M):

0,2000

**********

*** 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 | 320.0 | 8.59 | .41 | .18 | NO |
| 100. | 82.91 | 3 | 1.0 | 1.0 | 320.0 | 8.59 | 12.46 | 7.44 | NO |
| 200. | 80.01 | 5 | 1.0 | 1.0 | 10000.0 | 8.59 | 11.63 | 6.24 | NO |
| 300. | 73.86 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 11.23 | 5.62 | NO |
| 400. | 69.06 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 14.64 | 7.05 | NO |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 500. | 58.80 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 17.97 | 8.40 | NO |
| 600. | 49.10 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 21.24 | 9.69 | NO |
| 700. | 41.11 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 24.46 | 10.93 | NO |
| 800. | 34.96 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 27.63 | 11.98 | NO |
| 900. | 30.09 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 30.78 | 12.98 | NO |
| 1000. | 26.19 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 33.88 | 13.95 | NO |
| 1100. | 23.09 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 36.96 | 14.82 | NO |
| 1200. | 20.54 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 40.01 | 15.66 | NO |
| 1300. | 18.42 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 43.04 | 16.47 | NO |
| 1400. | 16.63 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 46.05 | 17.26 | NO |
| 1500. | 15.11 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 49.03 | 18.03 | NO |
| 1600. | 13.80 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 51.99 | 18.78 | NO |
| 1700. | 12.67 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 54.94 | 19.52 | NO |
| 1800. | 11.68 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 57.87 | 20.23 | NO |
| 1900. | 10.81 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 60.78 | 20.94 | NO |
| 2000. | 10.04 | 6 | 1.0 | 1.0 | 10000.0 | 8.59 | 63.68 | 21.63 | NO |

ITERATING TO FIND MAXIMUM CONCENTRATION . . .

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 80. | 89.37 | 3 | 1.0 | 1.0 | 320.0 | 8.59 | 10.26 | 6.14 | NO |

USE DISCRETE DISTANCES? ENTER Y OR N:

n

**********

*** SUMMARY OF SCREEN MODEL RESULTS ***

**********

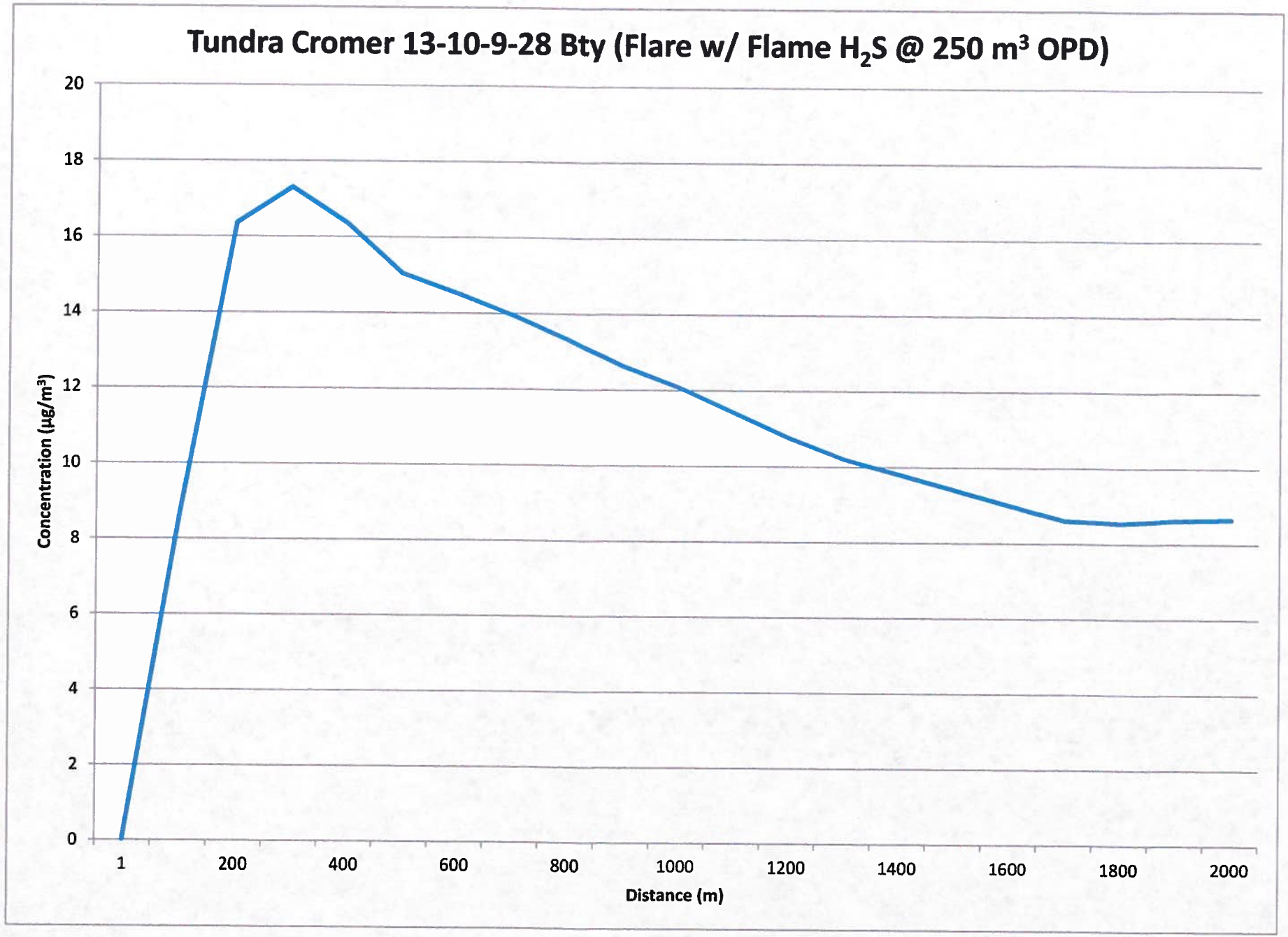
| CALCULATION PROCEDURE | MAX CONC (UG/M**3) | DIST TO MAX (M) | TERRAIN HT (M) |
|---|---|---|---|
| SIMPLE TERRAIN | 89.37 | 80. | 0. |

