SOLVAY

SODA ASH JOINT VENTURE

November 5, 1997

Bernie Dailey
WDEQ-Air Quality Division
122 West 25th Ave.
Cheyenne, WY 82002

Dear Bernie:

RE: Revisions to Sections 5 and 6 (Ambient Impact Assessment) of AP-W77

The following document from Trinity Consultants dated November 4, 1997 is an update to the information submitted in Sections 5 and 6 of the Solvay Soda Ash Joint Venture Air Quality Permit Application (AP-W77) submitted to your office in June, 1997. The update includes revisions to the design of the expansion project, and reductions of permitted allowable rates and operating hours of some existing sources as detailed in my letter to you dated October 30, 1997.

If you have any questions concerning these revisions, please do not hesitate to contact me at (307) 872-6571. Again, I appreciate the prompt efforts of the Air Quality Division in reviewing this permit application.

Sincerely,

Dolly A. Potter
Environmental Engineer

cc: Ken Rairigh
Lee Gribovicz

Solvay Soda Ash Joint Venture, Inc.
P.O. Box 1167, Green River, Wyoming 82935 307/875-6500 FAX: 307/872-6510

Trinity Consultants
INCORPORATED

November 4, 1997

Dolly A. Potter
Environmental Engineer
Solvay Minerals, Inc.
P.O. Box 1167
Green River, Wyoming 82935

RE: Dispersion Modeling Results - NAAQS and PSD Increment Analysis Production Plant Expansion Project (Solvay Soda Ash Joint Venture)

Dear Ms. Potter:

Solvay Minerals, Inc. (Solvay) has requested that Trinity Consultants Incorporated (Trinity) perform an air dispersion modeling analysis in support of the proposed Solvay production plant expansion (also known as Solvay Soda Ash Joint Venture). This letter contains the results of the air dispersion modeling analysis performed to determine the potential impacts of Solvay's proposed expansion on ambient air quality.

The proposed expansion includes associated emission increases of particulate matter less than ten microns in diameter (PM_{10}) that are subject to review under the Prevention of Significant Deterioration (PSD) program. Emissions of other pollutants associated with the project (TSP, CO, NO_x, and SO_2) are not subject to PSD review. The analysis shows that the applicable Wyoming Standards (found in Wyoming Air Quality Standards and Regulations, Sections 3, 4, 10, and 12), National Ambient Air Quality Standards (NAAQS), and PSD increments are not exceeded by the expansion. The applicable Wyoming Standards, NAAQS, and PSD increments are shown in Table 1.

A dispersion modeling protocol[1] was submitted by Solvay to the Wyoming DEQ, Air Quality Division (AQD). The protocol outlines the modeling procedure and defines the applicable standards for this analysis. For PM_{10}, the PSD increment is the most restrictive ambient standard. For all other criteria pollutants, the project is not subject to comparison with the PSD increments, and therefore the most restrictive ambient standards are the Wyoming Standards or

[1] Woodward-Clyde, Dispersion Modeling Protocol, prepared for Solvay Minerals, November 1996.

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equivalent NAAQS. As set forth in the protocol, this analysis demonstrates compliance with the PSD increments for PM_{10} and the Wyoming Standards and NAAQS for other pollutants.

Table 1. Applicable ambient air quality standards (most restrictive shown in **bold** face).

Pollutant	Averaging Period	Wyoming Standards ($\mu g/m^3$)	Primary/Secondary NAAQS ($\mu g/m^3$)	Class II PSD Increments ($\mu g/m^3$)
PM_{10}	24-hour	150	150	**30**
	Annual	50	50	**17**
TSP	24-hour	**150**	---	---
SO_2	3-hour	**1,300**	1,300	512
	24-hour	**260**	365	91
	Annual	**60**	80	20
NO_2	Annual	**100**	100	25
CO	1-hour	**40,000**	40,000	---
	8-hour	**10,000**	10,000	---

An impact assessment for this project (not including recent design modifications) was provided by Solvay to the Wyoming AQD in support of the original application for the construction permit. That impact assessment included an evaluation of impacts on surrounding Class I Area Air Quality Related Values (AQRVs). The present analysis does not include a duplicate evaluation of AQRVs. Additionally, potential ozone impacts due to proposed emissions of organic compounds are not evaluated in this analysis as they are described in the original submittal.

SOLVAY MINERALS, INC. SOURCE PARAMETERS

For all pollutants and averaging periods, all existing and proposed sources of air pollution at the Solvay facility are considered in this modeling analysis. Sources of PM_{10} that are not located at the Solvay facility are also included in this analysis to determine PM_{10} increment consumption. These sources are described in the following section. All proposed and existing sources of PM_{10} that are located at the Solvay facility are increment-consuming and are therefore included in the PM_{10} increment analysis.

The proposed expansion to the Solvay facility includes the construction of the following new sources:

- AQD #76 - Primary crushing/screening
- AQD #79 - Transfer point
- AQD #80 - Calciner #4 ESP

- AQD #81 - Product dryer area baghouse
- AQD #82 - Dryer #6 ESP
- AQD #83 - Silo Top
- AQD #85 - Industrial Boiler

Additionally, this analysis considers operation of existing sources with proposed limitations to minimize air quality impacts. The proposed limitations are implemented in the analysis by either reducing the potential emission rate or limiting the allowed hours of operation. The proposed operating limitations are shown in Table 2.

Table 2. Proposed operating limitations for existing sources.

AQD Source ID #	Original PM_{10} Emission Rate (lb/hr)	Limited PM_{10} Emission Rate (lb/hr)	Limited to 12 hours of operation per day
10	0.60	0.30	Yes
11	---	---	Yes
14	---	---	Yes
15	6.80	4.34	---
18	10.00	5.00	---
19	10.00	5.00	---
26	1.10	0.55	---
44	0.90	0.16	Yes
50	1.39	0.70	---
51	4.80	2.40	---
53	0.90	0.45	---
64	0.15	0.08	---
65	0.06	0.03	---
72	0.11	0.055	---
73	1.20	0.90	---

Tables 1-1 through 1-4, in Attachment 1, provide the modeled operating parameters for all sources at the Solvay facility, including the sources related to the proposed expansion.

PM_{10} Increment-Consuming Source Parameters

All of Solvay's PM_{10} sources are increment-consuming and are therefore included in the PM_{10} increment analysis. Additionally, the Wyoming AQD has compiled an inventory of other sources in the Green River region that consume PM_{10} increment. The sources are located at neighboring plants permitted by FMC Corporation and General Chemical Corporation. Table 1-5, in Attachment 1, includes parameters for the PM_{10} increment-consuming sources selected by the AQD and considered in this analysis.

MODELING METHODOLOGY

The modeling analysis is performed using the Industrial Source Complex Short Term Model, Version 3 (ISCST3 - Dated 96113). ISCST3 is a U.S. EPA air dispersion model that calculates concentrations from point, area, volume, and open pit sources in flat and elevated terrain. ISCST3 is the preferred U.S. EPA model for evaluating impacts of sources with multiple emission points in areas of variable terrain.

For the dispersion modeling analysis, the following model options are used:

- Rural dispersion coefficients
- Final plume rise
- Stack-tip downwash
- Buoyancy-induced dispersion
- Regulatory default values for wind profile exponents
- Regulatory default values for vertical potential temperature gradients
- Elevated terrain
- Building downwash

As directed by the Wyoming AQD, this analysis does not provide any correction of ambient air quality standards to account for the base elevation of the modeled impacts.[2]

BUILDING DOWNWASH

All of the sources at the Solvay facility are evaluated in terms of their proximity to nearby structures. The purpose of this evaluation is to determine if the discharge from a stack may become caught in the turbulent wake of a building (or other structure) resulting in downwash of the plume. The EPA provides guidance for determining whether building downwash will occur in *Guideline for Determination of Good Engineering Practice Stack Height*.[3] The minimum stack height not subject to the effects of downwash is defined by the formula:

$$G=H+1.5L$$

where:
G = Minimum GEP stack height
H = Height of the structure
L = Lesser dimension (height or projected width of structure)

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[2] Telephone Correspondence: Ken Rairigh, Wyoming DEQ, Air Quality Division, with Brewster Birdsall, Trinity Consultants. October 30, 1997.

[3] U.S. EPA, Office of Air Quality Planning and Standards. *Guideline for Determination of Good Engineering Practice Stack Height (Technical Support Document for the Stack Height Regulations) (Revised)*. Research Triangle Park, North Carolina. EPA 450/4-80-023R. June, 1985.

This equation is applied to stacks located within 5L of the structure. Calculations for determining direction-specific downwash parameters are performed using *BREEZE AIR*™ BPIP, a software program based on the U.S. EPA BPIP program and provided by Trinity Consultants. The calculations performed by this program have been verified using the EPA test data set for building downwash calculations. Building dimensions incorporated in the downwash analysis are derived from plot plans supplied by Solvay. The *BREEZE AIR* BPIP output, included as Attachment 2, contains information on the downwash structures analyzed and the direction-specific building dimensions.

METEOROLOGICAL DATA

Meteorological data is based on pre-processed surface-air data from the airport at Rock Springs, Wyoming (Station Number 24027) and upper-air data from Lander, Wyoming (Station Number 24021) for the years 1987 through 1991. All meteorological data is provided in electronic format in Attachment 3, Modeling Input and Output Files.

RECEPTOR GRIDS

Ground-level concentrations of PM_{10}, CO, NO_x, and SO_2, are calculated using a fine receptor grid with 100-meter spacing superimposed on a receptor grid with 500-meter spacing. The fine grid extends at least one kilometer in each direction from location of the sources. The 500-meter grid extends approximately 5 km from the sources and covers an area of 100 square km.

For improved resolution of maximum PM_{10} impacts near the southwest property boundary, additional receptors are included on 25-meter intervals. Receptors in this region routinely reported elevated concentrations.

Terrain elevations for all receptors are determined from United States Geological Survey (USGS) digital elevation data (DEM). The elevation for each receptor is from digitized 7.5 minute USGS maps for the quadrangles of Little America, Bryan, Massacre Hill, and Antelope Knoll NE in Wyoming. The digitized files are available from Micropath Corporation.[4] For incorporation with the model, each receptor elevation is interpolated from the digitized map data using a utility provided in *BREEZE AIR SUITE (ISCST3) V1.24*, a software package developed by Trinity Consultants.

Figure 1 shows the receptor grids and terrain elevations represented in the model. Figure 2 shows the relative locations of Solvay's sources and structures considered in the downwash analysis.

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[4] Micropath Corporation. (2023 Montane Drive East, Golden, Colorado 80401-8099, Tel: (303) 526-5454, http://www.micropath.com).

Figure 1. Location of Receptor Grids and Terrain Elevations.

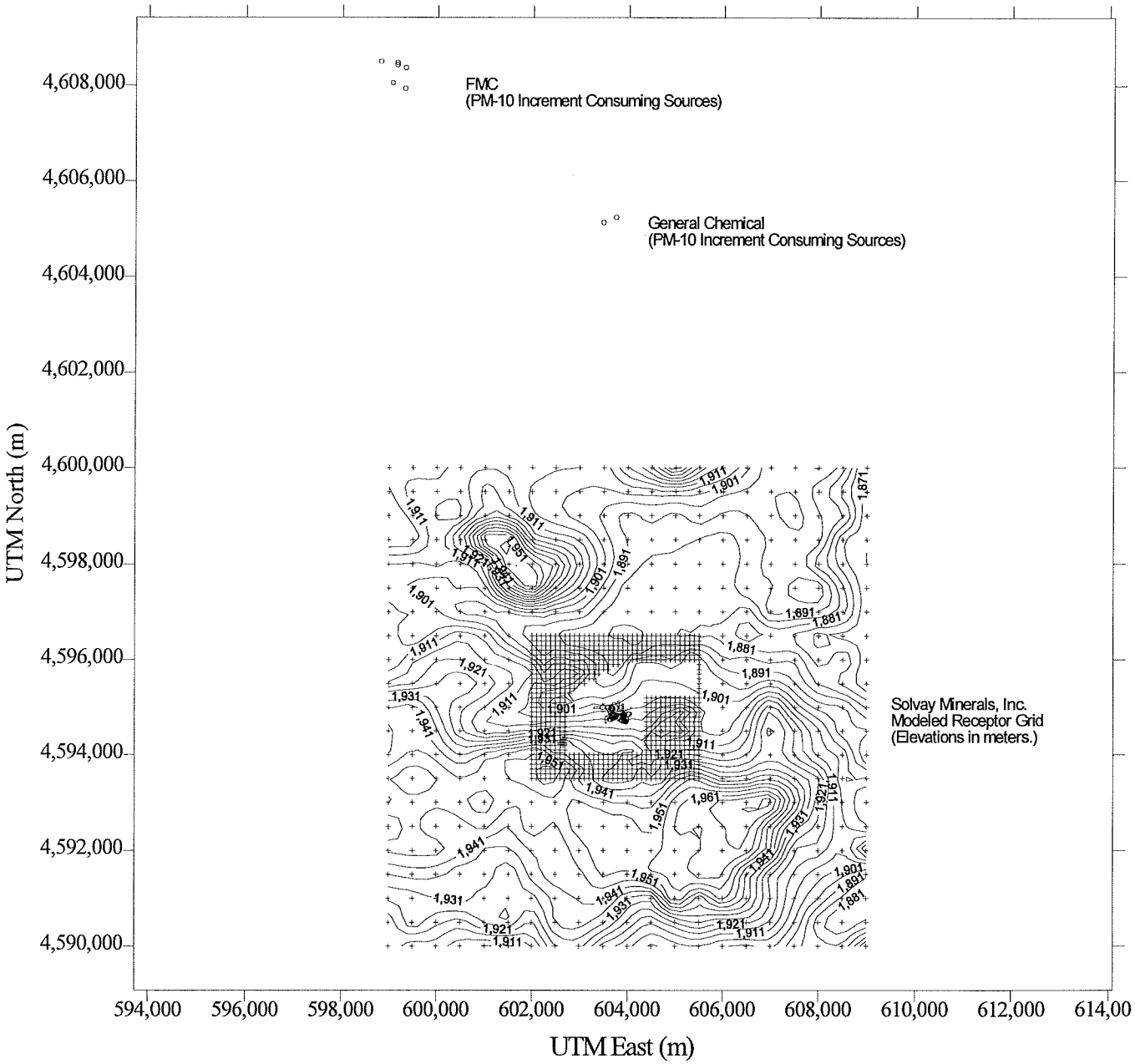
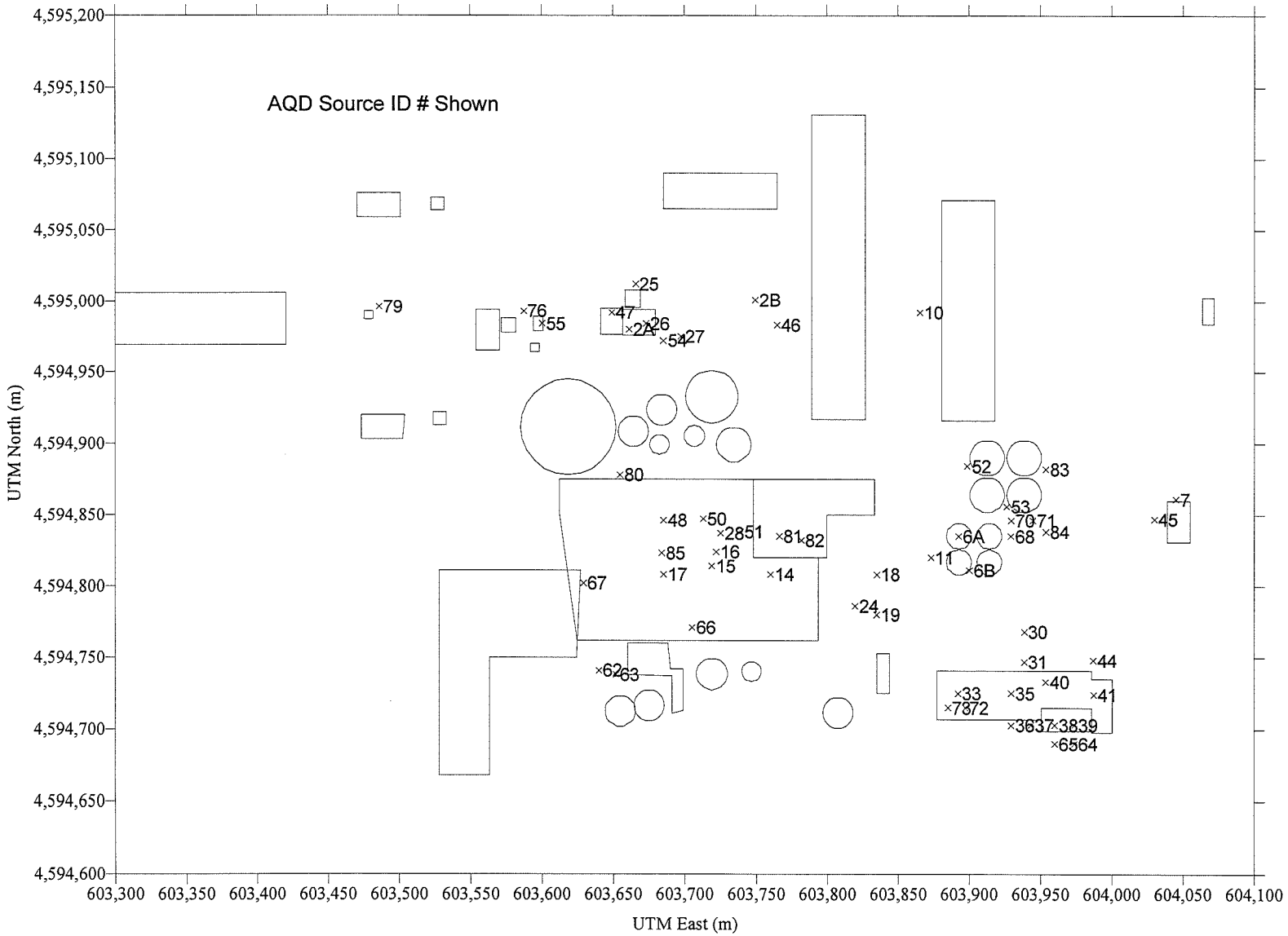


Figure 2. Location of Solvay Sources and Structures Considered in Downwash Analysis.



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PM_{10} PSD INCREMENT ANALYSIS RESULTS

The PM_{10} modeling analysis considers all proposed and existing sources of PM_{10} located at the Solvay facility and all other PM_{10} increment-consuming sources located at the neighboring FMC and General Chemical facilities. The combined impacts of these sources are summarized in this section.

The Class II PSD increments that are applicable in this analysis are 17 $\mu g/m^3$ for annual average PM_{10} impacts and 30 $\mu g/m^3$ for 24-hour average PM_{10} impacts. As defined in 40 CFR 51.166(c), the 24-hour PSD increment for PM_{10} allows one exceedance per year. Compliance with this standard can be demonstrated by observing the second highest 24-hour average concentration for any one receptor during any one year. These concentrations are reported below. Table 3 provides the highest second-highest 24-hour average PM_{10} concentration for each modeled year, and Table 4 provides the maximum annual average PM_{10} concentration for each modeled year.

Table 3. Highest second-highest 24-hour average PM_{10} concentration.

Model Year	Model Run Output File Name	UTM East (km)	UTM North (km)	Modeled Concentration ($\mu g/m^3$)	Class II PSD Increment ($\mu g/m^3$)
1987	09pf87d2.dat	602.700	4594.250	24.35	30.0
1988	09pf88d2.dat	604.400	4594.900	23.70	30.0
1989	09pf89d2.dat	602.700	4594.300	28.81	30.0
1990	09pf90d2.dat	602.700	4594.225	24.93	30.0
1991	09pf91d2.dat	604.400	4595.200	21.78	30.0

Table 4. Maximum annual average PM_{10} concentration.

Model Year	Model Run Output File Name	UTM East (km)	UTM North (km)	Modeled Concentration ($\mu g/m^3$)	Class II PSD Increment ($\mu g/m^3$)
1987	09pf87a.dat	604.400	4594.900	8.38	17.0
1988	09pf88a.dat	604.400	4594.900	8.94	17.0
1989	09pf89a.dat	604.400	4594.900	7.74	17.0
1990	09pf90a.dat	604.400	4595.000	6.94	17.0
1991	09pf91a.dat	604.400	4595.100	8.15	17.0

The results show that the combined impacts of all increment-consuming sources, including all sources of PM_{10} at the Solvay facility, are less than the Class II PSD increments. Modeled year 1989 reported the highest short-term concentrations. Figures 3 and 4 illustrate the second-highest 24-hour and annual average isopleths for PM_{10} impacts during modeled year 1989.

Figure 3. Modeled year 1989 - Second-highest 24-hour average PM_{10} impacts ($\mu g/m^3$).