**********

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

**********

DO YOU WANT TO PRINT A HARDCOPY OF THE RESULTS? ENTER Y OR N:


Tundra Cromer 13-10-9-28 Bty (Flare w/ Flame $H_2S$ @ 250 $m^3$ OPD)
Concentration (µg/m³)
0
2
4
6
8
10
12
14
16
18
20
1
200
400
600
800
1000
1200
1400
1600
1800
2000
Distance (m)

****** SCREEN3 MODEL ******

**** VERSION DATED 96043 ****

ENTER TITLE FOR THIS RUN (UP TO 79 CHARACTERS):

13-10-9-28 FLARE W/ FLAME H2S

ENTER SOURCE TYPE: P FOR POINT

F FOR FLARE

A FOR AREA

V FOR VOLUME

ALSO ENTER ANY OF THE FOLLOWING OPTIONS ON THE SAME LINE:

N - TO USE THE NON-REGULATORY BUT CONSERVATIVE BRODE 2 MIXING HEIGHT OPTION,

nn.n - TO USE AN ANEMOMETER HEIGHT OTHER THAN THE REGULATORY (DEFAULT) 10 METER HEIGHT.

SS - TO USE A NON-REGULATORY CAVITY CALCULATION ALTERNATIVE

Example - PN 7.0 SS (entry for a point source)

ENTER SOURCE TYPE AND ANY OF THE ABOVE OPTIONS:

F

ENTER EMISSION RATE (G/S):

0.4031

ENTER FLARE STACK HEIGHT (M):

12.2

ENTER TOTAL HEAT RELEASE RATE (CAL/S):

231916

ENTER RECEPTOR HEIGHT ABOVE GROUND (FOR FLAGPOLE RECEPTOR) (M):

0

ENTER URBAN/RURAL OPTION (U=URBAN, R=RURAL):

r

EFFECTIVE RELEASE HEIGHT = 13.873370

CONSIDER BUILDING DOWNWASH IN CALCS? ENTER Y OR N:

n

USE COMPLEX TERRAIN SCREEN FOR TERRAIN ABOVE STACK HEIGHT?

ENTER Y OR N:

n

USE SIMPLE TERRAIN SCREEN WITH TERRAIN ABOVE STACK BASE?

ENTER Y OR N:

n

ENTER CHOICE OF METEOROLOGY;

1 - FULL METEOROLOGY (ALL STABILITIES & WIND SPEEDS)

2 - INPUT SINGLE STABILITY CLASS

3 - INPUT SINGLE STABILITY CLASS AND WIND SPEED

1

USE AUTOMATED DISTANCE ARRAY? ENTER Y OR N:

y

ENTER MIN AND MAX DISTANCES TO USE (M):

0,2000

**********

*** 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 | 320.0 | 71.37 | 1.10 | 1.04 | NO |
| 100. | 8.615 | 1 | 3.0 | 3.1 | 960.0 | 33.04 | 27.32 | 14.83 | NO |
| 200. | 16.36 | 2 | 4.0 | 4.1 | 1280.0 | 28.25 | 36.40 | 20.65 | NO |
| 300. | 17.30 | 3 | 3.5 | 3.6 | 1120.0 | 30.14 | 34.61 | 20.85 | NO |
| 400. | 16.35 | 3 | 2.5 | 2.6 | 800.0 | 36.65 | 45.12 | 27.23 | NO |
| 500. | 15.04 | 3 | 2.0 | 2.1 | 640.0 | 42.34 | 55.37 | 33.44 | NO |
| 600. | 14.51 | 4 | 3.5 | 3.7 | 1120.0 | 29.88 | 42.96 | 21.70 | NO |
| 700. | 13.95 | 4 | 3.0 | 3.2 | 960.0 | 32.54 | 49.48 | 24.62 | NO |
| 800. | 13.32 | 4 | 2.5 | 2.6 | 800.0 | 36.28 | 55.94 | 27.54 | NO |
| 900. | 12.63 | 4 | 2.5 | 2.6 | 800.0 | 36.28 | 62.21 | 30.15 | NO |
| 1000. | 12.08 | 4 | 2.0 | 2.1 | 640.0 | 41.88 | 68.60 | 33.08 | NO |
| 1100. | 11.42 | 4 | 2.0 | 2.1 | 640.0 | 41.88 | 74.74 | 35.05 | NO |
| 1200. | 10.76 | 4 | 2.0 | 2.1 | 640.0 | 41.88 | 80.84 | 36.97 | NO |
| 1300. | 10.20 | 4 | 1.5 | 1.6 | 480.0 | 51.22 | 87.17 | 39.47 | NO |
| 1400. | 9.806 | 4 | 1.5 | 1.6 | 480.0 | 51.22 | 93.16 | 41.26 | NO |
| 1500. | 9.402 | 4 | 1.5 | 1.6 | 480.0 | 51.22 | 99.12 | 43.01 | NO |