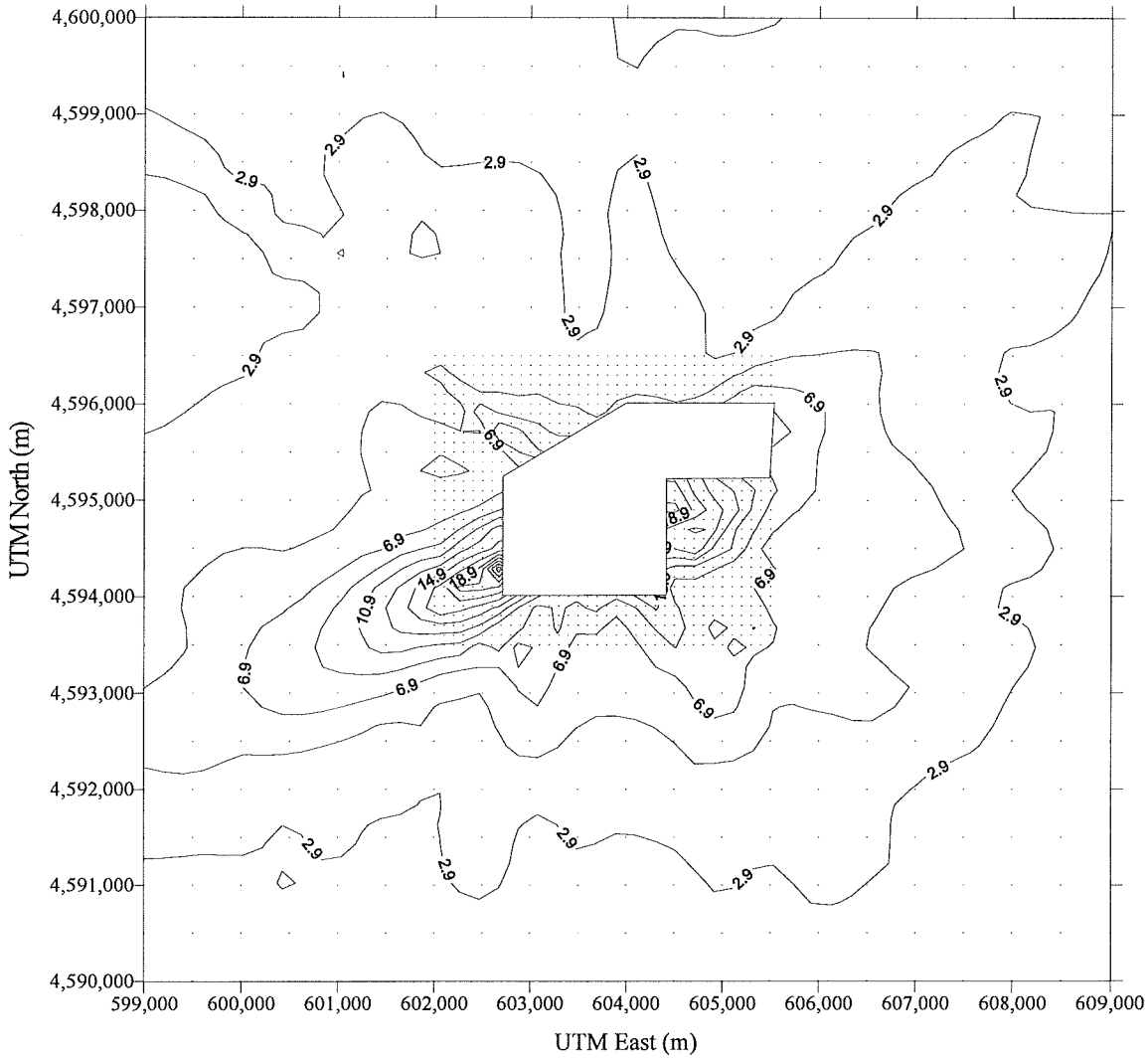
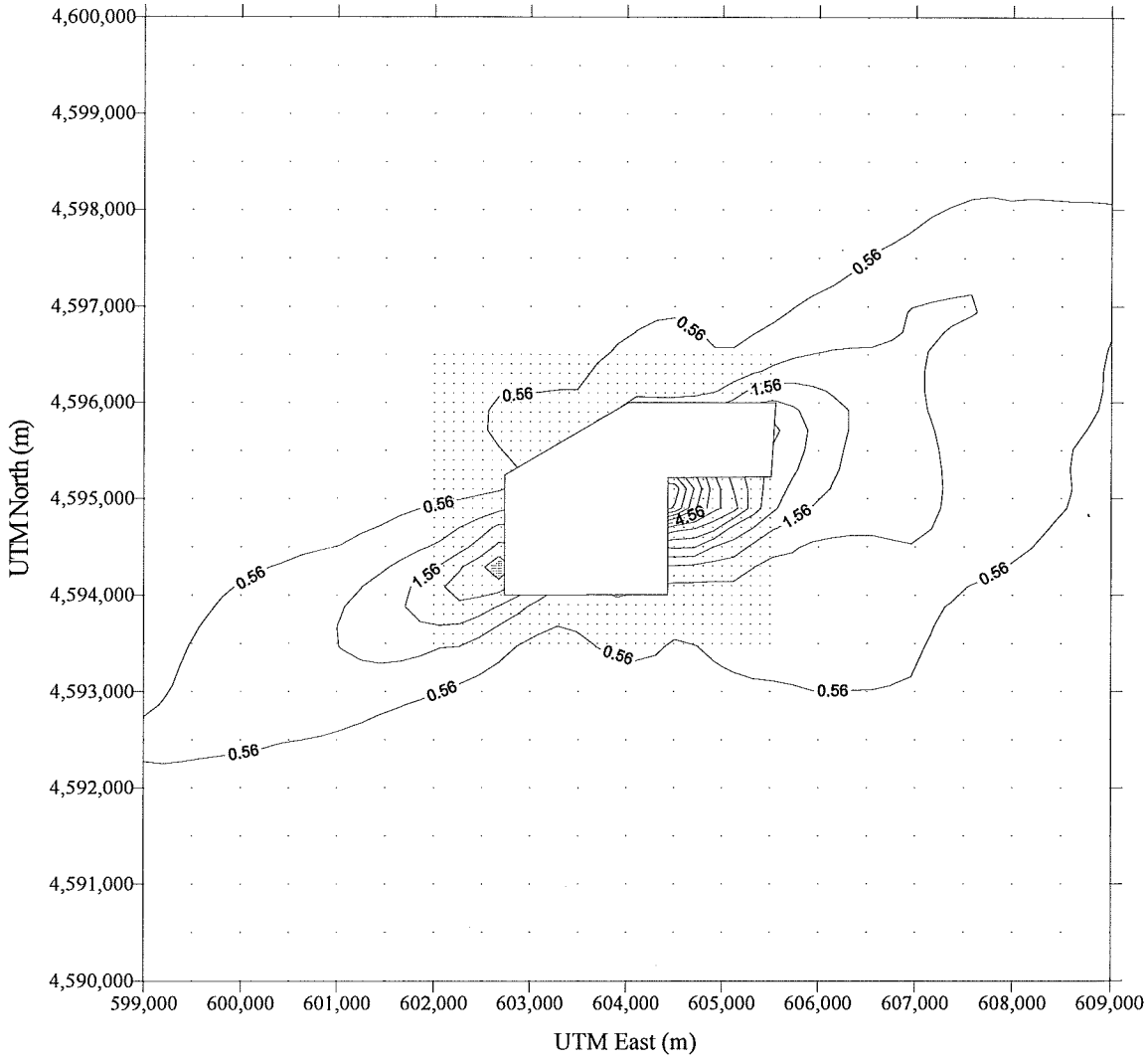


Figure 4. Modeled year 1989 - Annual average PM_{10} impacts ($\mu g/m^3$).



CRITERIA POLLUTANT NAAQS ANALYSIS

The analysis to determine compliance with the Wyoming Standards and NAAQS for criteria pollutants considers all proposed and existing sources of CO, NO_x, and SO_2 located at the Solvay facility. The combined impacts of these sources are summarized in this section with background concentrations where available.

Compliance with the Wyoming Standard for TSP and NAAQS for PM_{10} is demonstrated by demonstrating compliance with the PM_{10} PSD increment shown previously. For the purpose of this analysis, emissions of particulate matter from sources at the Solvay facility are considered to be equivalent to emissions of particulate matter less than ten microns. Therefore, modeled impacts of TSP would be equivalent to the modeled impacts of PM_{10} presented above. Background concentrations of PM_{10} for this region are provided in the impact assessment submitted with the original application. The highest 24-hour average background concentration is 57 $\mu g/m^3$, and the maximum annual average background concentration is 11.25 $\mu g/m^3$. These background concentrations are assumed to account for combined impacts of other facilities in the region as well as agricultural and mobile source impacts. Table 5 summarizes the PM_{10} modeled impact from above and includes the background concentrations for comparison with these standards.

Table 5. Summary of modeled PM_{10} concentrations and background impacts.

Averaging Period	Model Run Output File Name	Modeled Concentration ($\mu g/m^3$)	Background Concentration ($\mu g/m^3$)	Total Concentration ($\mu g/m^3$)	Applicable Standard ($\mu g/m^3$)
24-hour	09pf89d2.dat	28.81	57.00	85.81	150.0
Annual	09pf88a.dat	8.94	11.25	20.19	50.0

The off-property, ground-level concentrations of CO, NO_x, and SO_2 are presented for comparison against the applicable Wyoming Standards and NAAQS. The applicable standards are summarized in Table 1 of this letter. For short-term standards with averaging periods less than annual, the Wyoming Standards and NAAQS allow one exceedance per year. In this case of this analysis, compliance with these standards is demonstrated with the highest short-term average concentration observed for any one receptor during any year. As such, the highest short-term concentrations are reported in this analysis.

Table 6 provides the highest 1-hour average CO concentration for each modeled year, and Table 7 provides the highest 8-hr average CO concentration. Table 8 provides the maximum annual average NO_x concentration for each modeled year, and Tables 9 through 11 provide the

highest 3-hour average, highest 24-hour average, and maximum annual average concentrations for SO_2.

Table 6. Highest 1-hour average CO concentration.

Model Year	Model Run Output File Name	UTM East (km)	UTM North (km)	Modeled Concentration ($\mu g/m^3$)	Applicable Standard ($\mu g/m^3$)
1987	09cf871.dat	602.500	4593.700	4,057.57	40,000.0
1988	09cf881.dat	602.500	4593.700	4,132.58	40,000.0
1989	09cf891.dat	602.300	4593.700	3,769.32	40,000.0
1990	09cf901.dat	602.500	4593.700	3,752.32	40,000.0
1991	09cf911.dat	602.100	4593.700	3,701.19	40,000.0

Table 7. Highest 8-hour average CO concentration.

Model Year	Model Run Output File Name	UTM East (km)	UTM North (km)	Modeled Concentration ($\mu g/m^3$)	Applicable Standard ($\mu g/m^3$)
1987	09cf878.dat	602.700	4594.300	877.61	10,000.0
1988	09cf888.dat	602.300	4593.700	1,148.31	10,000.0
1989	09cf898.dat	602.000	4594.200	1,040.02	10,000.0
1990	09cf908.dat	602.300	4593.900	952.22	10,000.0
1991	09cf918.dat	602.300	4593.900	1,030.20	10,000.0

Table 8. Maximum annual average NO_X concentration.

Model Year	Model Run Output File Name	UTM East (km)	UTM North (km)	Total Concentration* ($\mu g/m^3$)	Applicable Standard ($\mu g/m^3$)
1987	09nf87a.dat	604.400	4594.900	50.07	100.0
1988	09nf88a.dat	604.400	4594.900	58.74	100.0
1989	09nf89a.dat	604.400	4595.100	53.64	100.0
1990	09nf90a.dat	604.400	4595.100	51.35	100.0
1991	09nf91a.dat	604.400	4595.100	56.00	100.0

* Total annual average concentration for NO_X includes modeled concentration plus 3 $\mu g/m^3$ background concentration reported in the impact assessment submitted with the original application.

Table 9. Highest 3-hour average SO_2 concentration.

Model Year	Model Run Output File Name	UTM East (km)	UTM North (km)	Modeled Concentration ($\mu g/m^3$)	Applicable Standard ($\mu g/m^3$)
1987	09sf873.dat	602.700	4594.300	254.32	1300.0
1988	09sf883.dat	602.500	4593.700	337.38	1300.0
1989	09sf893.dat	602.600	4594.300	446.21	1300.0
1990	09sf903.dat	603.000	4593.700	331.14	1300.0
1991	09sf913.dat	602.600	4593.900	288.10	1300.0

Table 10. Highest 24-hour average SO_2 concentration.

Model Year	Model Run Output File Name	UTM East (km)	UTM North (km)	Modeled Concentration ($\mu g/m^3$)	Applicable Standard ($\mu g/m^3$)
1987	09sf87d.dat	604.400	4594.900	67.53	260.0
1988	09sf88d.dat	604.400	4594.900	79.00	260.0
1989	09sf89d.dat	604.400	4594.900	73.22	260.0
1990	09sf90d.dat	604.500	4594.900	66.37	260.0
1991	09sf91d.dat	602.600	4593.900	62.02	260.0

Table 11. Maximum annual average SO_2 concentration.

Model Year	Model Run Output File Name	UTM East (km)	UTM North (km)	Modeled Concentration ($\mu g/m^3$)	Applicable Standard ($\mu g/m^3$)
1987	09sf87a.dat	604.400	4594.900	12.85	60.0
1988	09sf88a.dat	604.400	4594.900	15.11	60.0
1989	09sf89a.dat	604.400	4595.100	13.78	60.0
1990	09sf90a.dat	604.400	4595.100	13.13	60.0
1991	09sf91a.dat	604.400	4595.100	14.46	60.0

CONCLUSIONS

This analysis demonstrates that the maximum modeled impacts due to existing and proposed sources at the Solvay facility are less than each applicable standard. Attachment 3 contains an electronic version of the modeling input and output files.

If you have any questions please call me at (303) 607-9600.

Sincerely,

TRINITY CONSULTANTS INCORPORATED

Brewster Birdsall
Project Supervisor

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Attachment 1 - Modeled Source Parameters
Attachment 2 - BPIP Output
Attachment 3 - Modeling Input and Output Files

ATTACHMENT 1 - MODELED SOURCE PARAMETERS

Table 1-1. Solvay Minerals PM_{10} Source Parameters.
Table 1-2. Solvay Minerals CO Source Parameters.
Table 1-3. Solvay Minerals NO_x Source Parameters.
Table 1-4. Solvay Minerals SO_2 Source Parameters.
Table 1-5. PM_{10} Increment-Consuming Source Parameters.

TABLE 1-1. Solvay Minerals PM_{10} Source Parameters.

AQD#	UTM(E) (m)	UTM(N) (m)	Base Elevation (m)	Release Ht (m)	Release Temp (K)	Release Vel (m/s)	Stack Dia (m)	Emission Rate (g/s)	Emission Rate (lb/hr)
2A	603,661	4,594,980	1,900	7.01	293.15	15.85	1.06	2.02E-01	1.603
6A	603,893	4,594,835	1,903	40.54	309.00	24.99	0.64	3.80E-02	0.302
6B	603,900	4,594,811	1,903	4.72	297.00	10.06	0.67	6.40E-02	0.508
7	604,045	4,594,861	1,906	24.99	293.00	19.51	0.75	1.51E-01	1.198
10	603,865	4,594,992	1,900	4.05	293.00	5.49	0.60	3.78E-02	0.300
11	603,873	4,594,820	1,901	10.76	293.00	6.40	0.55	2.65E-02	0.210
14	603,760	4,594,808	1,902	38.10	293.00	17.37	0.43	4.70E-02	0.373
15	603,719	4,594,814	1,902	54.86	347.00	14.94	1.83	5.47E-01	4.340
16	603,722	4,594,825	1,902	38.40	369.00	12.80	1.07	1.13E-01	0.897
17	603,686	4,594,808	1,902	55.02	464.00	13.41	3.66	2.81E+00	22.302
18	603,835	4,594,808	1,902	55.02	325.00	17.68	2.21	6.30E-01	5.000
19	603,835	4,594,780	1,902	55.02	322.00	18.29	2.21	6.30E-01	5.000
24	603,820	4,594,786	1,902	7.62	301.50	12.50	0.30	3.80E-02	0.302
25	603,666	4,595,012	1,900	23.16	293.00	14.63	0.73	1.26E-01	1.000
26	603,673	4,594,985	1,900	20.42	311.00	17.68	0.73	6.93E-02	0.550
27	603,698	4,594,975	1,900	18.29	293.00	18.90	0.48	6.30E-02	0.500
28	603,725	4,594,837	1,902	42.67	347.00	12.19	1.22	3.65E-01	2.897
30	603,939	4,594,768	1,902	26.82	293.00	17.98	0.20	2.50E-02	0.198
31	603,939	4,594,747	1,902	26.82	293.00	17.98	0.20	2.50E-02	0.198
35	603,929	4,594,725	1,905	31.39	327.00	14.63	0.70	1.76E-01	1.397
36	603,929	4,594,703	1,905	18.29	338.00	25.88	0.15	1.30E-02	0.103
37	603,943	4,594,703	1,905	18.29	338.00	25.88	0.15	1.30E-02	0.103
38	603,960	4,594,703	1,905	18.29	338.00	25.88	0.15	1.30E-02	0.103
39	603,974	4,594,703	1,905	18.29	338.00	25.88	0.15	1.30E-02	0.103
41	603,987	4,594,724	1,905	21.34	338.00	21.34	0.30	2.40E-02	0.190
44	603,987	4,594,748	1,905	19.20	293.00	17.07	0.30	2.00E-02	0.159
45	604,030	4,594,847	1,906	5.43	293.00	8.84	0.27	2.50E-02	0.198
46	603,765	4,594,983	1,900	3.81	293.00	14.02	0.67	8.90E-02	0.706
48	603,686	4,594,846	1,902	54.86	450.00	9.75	3.20	1.17E+00	9.302
50	603,713	4,594,847	1,902	54.86	366.00	8.23	1.37	8.82E-02	0.700
51	603,739	4,594,838	1,902	54.86	422.00	10.06	2.44	3.02E-01	2.400
52	603,899	4,594,884	1,903	42.98	293.00	15.24	0.46	6.30E-02	0.500
53	603,926	4,594,857	1,903	9.14	293.00	10.97	0.85	5.67E-02	0.450
54	603,686	4,594,972	1,900	19.57	293.00	24.08	0.18	2.40E-02	0.190
55	603,600	4,594,985	1,900	19.51	293.00	15.24	0.40	5.00E-02	0.397
62	603,640	4,594,741	1,900	27.74	293.00	25.91	0.15	1.60E-02	0.127
63	603,652	4,594,738	1,900	17.68	293.00	31.09	0.15	2.10E-02	0.167
64	603,974	4,594,690	1,905	4.57	293.00	29.26	0.15	1.01E-02	0.080
65	603,960	4,594,690	1,905	10.67	293.00	4.57	0.23	3.78E-03	0.030
66	603,705	4,594,771	1,902	38.10	293.00	22.86	0.30	7.30E-02	0.579
67	603,629	4,594,802	1,902	38.10	311.00	10.06	0.46	5.90E-02	0.468
68	603,929	4,594,835	1,905	24.99	293.00	23.47	0.37	4.50E-02	0.357
70	603,929	4,594,846	1,905	24.99	293.00	14.94	0.40	3.40E-02	0.270
71	603,945	4,594,846	1,905	24.99	293.00	14.94	0.40	3.40E-02	0.270

TABLE 1-1. Solvay Minerals PM_{10} Source Parameters.

AQD#	UTM(E) (m)	UTM(N) (m)	Base Elevation (m)	Release Ht (m)	Release Temp (K)	Release Vel (m/s)	Stack Dia (m)	Emission Rate (g/s)	Emission Rate (lb/hr)
72	603,897	4,594,715	1,905	18.49	366.00	16.15	0.20	6.93E-03	0.055
73	603,885	4,594,715	1,905	28.96	305.00	17.07	0.61	1.13E-01	0.900
76	603,587	4,594,993	1,900	33.53	288.71	17.22	1.12	3.09E-01	2.450
79	603,486	4,594,996	1,900	18.29	288.71	18.26	0.63	1.06E-01	0.840
80	603,655	4,594,878	1,902	54.86	424.82	15.49	3.20	1.54E+00	12.250
81	603,766	4,594,835	1,902	54.86	394.26	23.29	0.51	6.30E-02	0.500
82	603,782	4,594,832	1,902	54.86	420.93	13.15	2.44	4.35E-01	3.450
83	603,954	4,594,882	1,903	39.62	366.48	17.47	0.51	5.17E-02	0.410
85	603,684	4,594,823	1,902	42.67	436.00	15.24	0.91	6.05E-02	0.480

TABLE 1-2. Solvay Minerals CO Source Parameters.

AQD#	UTM(E) (m)	UTM(N) (m)	Base Elevation (m)	Release Ht (m)	Release Temp (K)	Release Vel (m/s)	Stack Dia (m)	Emission Rate (g/s)	Emission Rate (lb/hr)
17	603,686	4,594,808	1,902	55.02	464.00	13.41	3.66	1.92E+02	1524.000
18	603,835	4,594,808	1,902	55.02	325.00	17.68	2.21	2.21E+00	17.500
19	603,835	4,594,780	1,902	55.02	322.00	18.29	2.21	2.21E+00	17.500
26	603,673	4,594,985	1,900	20.42	311.00	17.68	0.73	9.00E-03	0.071
48	603,686	4,594,846	1,902	54.86	450.00	9.75	3.20	9.60E+01	762.000
51	603,739	4,594,838	1,902	54.86	422.00	10.06	2.44	3.02E-01	2.397
80	603,655	4,594,878	1,902	54.86	424.82	15.49	3.20	1.32E+02	1048.000
82	603,782	4,594,832	1,902	54.86	420.93	13.15	2.44	1.76E+00	14.000
85	603,684	4,594,823	1,902	42.67	436.00	15.24	0.91	1.14E+00	9.008

AQD#	UTM(E) (m)	UTM(N) (m)	Base Elevation (m)	Release Ht (m)	Initial Lateral Dim (m)	Initial Vertical Dim (m)	Emission Rate (g/s)	Emission Rate (lb/hr)
MV	603,297	4,594,902	1,899	2.44	17.72	2.27	4.80E-01	3.810

TABLE 1-3. Solvay Minerals NOx Source Parameters.