1600. 9.000 4 1.5 1.6 480.0 51.22 105.04 44.73 NO

1700. 8.606 4 1.5 1.6 480.0 51.22 110.92 46.41 NO

1800. 8.552 5 1.0 1.1 10000.0 58.69 87.91 33.85 NO

1900. 8.623 5 1.0 1.1 10000.0 58.69 92.24 34.86 NO

2000. 8.655 5 1.0 1.1 10000.0 58.69 96.55 35.85 NO

ITERATING TO FIND MAXIMUM CONCENTRATION . . .

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

283. 17.38 3 4.0 4.1 1280.0 28.11 32.86 19.76 NO

USE DISCRETE DISTANCES? ENTER Y OR N:

n

DO YOU WISH TO MAKE A FUMIGATION CALCULATION? ENTER Y OR N:

n

**********

*** SUMMARY OF SCREEN MODEL RESULTS ***

**********

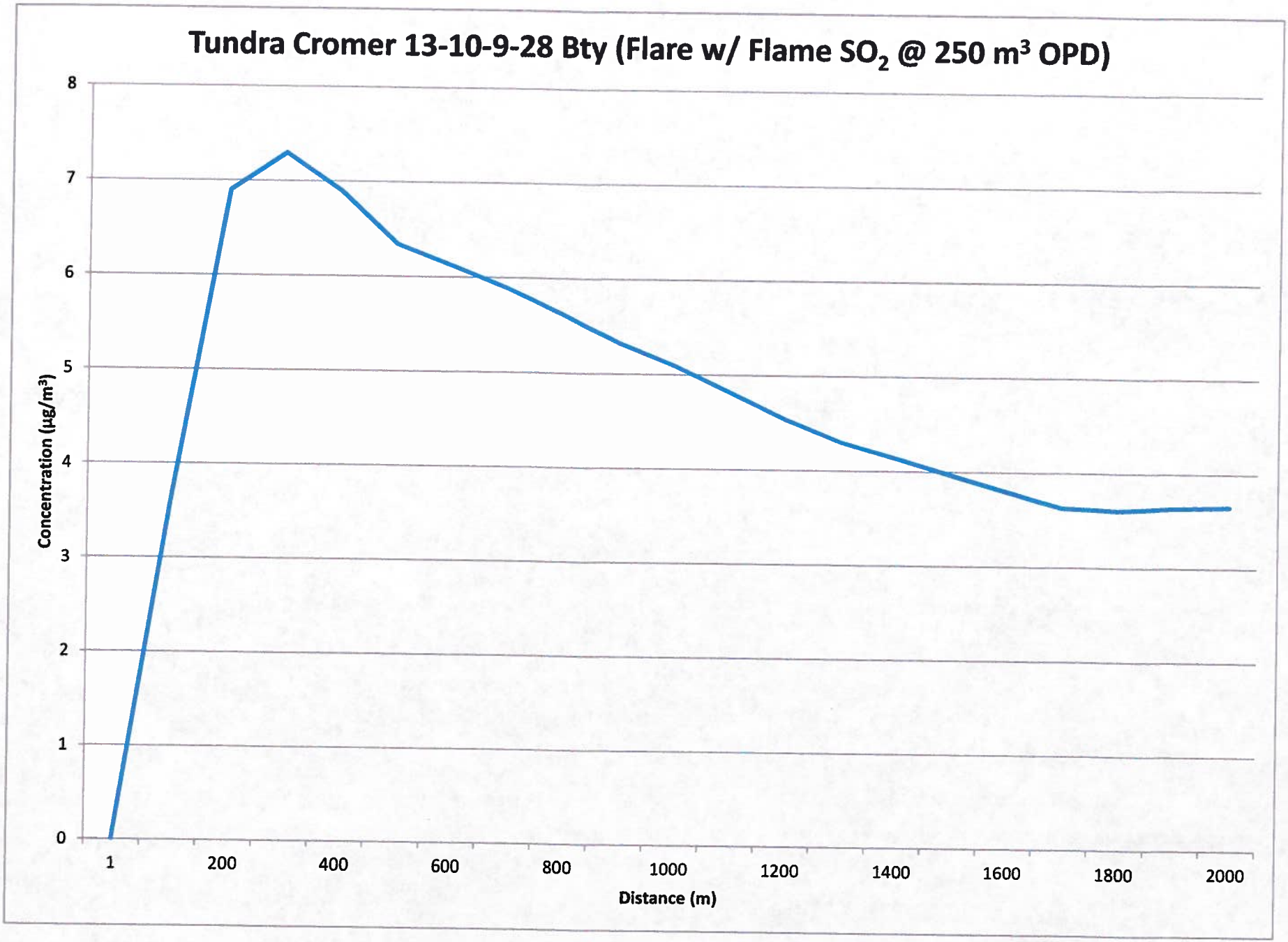
| CALCULATION PROCEDURE | MAX CONC (UG/M**3) | DIST TO MAX (M) | TERRAIN HT (M) |
|---|---|---|---|
| SIMPLE TERRAIN | 17.38 | 283. | 0. |

**********

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

**********

DO YOU WANT TO PRINT A HARDCOPY OF THE RESULTS? ENTER Y OR N:


Tundra Cromer 13-10-9-28 Bty (Flare w/ Flame $SO_2$ @ 250 $m^3$ OPD)
Concentration (µg/m³)
0
1
2
3
4
5
6
7
8
1
200
400
600
800
1000
1200
1400
1600
1800
2000
Distance (m)

****** SCREEN3 MODEL ******

**** VERSION DATED 96043 ****

ENTER TITLE FOR THIS RUN (UP TO 79 CHARACTERS):

13-10-9-28 FLARE W/ FLAME SO2

ENTER SOURCE TYPE: P FOR POINT

F FOR FLARE

A FOR AREA

V FOR VOLUME

ALSO ENTER ANY OF THE FOLLOWING OPTIONS ON THE SAME LINE:

N - TO USE THE NON-REGULATORY BUT CONSERVATIVE BRODE 2 MIXING HEIGHT OPTION,

nn.n - TO USE AN ANEMOMETER HEIGHT OTHER THAN THE REGULATORY (DEFAULT) 10 METER HEIGHT.

SS - TO USE A NON-REGULATORY CAVITY CALCULATION ALTERNATIVE

Example - PN 7.0 SS (entry for a point source)

ENTER SOURCE TYPE AND ANY OF THE ABOVE OPTIONS:

F

ENTER EMISSION RATE (G/S):

0.17

ENTER FLARE STACK HEIGHT (M):

12.2

ENTER TOTAL HEAT RELEASE RATE (CAL/S):

231916

ENTER RECEPTOR HEIGHT ABOVE GROUND (FOR FLAGPOLE RECEPTOR) (M):

0

ENTER URBAN/RURAL OPTION (U=URBAN, R=RURAL):

r

EFFECTIVE RELEASE HEIGHT = 13.873370

CONSIDER BUILDING DOWNWASH IN CALCS? ENTER Y OR N:

n

USE COMPLEX TERRAIN SCREEN FOR TERRAIN ABOVE STACK HEIGHT?

ENTER Y OR N:

n

USE SIMPLE TERRAIN SCREEN WITH TERRAIN ABOVE STACK BASE?

ENTER Y OR N:

n

ENTER CHOICE OF METEOROLOGY;

1 - FULL METEOROLOGY (ALL STABILITIES & WIND SPEEDS)

2 - INPUT SINGLE STABILITY CLASS

3 - INPUT SINGLE STABILITY CLASS AND WIND SPEED

1

USE AUTOMATED DISTANCE ARRAY? ENTER Y OR N:

y

ENTER MIN AND MAX DISTANCES TO USE (M):

0,2000

**********

*** 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 | 320.0 | 71.37 | 1.10 | 1.04 | NO |
| 100. | 3.633 | 1 | 3.0 | 3.1 | 960.0 | 33.04 | 27.32 | 14.83 | NO |
| 200. | 6.900 | 2 | 4.0 | 4.1 | 1280.0 | 28.25 | 36.40 | 20.65 | NO |
| 300. | 7.295 | 3 | 3.5 | 3.6 | 1120.0 | 30.14 | 34.61 | 20.85 | NO |
| 400. | 6.894 | 3 | 2.5 | 2.6 | 800.0 | 36.65 | 45.12 | 27.23 | NO |
| 500. | 6.344 | 3 | 2.0 | 2.1 | 640.0 | 42.34 | 55.37 | 33.44 | NO |
| 600. | 6.119 | 4 | 3.5 | 3.7 | 1120.0 | 29.88 | 42.96 | 21.70 | NO |
| 700. | 5.885 | 4 | 3.0 | 3.2 | 960.0 | 32.54 | 49.48 | 24.62 | NO |
| 800. | 5.617 | 4 | 2.5 | 2.6 | 800.0 | 36.28 | 55.94 | 27.54 | NO |
| 900. | 5.327 | 4 | 2.5 | 2.6 | 800.0 | 36.28 | 62.21 | 30.15 | NO |
| 1000. | 5.093 | 4 | 2.0 | 2.1 | 640.0 | 41.88 | 68.60 | 33.08 | NO |
| 1100. | 4.816 | 4 | 2.0 | 2.1 | 640.0 | 41.88 | 74.74 | 35.05 | NO |
| 1200. | 4.538 | 4 | 2.0 | 2.1 | 640.0 | 41.88 | 80.84 | 36.97 | NO |
| 1300. | 4.301 | 4 | 1.5 | 1.6 | 480.0 | 51.22 | 87.17 | 39.47 | NO |
| 1400. | 4.136 | 4 | 1.5 | 1.6 | 480.0 | 51.22 | 93.16 | 41.26 | NO |
| 1500. | 3.965 | 4 | 1.5 | 1.6 | 480.0 | 51.22 | 99.12 | 43.01 | NO |