AQD#	UTM(E) (m)	UTM(N) (m)	Base Elevation (m)	Release Ht (m)	Release Temp (K)	Release Vel (m/s)	Stack Dia (m)	Emission Rate (g/s)	Emission Rate (lb/hr)
15	603,719	4,594,814	1,902	54.86	347.00	14.94	1.83	1.51E-01	1.198
17	603,686	4,594,808	1,902	55.02	464.00	13.41	3.66	3.78E+00	30.000
18	603,835	4,594,808	1,902	55.02	325.00	17.68	2.21	3.09E+01	245.000
19	603,835	4,594,780	1,902	55.02	322.00	18.29	2.21	3.09E+01	245.000
26	603,673	4,594,985	1,900	20.42	311.00	17.68	0.73	6.00E-03	0.048
33	603,892	4,594,725	1,905	30.48	339.00	10.67	0.61	1.89E-01	1.500
48	603,686	4,594,846	1,902	54.86	450.00	9.75	3.20	1.89E+00	15.000
51	603,739	4,594,838	1,902	54.86	422.00	10.06	2.44	2.27E+00	18.000
73	603,885	4,594,715	1,905	28.96	305.00	17.07	0.61	1.90E-02	0.151
80	603,655	4,594,878	1,902	54.86	424.82	15.49	3.20	2.52E+00	20.000
82	603,782	4,594,832	1,902	54.86	420.93	13.15	2.44	3.78E+00	30.000
85	603,684	4,594,823	1,902	42.67	436.00	15.24	0.91	4.79E-01	3.802

TABLE 1-4. Solvay Minerals SO_2 Source Parameters.

AQD#	UTM(E) (m)	UTM(N) (m)	Base Elevation (m)	Release Ht (m)	Release Temp (K)	Release Vel (m/s)	Stack Dia (m)	Emission Rate (g/s)	Emission Rate (lb/hr)
18	603,835	4,594,808	1,902	55.02	325.00	17.68	2.21	8.82E+00	70.000
19	603,835	4,594,780	1,902	55.02	322.00	18.29	2.21	8.82E+00	70.000
33	603,890	4,594,724	1,905	30.48	339.00	10.67	0.61	5.00E-02	0.397
73	603,885	4,594,715	1,905	28.96	305.00	17.07	0.61	9.70E-02	0.770
85	603,684	4,594,823	1,902	42.67	436.00	15.24	0.91	7.60E-03	0.060

(PM-10 INCREMENT CONSUMPTION WORKSHEET)

TABLE 1-5. PM_{10} Increment-Consuming Source Parameters.

AQD#	UTM(E) (m)	UTM(N) (m)	Base Elevation (m)	Release Ht (m)	Release Ht (ft)	Release Temp (K)	Release Temp (F)	Release Vel (m/s)	Release Vel (ft/min)	Stack Vol Flow (acfm)	Stack Dia (m)	Stack Dia (ft)	Emission Rate (g/s)	Emission Rate (lb/hr)
FMC														
BC-1	599,153	4,608,435	1,896	28.35	93.00	350.37	171.00	18.63	3,666.9	18,000	0.76	2.50	3.78E-01	3.000
BC-2	599,153	4,608,484	1,896	27.74	91.00	312.59	103.00	10.35	2,037.2	10,000	0.76	2.50	2.14E-01	1.700
Mono-11	599,323	4,607,941	1,896	7.62	25.00	290.93	64.00	20.70	4,074.4	20,000	0.76	2.50	3.78E-01	3.000
Mono-12	599,331	4,608,374	1,896	18.29	60.00	293.71	69.00	17.25	3,395.3	24,000	0.91	3.00	2.17E-01	1.722
MW-3	599,058	4,608,059	1,896	39.62	130.00	338.71	150.00	18.38	3,617.9	120,052	1.98	6.50	3.43E-02	0.272
RA-29	598,812	4,608,511	1,896	24.38	80.00	355.37	180.00	29.51	5,809.2	73,000	1.22	4.00	4.46E-02	0.354
General Chemical														
FD-617	603,742	4,605,237	1,902	1.22	4.00	285.93	55.00	26.73	5,261.3	1,800	0.20	0.66	2.90E-02	0.230
GR-3-Q	603,476	4,605,127	1,902	35.96	118.00	341.48	155.00	13.44	2,645.5	18,700	0.91	3.00	1.89E-01	1.500

SOLVAY2016_1.4_000772

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                    BUILDING PROFILE INPUT PROGRAM (BPIP)
                    Dated  95086
                    BREEZE WAKE/BPIP-32
                    IBM-PC VERSION (1.22)
                    (C) COPYRIGHT 1994, 1995 TRINITY CONSULTANTS, INC.

RUN INFORMATION
****************************************
Building Data File:
Source Info. File:
BPIP Run File:       U:\P\1997\9781-032\SOLVAY11.BPI
Output List File:    U:\P\1997\9781-032\SOLVAY11.BPO
Output Wake File:    U:\P\1997\9781-032\SOLVAY11.WAK
Output EPA  File:    U:\P\1997\9781-032\SOLVAY11.EPA


Run began on:        10/31/1997 at 13:18:55
****************************************


Description - Solvay11

Plant North:     0.00

Calculations for the ISCST2 model with 36 radial directions.

Input Buildings:    43

------ Building ------  Tier  Tier  Tier   # of        Corner coordinates
ID          #    Elev.   #    Ref.   hgt   corners        X            Y
                  (m)                                     (m)          (m)

PROCAT1     1    0.00    1     1   35.05    9
                                                     603612.400   4594850.000
                                                     603612.400   4594875.000
                                                     603833.400   4594875.000
                                                     603833.400   4594850.000
                                                     603799.800   4594850.000
                                                     603799.800   4594820.000
                                                     603793.700   4594820.000
                                                     603793.700   4594762.000
                                                     603624.600   4594762.000
                         2     2   36.58    6
                                                     603748.000   4594875.000
                                                     603833.400   4594875.000
                                                     603833.400   4594850.000
                                                     603799.800   4594850.000
                                                     603799.800   4594820.000
                                                     603748.000   4594820.000

------ Building ------  Tier  Tier  Tier   # of        Corner coordinates
ID          #    Elev.   #    Ref.   hgt   corners        X            Y
                  (m)                                     (m)          (m)

PRODLS      2    0.00    1     7   32.31    4
                                                     604039.100   4594860.000
                                                     604055.000   4594860.000
                                                     604055.000   4594831.000
                                                     604039.100   4594831.000

------ Building ------  Tier  Tier  Tier   # of        Corner coordinates
ID          #    Elev.   #    Ref.   hgt   corners        X            Y
                  (m)                                     (m)          (m)

PRISCR      3    0.00    1    13   32.00    4
                                                     603554.000   4594994.000
                                                     603570.400   4594994.000
                                                     603570.400   4594965.000
                                                     603554.000   4594965.000