1600. 3.795 4 1.5 1.6 480.0 51.22 105.04 44.73 NO

1700. 3.629 4 1.5 1.6 480.0 51.22 110.92 46.41 NO

1800. 3.607 5 1.0 1.1 10000.0 58.69 87.91 33.85 NO

1900. 3.637 5 1.0 1.1 10000.0 58.69 92.24 34.86 NO

2000. 3.650 5 1.0 1.1 10000.0 58.69 96.55 35.85 NO

ITERATING TO FIND MAXIMUM CONCENTRATION . . .

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

283. 7.330 3 4.0 4.1 1280.0 28.11 32.86 19.76 NO

USE DISCRETE DISTANCES? ENTER Y OR N:

n

DO YOU WISH TO MAKE A FUMIGATION CALCULATION? ENTER Y OR N:

n

**********

*** SUMMARY OF SCREEN MODEL RESULTS ***

**********

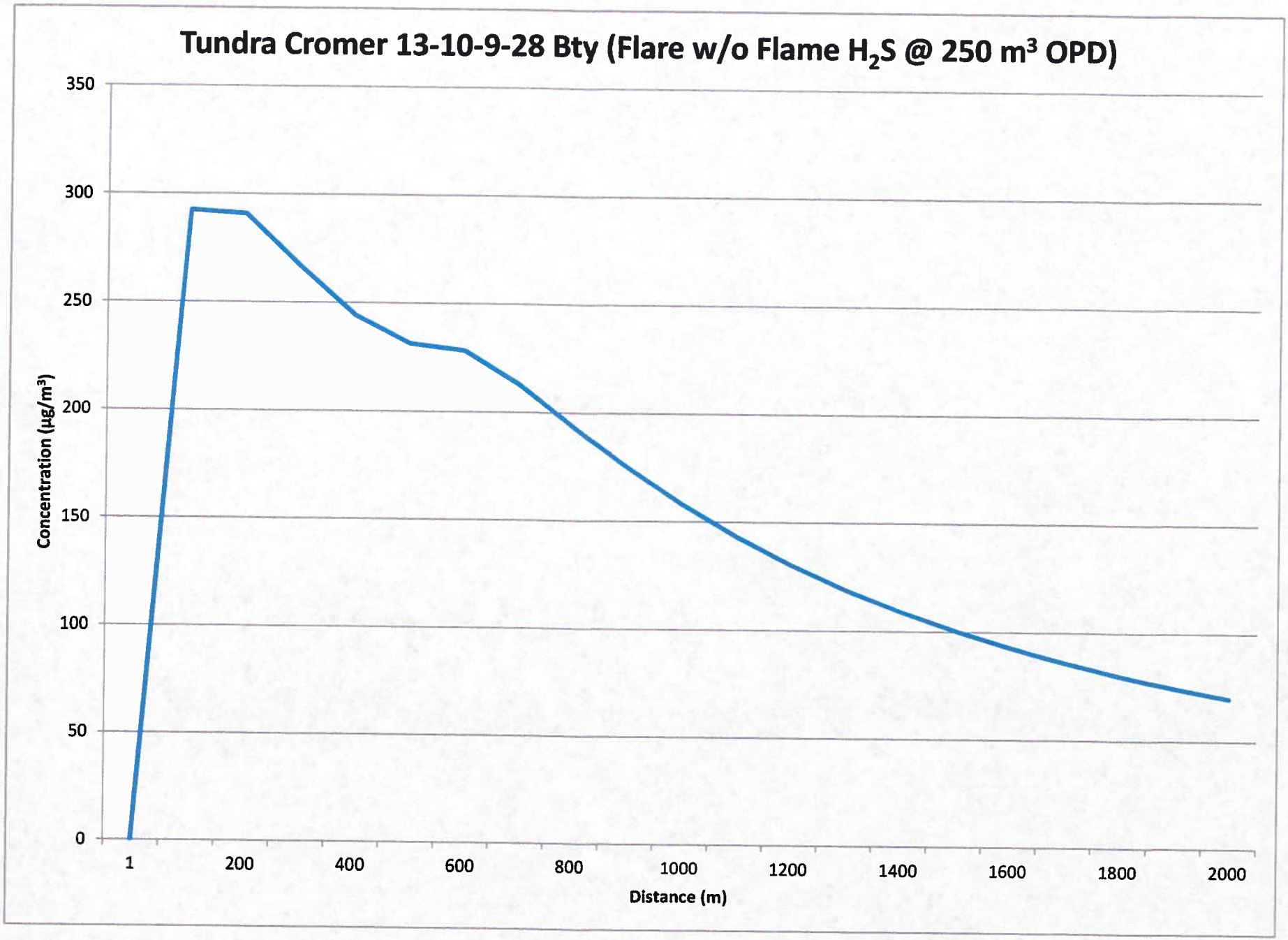
| CALCULATION PROCEDURE | MAX CONC (UG/M**3) | DIST TO MAX (M) | TERRAIN HT (M) |
|---|---|---|---|
| SIMPLE TERRAIN | 7.330 | 283. | 0. |

**********

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

**********

DO YOU WANT TO PRINT A HARDCOPY OF THE RESULTS? ENTER Y OR N:


Tundra Cromer 13-10-9-28 Bty (Flare w/o Flame $H_2S$ @ 250 $m^3$ OPD)
Concentration (µg/m³)
350
300
250
200
150
100
50
0
1
200
400
600
800
1000
1200
1400
1600
1800
2000
Distance (m)

****** SCREEN3 MODEL ******

**** VERSION DATED 96043 ****

ENTER TITLE FOR THIS RUN (UP TO 79 CHARACTERS):

13-10-9-28 FLARE W/O FLAME H2S

ENTER SOURCE TYPE: P FOR POINT

F FOR FLARE

A FOR AREA

V FOR VOLUME

ALSO ENTER ANY OF THE FOLLOWING OPTIONS ON THE SAME LINE:

N - TO USE THE NON-REGULATORY BUT CONSERVATIVE BRODE 2 MIXING HEIGHT OPTION,

nn.n - TO USE AN ANEMOMETER HEIGHT OTHER THAN THE REGULATORY (DEFAULT) 10 METER HEIGHT.

SS - TO USE A NON-REGULATORY CAVITY CALCULATION ALTERNATIVE

Example - PN 7.0 SS (entry for a point source)

ENTER SOURCE TYPE AND ANY OF THE ABOVE OPTIONS:

P

ENTER EMISSION RATE (G/S):

0.4031

ENTER STACK HEIGHT (M):

12.2

ENTER STACK INSIDE DIAMETER (M):

0.1016

ENTER STACK GAS EXIT VELOCITY OR FLOW RATE:

OPTION 1 : EXIT VELOCITY (M/S):

DEFAULT - ENTER NUMBER ONLY

OPTION 2 : VOLUME FLOW RATE (M**3/S):

EXAMPLE "VM=20.00"

OPTION 3 : VOLUME FLOW RATE (ACFM):

EXAMPLE "VF=1000.00"

2.807

ENTER STACK GAS EXIT TEMPERATURE (K):

293

ENTER AMBIENT AIR TEMPERATURE (USE 293 FOR DEFAULT) (K):

293

ENTER RECEPTOR HEIGHT ABOVE GROUND (FOR FLAGPOLE RECEPTOR) (M):

0

ENTER URBAN/RURAL OPTION (U=URBAN, R=RURAL):

r

CONSIDER BUILDING DOWNWASH IN CALCS? ENTER Y OR N:

n

USE COMPLEX TERRAIN SCREEN FOR TERRAIN ABOVE STACK HEIGHT?

ENTER Y OR N:

n

USE SIMPLE TERRAIN SCREEN WITH TERRAIN ABOVE STACK BASE?

ENTER Y OR N:

n

ENTER CHOICE OF METEOROLOGY;

1 - FULL METEOROLOGY (ALL STABILITIES & WIND SPEEDS)

2 - INPUT SINGLE STABILITY CLASS

3 - INPUT SINGLE STABILITY CLASS AND WIND SPEED

1

USE AUTOMATED DISTANCE ARRAY? ENTER Y OR N:

y

ENTER MIN AND MAX DISTANCES TO USE (M):

0,2000

**********

*** 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 | 320.0 | 13.04 | .44 | .23 | NO |
| 100. | 292.5 | 3 | 1.0 | 1.0 | 320.0 | 13.04 | 12.46 | 7.45 | NO |
| 200. | 290.8 | 4 | 1.0 | 1.0 | 320.0 | 13.03 | 15.57 | 8.50 | NO |
| 300. | 266.7 | 5 | 1.0 | 1.1 | 10000.0 | 13.00 | 16.90 | 8.70 | NO |
| 400. | 244.2 | 5 | 1.0 | 1.1 | 10000.0 | 13.00 | 22.01 | 10.82 | NO |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 500. | 231.4 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 17.97 | 8.40 | NO |
| 600. | 228.3 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 21.24 | 9.69 | NO |
| 700. | 212.9 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 24.46 | 10.93 | NO |
| 800. | 193.4 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 27.64 | 11.98 | NO |
| 900. | 174.8 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 30.78 | 12.98 | NO |
| 1000. | 158.0 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 33.88 | 13.95 | NO |
| 1100. | 143.2 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 36.96 | 14.82 | NO |
| 1200. | 130.3 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 40.02 | 15.66 | NO |
| 1300. | 119.0 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 43.04 | 16.47 | NO |
| 1400. | 109.1 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 46.05 | 17.26 | NO |
| 1500. | 100.5 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 49.03 | 18.03 | NO |
| 1600. | 92.80 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 51.99 | 18.78 | NO |
| 1700. | 86.02 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 54.94 | 19.52 | NO |
| 1800. | 79.99 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 57.87 | 20.23 | NO |
| 1900. | 74.61 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 60.78 | 20.94 | NO |
| 2000. | 69.78 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 63.68 | 21.63 | NO |

ITERATING TO FIND MAXIMUM CONCENTRATION . . .