------ Building ------  Tier  Tier  Tier   # of        Corner coordinates
```

							604071.700	4594984.000
							604063.500	4594984.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
TTOW2	17	0.00	1	97	12.19	4		
							603592.200	4594970.000
							603598.300	4594970.000
							603598.300	4594964.000
							603592.200	4594964.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
PLANWA	18	0.00	1	103	7.62	4		
							603685.500	4595090.000
							603764.800	4595090.000
							603764.800	4595065.000
							603685.500	4595065.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
Psilo1	19	0.00	1	109	43.89	24		
							603892.800	4594826.000
							603895.100	4594825.000
							603897.200	4594825.000
							603899.100	4594823.000
							603900.500	4594821.000
							603901.300	4594819.000
							603901.600	4594817.000
							603901.300	4594815.000
							603900.500	4594812.000
							603899.100	4594811.000
							603897.200	4594809.000
							603895.100	4594808.000
							603892.800	4594808.000
							603890.500	4594808.000
							603888.400	4594809.000
							603886.600	4594811.000
							603885.100	4594812.000
							603884.300	4594815.000
							603884.000	4594817.000
							603884.300	4594819.000
							603885.100	4594821.000
							603886.600	4594823.000
							603888.400	4594825.000
							603890.500	4594825.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
Psilo2	20	0.00	1	115	43.89	24		
							603892.800	4594844.000
							603895.100	4594844.000
							603897.200	4594843.000
							603899.100	4594841.000
							603900.500	4594840.000
							603901.300	4594837.000
							603901.600	4594835.000
							603901.300	4594833.000
							603900.500	4594831.000
							603899.100	4594829.000
							603897.200	4594827.000
							603895.100	4594827.000
							603892.800	4594826.000
							603890.500	4594827.000

							603888.400	4594827.000
							603886.600	4594829.000
							603885.100	4594831.000
							603884.300	4594833.000
							603884.000	4594835.000
							603884.300	4594837.000
							603885.100	4594840.000
							603886.600	4594841.000
							603888.400	4594843.000
							603890.500	4594844.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Psilo3	21	0.00	1	121	43.89	24		
							603914.100	4594844.000
							603916.400	4594844.000
							603918.600	4594843.000
							603920.400	4594841.000
							603921.800	4594840.000
							603922.700	4594837.000
							603923.000	4594835.000
							603922.700	4594833.000
							603921.800	4594831.000
							603920.400	4594829.000
							603918.600	4594827.000
							603916.400	4594827.000
							603914.100	4594826.000
							603911.900	4594827.000
							603909.700	4594827.000
							603907.900	4594829.000
							603906.500	4594831.000
							603905.600	4594833.000
							603905.300	4594835.000
							603905.600	4594837.000
							603906.500	4594840.000
							603907.900	4594841.000
							603909.700	4594843.000
							603911.900	4594844.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Psilo4	22	0.00	1	127	43.89	24		
							603914.100	4594826.000
							603916.400	4594825.000
							603918.600	4594824.000
							603920.400	4594823.000
							603921.800	4594821.000
							603922.700	4594819.000
							603923.000	4594817.000
							603922.700	4594815.000
							603921.800	4594812.000
							603920.400	4594811.000
							603918.600	4594809.000
							603916.400	4594808.000
							603914.100	4594808.000
							603911.900	4594808.000
							603909.700	4594809.000
							603907.900	4594811.000
							603906.500	4594812.000
							603905.600	4594815.000
							603905.300	4594817.000
							603905.600	4594819.000
							603906.500	4594821.000
							603907.900	4594823.000
							603909.700	4594824.000
							603911.900	4594825.000

------ Building ------	Tier	Tier	Tier	# of	Corner coordinates

ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
PSTsilo	23	0.00	1	133	33.53	24		
							603912.600	4594876.000
							603915.800	4594876.000
							603918.700	4594875.000
							603921.200	4594873.000
							603923.200	4594870.000
							603924.400	4594867.000
							603924.800	4594864.000
							603924.400	4594861.000
							603923.200	4594858.000
							603921.200	4594855.000
							603918.700	4594854.000
							603915.800	4594852.000
							603912.600	4594852.000
							603909.500	4594852.000
							603906.500	4594854.000
							603904.000	4594855.000
							603902.100	4594858.000
							603900.800	4594861.000
							603900.400	4594864.000
							603900.800	4594867.000
							603902.100	4594870.000
							603904.000	4594873.000
							603906.500	4594875.000
							603909.500	4594876.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
PSTsilo	24	0.00	1	139	33.53	24		
							603912.600	4594902.000
							603915.800	4594902.000
							603918.700	4594901.000
							603921.200	4594899.000
							603923.200	4594896.000
							603924.400	4594893.000
							603924.800	4594890.000
							603924.400	4594887.000
							603923.200	4594884.000
							603921.200	4594881.000
							603918.700	4594879.000
							603915.800	4594878.000
							603912.600	4594878.000
							603909.500	4594878.000
							603906.500	4594879.000
							603904.000	4594881.000
							603902.100	4594884.000
							603900.800	4594887.000
							603900.400	4594890.000
							603900.800	4594893.000
							603902.100	4594896.000
							603904.000	4594899.000
							603906.500	4594901.000
							603909.500	4594902.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
PSTsilo	25	0.00	1	145	33.53	24		
							603938.500	4594902.000
							603941.700	4594902.000
							603944.600	4594901.000
							603947.100	4594899.000
							603949.100	4594896.000
							603950.300	4594893.000
							603950.700	4594890.000
							603950.300	4594887.000

							603949.100	4594884.000
							603947.100	4594881.000
							603944.600	4594879.000
							603941.700	4594878.000
							603938.500	4594878.000
							603935.400	4594878.000
							603932.400	4594879.000
							603929.900	4594881.000
							603928.000	4594884.000
							603926.800	4594887.000
							603926.300	4594890.000
							603926.800	4594893.000
							603928.000	4594896.000
							603929.900	4594899.000
							603932.400	4594901.000
							603935.400	4594902.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
PSTsilo	26	0.00	1	151	33.53	24		
							603938.500	4594876.000
							603941.700	4594876.000
							603944.600	4594875.000
							603947.100	4594873.000
							603949.100	4594870.000
							603950.300	4594867.000
							603950.700	4594864.000
							603950.300	4594861.000
							603949.100	4594858.000
							603947.100	4594855.000
							603944.600	4594854.000
							603941.700	4594852.000
							603938.500	4594852.000
							603935.400	4594852.000
							603932.400	4594854.000
							603929.900	4594855.000
							603928.000	4594858.000
							603926.800	4594861.000
							603926.300	4594864.000
							603926.800	4594867.000
							603928.000	4594870.000
							603929.900	4594873.000
							603932.400	4594875.000
							603935.400	4594876.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
PLcontk	27	0.00	1	157	16.76	24		
							603734.300	4594911.000
							603737.500	4594911.000
							603740.400	4594910.000
							603742.900	4594908.000
							603744.900	4594905.000
							603746.100	4594902.000
							603746.500	4594899.000
							603746.100	4594896.000
							603744.900	4594893.000
							603742.900	4594891.000
							603740.400	4594889.000
							603737.500	4594887.000
							603734.300	4594887.000
							603731.100	4594887.000
							603728.200	4594889.000
							603725.700	4594891.000
							603723.700	4594893.000
							603722.500	4594896.000
							603722.100	4594899.000
							603722.500	4594902.000

							603723.700	4594905.000
							603725.700	4594908.000
							603728.200	4594910.000
							603731.200	4594911.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ta-126	28	0.00	1	163	13.72	24		
							603682.500	4594906.000
							603684.300	4594906.000
							603685.900	4594905.000
							603687.300	4594904.000
							603688.400	4594903.000
							603689.100	4594901.000
							603689.400	4594899.000
							603689.100	4594897.000
							603688.400	4594896.000
							603687.300	4594894.000
							603685.900	4594893.000
							603684.300	4594893.000
							603682.500	4594892.000
							603680.700	4594893.000
							603679.100	4594893.000
							603677.600	4594894.000
							603676.600	4594896.000
							603675.900	4594897.000
							603675.600	4594899.000
							603675.900	4594901.000
							603676.600	4594903.000
							603677.600	4594904.000
							603679.100	4594905.000
							603680.700	4594906.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ta-146	29	0.00	1	169	11.28	24		
							603664.200	4594919.000
							603667.000	4594919.000
							603669.500	4594918.000
							603671.700	4594916.000
							603673.400	4594914.000
							603674.500	4594911.000
							603674.900	4594908.000
							603674.500	4594906.000
							603673.400	4594903.000
							603671.700	4594901.000
							603669.500	4594899.000
							603667.000	4594898.000
							603664.200	4594898.000
							603661.400	4594898.000
							603658.900	4594899.000
							603656.700	4594901.000
							603655.000	4594903.000
							603653.900	4594906.000
							603653.500	4594908.000
							603653.900	4594911.000
							603655.000	4594914.000
							603656.700	4594916.000
							603658.900	4594918.000
							603661.400	4594919.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ta-113	30	0.00	1	175	11.28	24		
							603706.900	4594913.000
							603708.800	4594912.000

603710.500	4594912.000
603712.100	4594910.000
603713.200	4594909.000
603713.900	4594907.000
603714.200	4594905.000
603713.900	4594903.000
603713.200	4594902.000
603712.100	4594900.000
603710.500	4594899.000
603708.800	4594898.000
603706.900	4594898.000
603705.000	4594898.000
603703.200	4594899.000
603701.700	4594900.000
603700.500	4594902.000
603699.800	4594903.000
603699.600	4594905.000
603699.800	4594907.000
603700.500	4594909.000
603701.700	4594910.000
603703.200	4594912.000
603705.000	4594912.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ta-136	31	0.00	1	181	11.28	24		
							603684.000	4594934.000
							603686.800	4594934.000
							603689.400	4594933.000
							603691.600	4594931.000
							603693.300	4594929.000
							603694.300	4594926.000
							603694.700	4594924.000
							603694.300	4594921.000
							603693.300	4594918.000
							603691.600	4594916.000
							603689.300	4594914.000
							603686.800	4594913.000
							603684.000	4594913.000
							603681.300	4594913.000
							603678.700	4594914.000
							603676.500	4594916.000
							603674.800	4594918.000
							603673.700	4594921.000
							603673.300	4594924.000
							603673.700	4594926.000
							603674.800	4594929.000
							603676.500	4594931.000
							603678.700	4594933.000
							603681.300	4594934.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ta-75	32	0.00	1	187	11.28	24		
							603807.500	4594722.000
							603810.200	4594722.000
							603812.800	4594721.000
							603815.000	4594719.000
							603816.700	4594717.000
							603817.800	4594714.000
							603818.100	4594712.000
							603817.800	4594709.000
							603816.700	4594706.000
							603815.000	4594704.000
							603812.800	4594702.000
							603810.200	4594701.000
							603807.500	4594701.000
							603804.700	4594701.000

							603802.100	4594702.000
							603799.900	4594704.000
							603798.200	4594706.000
							603797.200	4594709.000
							603796.800	4594712.000
							603797.200	4594714.000
							603798.200	4594717.000
							603799.900	4594719.000
							603802.100	4594721.000
							603804.700	4594722.000
------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
Ta-139	33	0.00	1	193	7.92	24		
							603618.500	4594945.000
							603627.200	4594944.000
							603635.300	4594940.000
							603642.200	4594935.000
							603647.500	4594928.000
							603650.900	4594920.000
							603652.000	4594911.000
							603650.900	4594903.000
							603647.500	4594895.000
							603642.200	4594888.000
							603635.200	4594882.000
							603627.200	4594879.000
							603618.500	4594878.000

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                    BUILDING PROFILE INPUT PROGRAM (BPIP)
                    Dated  95086
                    BREEZE WAKE/BPIP-32
                    IBM-PC VERSION (1.22)
                    (C) COPYRIGHT 1994, 1995 TRINITY CONSULTANTS, INC.

RUN INFORMATION
*****************************************
Building Data File:
Source Info. File:
BPIP Run File:       U:\P\1997\9781-032\SOLVAY11.BPI
Output List File:    U:\P\1997\9781-032\SOLVAY11.BPO
Output Wake File:    U:\P\1997\9781-032\SOLVAY11.WAK
Output EPA  File:    U:\P\1997\9781-032\SOLVAY11.EPA


Run began on:        10/31/1997 at 13:18:55
*****************************************


Description - Solvay11

Plant North:     0.00

Calculations for the ISCST2 model with 36 radial directions.

Input Buildings:    43

------ Building ------  Tier  Tier  Tier   # of        Corner coordinates
ID          #    Elev.   #    Ref.   hgt   corners        X            Y
                  (m)                                     (m)          (m)

PROCAT1     1    0.00    1     1   35.05    9
                                                     603612.400   4594850.000
                                                     603612.400   4594875.000
                                                     603833.400   4594875.000
                                                     603833.400   4594850.000
                                                     603799.800   4594850.000
                                                     603799.800   4594820.000
                                                     603793.700   4594820.000
                                                     603793.700   4594762.000
                                                     603624.600   4594762.000
                         2     2   36.58    6
                                                     603748.000   4594875.000
                                                     603833.400   4594875.000
                                                     603833.400   4594850.000
                                                     603799.800   4594850.000
                                                     603799.800   4594820.000
                                                     603748.000   4594820.000

------ Building ------  Tier  Tier  Tier   # of        Corner coordinates
ID          #    Elev.   #    Ref.   hgt   corners        X            Y
                  (m)                                     (m)          (m)

PRODLS      2    0.00    1     7   32.31    4
                                                     604039.100   4594860.000
                                                     604055.000   4594860.000
                                                     604055.000   4594831.000
                                                     604039.100   4594831.000

------ Building ------  Tier  Tier  Tier   # of        Corner coordinates
ID          #    Elev.   #    Ref.   hgt   corners        X            Y
                  (m)                                     (m)          (m)

PRISCR      3    0.00    1    13   32.00    4
                                                     603554.000   4594994.000
                                                     603570.400   4594994.000
                                                     603570.400   4594965.000
                                                     603554.000   4594965.000

------ Building ------  Tier  Tier  Tier   # of        Corner coordinates
```

ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
CAUST1	4	0.00	1	19	17.68	10		
							603877.600	4594741.000
							603985.800	4594741.000
							603985.800	4594735.000
							604000.400	4594735.000
							604000.400	4594698.000
							603985.800	4594698.000
							603985.800	4594699.000
							603950.700	4594699.000
							603950.700	4594707.000
							603877.600	4594707.000
			2	20	28.35	11		
							603877.600	4594741.000
							603985.800	4594741.000
							603985.800	4594735.000
							604000.400	4594735.000
							604000.400	4594698.000
							603985.800	4594698.000
							603985.800	4594699.000
							603985.800	4594715.000
							603950.700	4594715.000
							603950.700	4594707.000
							603877.600	4594707.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
SHDFRA	5	0.00	1	25	51.21	4		
							603524.000	4594922.000
							603533.100	4594922.000
							603533.100	4594913.000
							603524.000	4594913.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
NHDFRA	6	0.00	1	31	51.21	4		
							603522.500	4595073.000
							603531.600	4595073.000
							603531.600	4595064.000
							603522.500	4595064.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
WOREST	7	0.00	1	37	19.81	4		
							603298.400	4595006.000
							603420.400	4595006.000
							603420.400	4594969.000
							603298.400	4594969.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
ORESTO	8	0.00	1	43	19.20	4		
							603789.200	4595131.000
							603826.700	4595131.000
							603826.700	4594917.000
							603789.200	4594917.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
COALSTO	9	0.00	1	49	19.20	4		

							603880.600	4595071.000
							603918.100	4595071.000
							603918.100	4594916.000
							603880.600	4594916.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
PRICRU	10	0.00	1	55	17.68	4		
							603571.600	4594988.000
							603581.900	4594988.000
							603581.900	4594978.000
							603571.600	4594978.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
ORECRU	11	0.00	1	61	18.29	4		
							603594.100	4594989.000
							603600.800	4594989.000
							603600.800	4594979.000
							603594.100	4594979.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
TTOW1	12	0.00	1	67	22.86	4		
							603475.700	4594993.000
							603481.800	4594993.000
							603481.800	4594987.000
							603475.700	4594987.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
NHOISH	13	0.00	1	73	12.50	4		
							603470.700	4595076.000
							603501.100	4595076.000
							603501.100	4595059.000
							603470.700	4595059.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
SHOISH	14	0.00	1	79	12.50	4		
							603473.700	4594920.000
							603504.200	4594920.000
							603502.700	4594903.000
							603473.700	4594903.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
COOLTO	15	0.00	1	85	12.19	4		
							603834.900	4594753.000
							603844.000	4594753.000
							603844.000	4594725.000
							603834.900	4594725.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
UNLSTA	16	0.00	1	91	11.58	4		
							604063.500	4595003.000
							604071.700	4595003.000

							604071.700	4594984.000
							604063.500	4594984.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
TTOW2	17	0.00	1	97	12.19	4		
							603592.200	4594970.000
							603598.300	4594970.000
							603598.300	4594964.000
							603592.200	4594964.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
PLANWA	18	0.00	1	103	7.62	4		
							603685.500	4595090.000
							603764.800	4595090.000
							603764.800	4595065.000
							603685.500	4595065.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Psilo1	19	0.00	1	109	43.89	24		
							603892.800	4594826.000
							603895.100	4594825.000
							603897.200	4594825.000
							603899.100	4594823.000
							603900.500	4594821.000
							603901.300	4594819.000
							603901.600	4594817.000
							603901.300	4594815.000
							603900.500	4594812.000
							603899.100	4594811.000
							603897.200	4594809.000
							603895.100	4594808.000
							603892.800	4594808.000
							603890.500	4594808.000
							603888.400	4594809.000
							603886.600	4594811.000
							603885.100	4594812.000
							603884.300	4594815.000
							603884.000	4594817.000
							603884.300	4594819.000
							603885.100	4594821.000
							603886.600	4594823.000
							603888.400	4594825.000
							603890.500	4594825.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Psilo2	20	0.00	1	115	43.89	24		
							603892.800	4594844.000
							603895.100	4594844.000
							603897.200	4594843.000
							603899.100	4594841.000
							603900.500	4594840.000
							603901.300	4594837.000
							603901.600	4594835.000
							603901.300	4594833.000
							603900.500	4594831.000
							603899.100	4594829.000
							603897.200	4594827.000
							603895.100	4594827.000
							603892.800	4594826.000
							603890.500	4594827.000

							603888.400	4594827.000
							603886.600	4594829.000
							603885.100	4594831.000
							603884.300	4594833.000
							603884.000	4594835.000
							603884.300	4594837.000
							603885.100	4594840.000
							603886.600	4594841.000
							603888.400	4594843.000
							603890.500	4594844.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Psilo3	21	0.00	1	121	43.89	24		
							603914.100	4594844.000
							603916.400	4594844.000
							603918.600	4594843.000
							603920.400	4594841.000
							603921.800	4594840.000
							603922.700	4594837.000
							603923.000	4594835.000
							603922.700	4594833.000
							603921.800	4594831.000
							603920.400	4594829.000
							603918.600	4594827.000
							603916.400	4594827.000
							603914.100	4594826.000
							603911.900	4594827.000
							603909.700	4594827.000
							603907.900	4594829.000
							603906.500	4594831.000
							603905.600	4594833.000
							603905.300	4594835.000
							603905.600	4594837.000
							603906.500	4594840.000
							603907.900	4594841.000
							603909.700	4594843.000
							603911.900	4594844.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Psilo4	22	0.00	1	127	43.89	24		
							603914.100	4594826.000
							603916.400	4594825.000
							603918.600	4594824.000
							603920.400	4594823.000
							603921.800	4594821.000
							603922.700	4594819.000
							603923.000	4594817.000
							603922.700	4594815.000
							603921.800	4594812.000
							603920.400	4594811.000
							603918.600	4594809.000
							603916.400	4594808.000
							603914.100	4594808.000
							603911.900	4594808.000
							603909.700	4594809.000
							603907.900	4594811.000
							603906.500	4594812.000
							603905.600	4594815.000
							603905.300	4594817.000
							603905.600	4594819.000
							603906.500	4594821.000
							603907.900	4594823.000
							603909.700	4594824.000
							603911.900	4594825.000

------ Building ------	Tier	Tier	Tier	# of	Corner coordinates

ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
PSTsilo	23	0.00	1	133	33.53	24		
							603912.600	4594876.000
							603915.800	4594876.000
							603918.700	4594875.000
							603921.200	4594873.000
							603923.200	4594870.000
							603924.400	4594867.000
							603924.800	4594864.000
							603924.400	4594861.000
							603923.200	4594858.000
							603921.200	4594855.000
							603918.700	4594854.000
							603915.800	4594852.000
							603912.600	4594852.000
							603909.500	4594852.000
							603906.500	4594854.000
							603904.000	4594855.000
							603902.100	4594858.000
							603900.800	4594861.000
							603900.400	4594864.000
							603900.800	4594867.000
							603902.100	4594870.000
							603904.000	4594873.000
							603906.500	4594875.000
							603909.500	4594876.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
PSTsilo	24	0.00	1	139	33.53	24		
							603912.600	4594902.000
							603915.800	4594902.000
							603918.700	4594901.000
							603921.200	4594899.000
							603923.200	4594896.000
							603924.400	4594893.000
							603924.800	4594890.000
							603924.400	4594887.000
							603923.200	4594884.000
							603921.200	4594881.000
							603918.700	4594879.000
							603915.800	4594878.000
							603912.600	4594878.000
							603909.500	4594878.000
							603906.500	4594879.000
							603904.000	4594881.000
							603902.100	4594884.000
							603900.800	4594887.000
							603900.400	4594890.000
							603900.800	4594893.000
							603902.100	4594896.000
							603904.000	4594899.000
							603906.500	4594901.000
							603909.500	4594902.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
PSTsilo	25	0.00	1	145	33.53	24		
							603938.500	4594902.000
							603941.700	4594902.000
							603944.600	4594901.000
							603947.100	4594899.000
							603949.100	4594896.000
							603950.300	4594893.000
							603950.700	4594890.000
							603950.300	4594887.000

							603949.100	4594884.000
							603947.100	4594881.000
							603944.600	4594879.000
							603941.700	4594878.000
							603938.500	4594878.000
							603935.400	4594878.000
							603932.400	4594879.000
							603929.900	4594881.000
							603928.000	4594884.000
							603926.800	4594887.000
							603926.300	4594890.000
							603926.800	4594893.000
							603928.000	4594896.000
							603929.900	4594899.000
							603932.400	4594901.000
							603935.400	4594902.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
PSTsilo	26	0.00	1	151	33.53	24		
							603938.500	4594876.000
							603941.700	4594876.000
							603944.600	4594875.000
							603947.100	4594873.000
							603949.100	4594870.000
							603950.300	4594867.000
							603950.700	4594864.000
							603950.300	4594861.000
							603949.100	4594858.000
							603947.100	4594855.000
							603944.600	4594854.000
							603941.700	4594852.000
							603938.500	4594852.000
							603935.400	4594852.000
							603932.400	4594854.000
							603929.900	4594855.000
							603928.000	4594858.000
							603926.800	4594861.000
							603926.300	4594864.000
							603926.800	4594867.000
							603928.000	4594870.000
							603929.900	4594873.000
							603932.400	4594875.000
							603935.400	4594876.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
PLcontk	27	0.00	1	157	16.76	24		
							603734.300	4594911.000
							603737.500	4594911.000
							603740.400	4594910.000
							603742.900	4594908.000
							603744.900	4594905.000
							603746.100	4594902.000
							603746.500	4594899.000
							603746.100	4594896.000
							603744.900	4594893.000
							603742.900	4594891.000
							603740.400	4594889.000
							603737.500	4594887.000
							603734.300	4594887.000
							603731.100	4594887.000
							603728.200	4594889.000
							603725.700	4594891.000
							603723.700	4594893.000
							603722.500	4594896.000
							603722.100	4594899.000
							603722.500	4594902.000

							603723.700	4594905.000
							603725.700	4594908.000
							603728.200	4594910.000
							603731.200	4594911.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ta-126	28	0.00	1	163	13.72	24		
							603682.500	4594906.000
							603684.300	4594906.000
							603685.900	4594905.000
							603687.300	4594904.000
							603688.400	4594903.000
							603689.100	4594901.000
							603689.400	4594899.000
							603689.100	4594897.000
							603688.400	4594896.000
							603687.300	4594894.000
							603685.900	4594893.000
							603684.300	4594893.000
							603682.500	4594892.000
							603680.700	4594893.000
							603679.100	4594893.000
							603677.600	4594894.000
							603676.600	4594896.000
							603675.900	4594897.000
							603675.600	4594899.000
							603675.900	4594901.000
							603676.600	4594903.000
							603677.600	4594904.000
							603679.100	4594905.000
							603680.700	4594906.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ta-146	29	0.00	1	169	11.28	24		
							603664.200	4594919.000
							603667.000	4594919.000
							603669.500	4594918.000
							603671.700	4594916.000
							603673.400	4594914.000
							603674.500	4594911.000
							603674.900	4594908.000
							603674.500	4594906.000
							603673.400	4594903.000
							603671.700	4594901.000
							603669.500	4594899.000
							603667.000	4594898.000
							603664.200	4594898.000
							603661.400	4594898.000
							603658.900	4594899.000
							603656.700	4594901.000
							603655.000	4594903.000
							603653.900	4594906.000
							603653.500	4594908.000
							603653.900	4594911.000
							603655.000	4594914.000
							603656.700	4594916.000
							603658.900	4594918.000
							603661.400	4594919.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ta-113	30	0.00	1	175	11.28	24		
							603706.900	4594913.000
							603708.800	4594912.000

							603710.500	4594912.000
							603712.100	4594910.000
							603713.200	4594909.000
							603713.900	4594907.000
							603714.200	4594905.000
							603713.900	4594903.000
							603713.200	4594902.000
							603712.100	4594900.000
							603710.500	4594899.000
							603708.800	4594898.000
							603706.900	4594898.000
							603705.000	4594898.000
							603703.200	4594899.000
							603701.700	4594900.000
							603700.500	4594902.000
							603699.800	4594903.000
							603699.600	4594905.000
							603699.800	4594907.000
							603700.500	4594909.000
							603701.700	4594910.000
							603703.200	4594912.000
							603705.000	4594912.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
Ta-136	31	0.00	1	181	11.28	24		
							603684.000	4594934.000
							603686.800	4594934.000
							603689.400	4594933.000
							603691.600	4594931.000
							603693.300	4594929.000
							603694.300	4594926.000
							603694.700	4594924.000
							603694.300	4594921.000
							603693.300	4594918.000
							603691.600	4594916.000
							603689.300	4594914.000
							603686.800	4594913.000
							603684.000	4594913.000
							603681.300	4594913.000
							603678.700	4594914.000
							603676.500	4594916.000
							603674.800	4594918.000
							603673.700	4594921.000
							603673.300	4594924.000
							603673.700	4594926.000
							603674.800	4594929.000
							603676.500	4594931.000
							603678.700	4594933.000
							603681.300	4594934.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
Ta-75	32	0.00	1	187	11.28	24		
							603807.500	4594722.000
							603810.200	4594722.000
							603812.800	4594721.000
							603815.000	4594719.000
							603816.700	4594717.000
							603817.800	4594714.000
							603818.100	4594712.000
							603817.800	4594709.000
							603816.700	4594706.000
							603815.000	4594704.000
							603812.800	4594702.000
							603810.200	4594701.000
							603807.500	4594701.000
							603804.700	4594701.000

							603802.100	4594702.000
							603799.900	4594704.000
							603798.200	4594706.000
							603797.200	4594709.000
							603796.800	4594712.000
							603797.200	4594714.000
							603798.200	4594717.000
							603799.900	4594719.000
							603802.100	4594721.000
							603804.700	4594722.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ta-139	33	0.00	1	193	7.92	24		
							603618.500	4594945.000
							603627.200	4594944.000
							603635.300	4594940.000
							603642.200	4594935.000
							603647.500	4594928.000
							603650.900	4594920.000
							603652.000	4594911.000
							603650.900	4594903.000
							603647.500	4594895.000
							603642.200	4594888.000
							603635.200	4594882.000
							603627.200	4594879.000
							603618.500	4594878.000
							603609.800	4594879.000
							603601.700	4594882.000
							603594.800	4594888.000
							603589.400	4594895.000
							603586.100	4594903.000
							603585.000	4594911.000
							603586.100	4594920.000
							603589.400	4594928.000
							603594.800	4594935.000
							603601.700	4594940.000
							603609.800	4594944.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ta-110	34	0.00	1	199	5.79	24		
							603719.100	4594951.000
							603723.800	4594950.000
							603728.200	4594949.000
							603732.000	4594946.000
							603734.900	4594942.000
							603736.700	4594937.000
							603737.400	4594933.000
							603736.700	4594928.000
							603734.900	4594924.000
							603732.000	4594920.000
							603728.200	4594917.000
							603723.800	4594915.000
							603719.100	4594914.000
							603714.300	4594915.000
							603709.900	4594917.000
							603706.100	4594920.000
							603703.200	4594924.000
							603701.400	4594928.000
							603700.800	4594933.000
							603701.400	4594937.000
							603703.200	4594942.000
							603706.100	4594946.000
							603709.900	4594949.000
							603714.300	4594950.000

------ Building ------	Tier	Tier	Tier	# of	Corner coordinates

ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
PROCATX	35	0.00	1	205	10.67	6		
							603624.200	4594750.000
							603563.200	4594750.000
							603563.200	4594668.000
							603528.200	4594668.000
							603528.200	4594811.000
							603627.200	4594811.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
PROCATY	36	0.00	1	211	23.77	8		
							603660.200	4594760.000
							603660.200	4594738.000
							603691.200	4594737.000
							603691.200	4594711.000
							603699.200	4594713.000
							603699.200	4594742.000
							603690.200	4594742.000
							603688.200	4594760.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
TA-122	37	0.00	1	217	11.28	24		
							603654.900	4594723.000
							603657.700	4594723.000
							603660.300	4594722.000
							603662.500	4594720.000
							603664.200	4594718.000
							603665.200	4594716.000
							603665.600	4594713.000
							603665.200	4594710.000
							603664.200	4594707.000
							603662.500	4594705.000
							603660.300	4594704.000
							603657.700	4594702.000
							603654.900	4594702.000
							603652.200	4594702.000
							603649.600	4594704.000
							603647.400	4594705.000
							603645.700	4594707.000
							603644.600	4594710.000
							603644.300	4594713.000
							603644.600	4594716.000
							603645.700	4594718.000
							603647.400	4594720.000
							603649.600	4594722.000
							603652.200	4594723.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
TA-13	38	0.00	1	223	11.28	24		
							603675.100	4594727.000
							603677.900	4594727.000
							603680.500	4594726.000
							603682.700	4594724.000
							603684.400	4594722.000
							603685.400	4594719.000
							603685.800	4594716.000
							603685.400	4594714.000
							603684.400	4594711.000
							603682.700	4594709.000
							603680.400	4594707.000
							603677.900	4594706.000

							603675.100	4594706.000
							603672.400	4594706.000
							603669.800	4594707.000
							603667.600	4594709.000
							603665.900	4594711.000
							603664.800	4594714.000
							603664.400	4594716.000
							603664.800	4594719.000
							603665.900	4594722.000
							603667.600	4594724.000
							603669.800	4594726.000
							603672.400	4594727.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
TA-92	39	0.00	1	229	11.28	24		
							603719.100	4594749.000
							603722.000	4594749.000
							603724.600	4594748.000
							603726.900	4594746.000
							603728.600	4594744.000
							603729.700	4594741.000
							603730.100	4594738.000
							603729.700	4594736.000
							603728.600	4594733.000
							603726.900	4594731.000
							603724.600	4594729.000
							603722.000	4594728.000
							603719.100	4594727.000
							603716.300	4594728.000
							603713.700	4594729.000
							603711.400	4594731.000
							603709.600	4594733.000
							603708.500	4594736.000
							603708.200	4594738.000
							603708.500	4594741.000
							603709.600	4594744.000
							603711.400	4594746.000
							603713.700	4594748.000
							603716.300	4594749.000

------ Building ------			Tier	Tier	Tier	# of	Corner coordinates	
ID	#	Elev. (m)	#	Ref.	hgt	corners	X (m)	Y (m)
TA-36	40	0.00	1	235	13.72	24		
							603746.700	4594747.000
							603748.400	4594747.000
							603750.100	4594746.000
							603751.500	4594745.000
							603752.600	4594744.000
							603753.300	4594742.000
							603753.500	4594740.000
							603753.300	4594739.000
							603752.600	4594737.000
							603751.500	4594735.000
							603750.100	4594734.000
							603748.400	4594734.000
							603746.700	4594733.000
							603744.900	4594734.000
							603743.200	4594734.000
							603741.800	4594735.000
							603740.700	4594737.000
							603740.100	4594739.000
							603739.800	4594740.000
							603740.100	4594742.000
							603740.700	4594744.000
							603741.800	4594745.000
							603743.200	4594746.000
							603744.900	4594747.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ore01	41	0.00	1	241	30.50	4		
							603656.800	4594994.000
							603656.800	4594976.000
							603679.800	4594976.000
							603679.800	4594994.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ore02	42	0.00	1	247	21.00	4		
							603656.800	4594976.500
							603641.500	4594976.500
							603641.500	4594995.000
							603656.800	4594995.000

------ Building ------ ID	#	Elev. (m)	Tier #	Tier Ref.	Tier hgt	# of corners	Corner coordinates X (m)	Y (m)
Ore03	43	0.00	1	253	28.90	4		
							603658.600	4594995.500
							603669.200	4594995.500
							603669.200	4595008.000
							603658.600	4595008.000

Input Stacks: 58

Stack #	Stack Name	Stack Height	Stack Elev.	Stack coordinates X (m)	Y (m)
1	2A	0.00	0.00	603661.200	4594980.000
2	2B	0.00	0.00	603749.500	4595001.000
3	6A	0.00	0.00	603892.800	4594835.000
4	6B	0.00	0.00	603900.400	4594811.000
5	7	0.00	0.00	604045.200	4594861.000
6	10	0.00	0.00	603865.400	4594992.000
7	11	0.00	0.00	603873.000	4594820.000
8	14	0.00	0.00	603760.200	4594808.000
9	15	0.00	0.00	603719.100	4594814.000
10	16	0.00	0.00	603722.100	4594824.000
11	17	0.00	0.00	603685.500	4594808.000
12	18	0.00	0.00	603834.900	4594808.000
13	19	0.00	0.00	603834.900	4594780.000
14	24	0.00	0.00	603819.700	4594786.000
15	25	0.00	0.00	603665.700	4595012.000
16	26	0.00	0.00	603673.300	4594984.000
17	27	0.00	0.00	603697.700	4594975.000
18	28	0.00	0.00	603725.200	4594837.000
19	30	0.00	0.00	603938.500	4594768.000
20	31	0.00	0.00	603938.500	4594747.000
21	33	0.00	0.00	603892.000	4594725.000
22	35	0.00	0.00	603929.400	4594725.000
23	36	0.00	0.00	603929.400	4594703.000
24	37	0.00	0.00	603943.100	4594703.000
25	38	0.00	0.00	603959.900	4594703.000
26	39	0.00	0.00	603973.600	4594703.000
27	40	0.00	0.00	603953.800	4594733.000
28	41	0.00	0.00	603987.300	4594724.000
29	44	0.00	0.00	603987.200	4594748.000
30	45	0.00	0.00