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 126. | 324.5 | 3 | 1.0 | 1.0 | 320.0 | 13.04 | 15.54 | 9.26 | NO |

USE DISCRETE DISTANCES? ENTER Y OR N:

n

DO YOU WISH TO MAKE A FUMIGATION CALCULATION? ENTER Y OR N:

n

**********

*** SUMMARY OF SCREEN MODEL RESULTS ***

**********

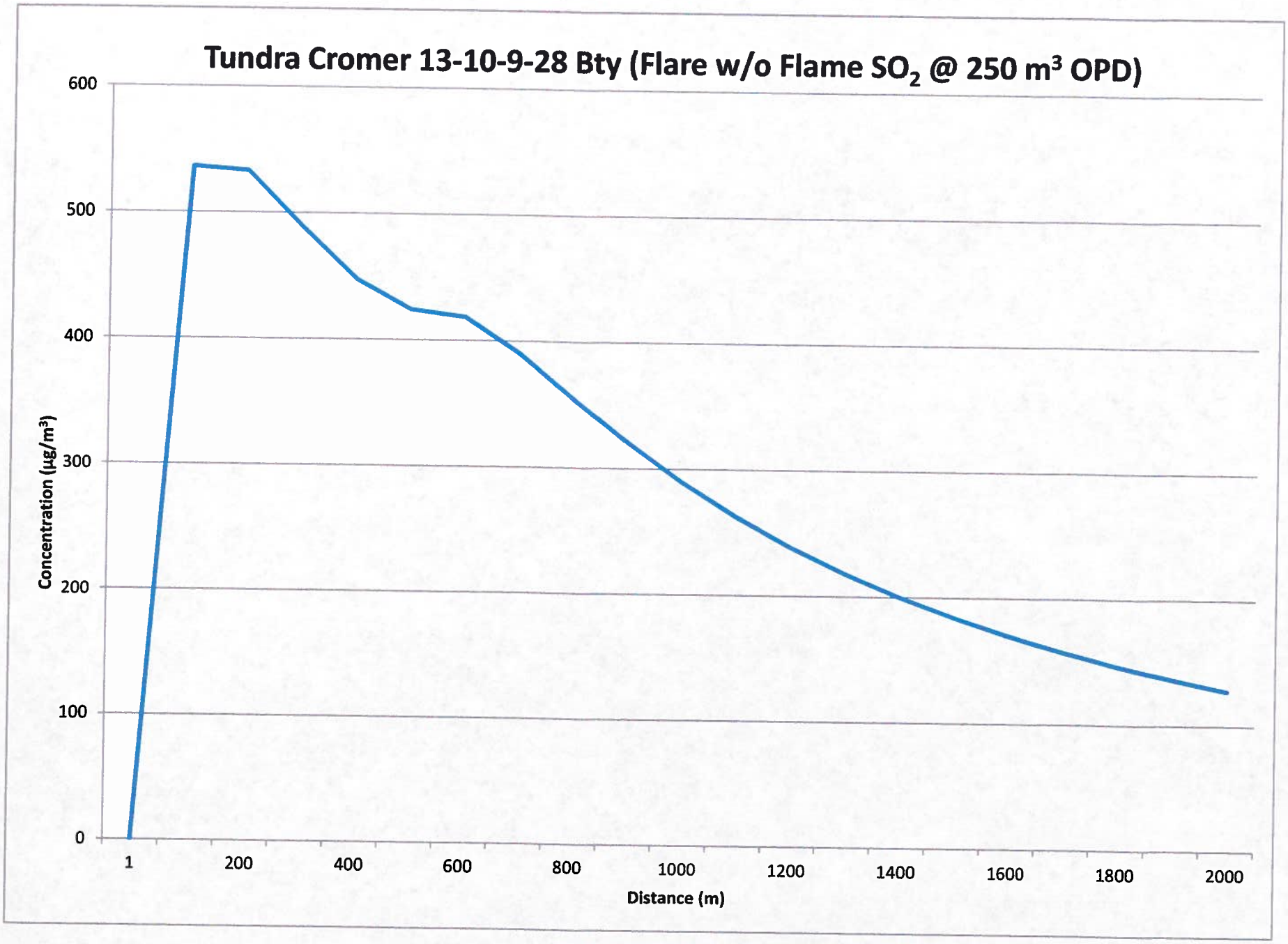
| CALCULATION PROCEDURE | MAX CONC (UG/M**3) | DIST TO MAX (M) | TERRAIN HT (M) |
|---|---|---|---|
| SIMPLE TERRAIN | 324.5 | 126. | 0. |

**********

** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

**********

DO YOU WANT TO PRINT A HARDCOPY OF THE RESULTS? ENTER Y OR N:


Tundra Cromer 13-10-9-28 Bty (Flare w/o Flame $SO_2$ @ 250 $m^3$ OPD)
600
500
400
300
200
100
0
Concentration (µg/m³)
1
200
400
600
800
1000
1200
1400
1600
1800
2000
Distance (m)

****** SCREEN3 MODEL ******

**** VERSION DATED 96043 ****

ENTER TITLE FOR THIS RUN (UP TO 79 CHARACTERS):

13-10-9-28 W/O FLAME SO2

ENTER SOURCE TYPE: P FOR POINT

F FOR FLARE

A FOR AREA

V FOR VOLUME

ALSO ENTER ANY OF THE FOLLOWING OPTIONS ON THE SAME LINE:

N - TO USE THE NON-REGULATORY BUT CONSERVATIVE BRODE 2 MIXING HEIGHT OPTION,

nn.n - TO USE AN ANEMOMETER HEIGHT OTHER THAN THE REGULATORY (DEFAULT) 10 METER HEIGHT.

SS - TO USE A NON-REGULATORY CAVITY CALCULATION ALTERNATIVE

Example - PN 7.0 SS (entry for a point source)

ENTER SOURCE TYPE AND ANY OF THE ABOVE OPTIONS:

P

ENTER EMISSION RATE (G/S):

0.739

ENTER STACK HEIGHT (M):

12.2

ENTER STACK INSIDE DIAMETER (M):

0.1016

ENTER STACK GAS EXIT VELOCITY OR FLOW RATE:

OPTION 1 : EXIT VELOCITY (M/S):

DEFAULT - ENTER NUMBER ONLY

OPTION 2 : VOLUME FLOW RATE (M**3/S):

EXAMPLE "VM=20.00"

OPTION 3 : VOLUME FLOW RATE (ACFM):

EXAMPLE "VF=1000.00"

2.807

ENTER STACK GAS EXIT TEMPERATURE (K):

293

ENTER AMBIENT AIR TEMPERATURE (USE 293 FOR DEFAULT) (K):

293

ENTER RECEPTOR HEIGHT ABOVE GROUND (FOR FLAGPOLE RECEPTOR) (M):

0

ENTER URBAN/RURAL OPTION (U=URBAN, R=RURAL):

r

CONSIDER BUILDING DOWNWASH IN CALCS? ENTER Y OR N:

n

USE COMPLEX TERRAIN SCREEN FOR TERRAIN ABOVE STACK HEIGHT?

ENTER Y OR N:

n

USE SIMPLE TERRAIN SCREEN WITH TERRAIN ABOVE STACK BASE?

ENTER Y OR N:

n

ENTER CHOICE OF METEOROLOGY;

1 - FULL METEOROLOGY (ALL STABILITIES & WIND SPEEDS)

2 - INPUT SINGLE STABILITY CLASS

3 - INPUT SINGLE STABILITY CLASS AND WIND SPEED

1

USE AUTOMATED DISTANCE ARRAY? ENTER Y OR N:

y

ENTER MIN AND MAX DISTANCES TO USE (M):

0,2000

**********

*** 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 | 320.0 | 13.04 | .44 | .23 | NO |
| 100. | 536.2 | 3 | 1.0 | 1.0 | 320.0 | 13.04 | 12.46 | 7.45 | NO |
| 200. | 533.1 | 4 | 1.0 | 1.0 | 320.0 | 13.03 | 15.57 | 8.50 | NO |
| 300. | 489.0 | 5 | 1.0 | 1.1 | 10000.0 | 13.00 | 16.90 | 8.70 | NO |
| 400. | 447.6 | 5 | 1.0 | 1.1 | 10000.0 | 13.00 | 22.01 | 10.82 | NO |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 500. | 424.3 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 17.97 | 8.40 | NO |
| 600. | 418.5 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 21.24 | 9.69 | NO |
| 700. | 390.3 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 24.46 | 10.93 | NO |
| 800. | 354.5 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 27.64 | 11.98 | NO |
| 900. | 320.5 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 30.78 | 12.98 | NO |
| 1000. | 289.6 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 33.88 | 13.95 | NO |
| 1100. | 262.5 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 36.96 | 14.82 | NO |
| 1200. | 238.8 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 40.02 | 15.66 | NO |
| 1300. | 218.2 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 43.04 | 16.47 | NO |
| 1400. | 200.1 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 46.05 | 17.26 | NO |
| 1500. | 184.2 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 49.03 | 18.03 | NO |
| 1600. | 170.1 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 51.99 | 18.78 | NO |
| 1700. | 157.7 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 54.94 | 19.52 | NO |
| 1800. | 146.7 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 57.87 | 20.23 | NO |
| 1900. | 136.8 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 60.78 | 20.94 | NO |
| 2000. | 127.9 | 6 | 1.0 | 1.1 | 10000.0 | 12.97 | 63.68 | 21.63 | NO |

ITERATING TO FIND MAXIMUM CONCENTRATION . . .

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

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| 126. | 594.8 | 3 | 1.0 | 1.0 | 320.0 | 13.04 | 15.54 | 9.26 | NO |

USE DISCRETE DISTANCES? ENTER Y OR N:

n

DO YOU WISH TO MAKE A FUMIGATION CALCULATION? ENTER Y OR N:

n

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*** SUMMARY OF SCREEN MODEL RESULTS ***

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| CALCULATION PROCEDURE | MAX CONC (UG/M**3) | DIST TO MAX (M) | TERRAIN HT (M) |
|---|---|---|---|
| SIMPLE TERRAIN | 594.8 | 126. | 0. |

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** REMEMBER TO INCLUDE BACKGROUND CONCENTRATIONS **

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DO YOU WANT TO PRINT A HARDCOPY OF THE RESULTS? ENTER Y OR N: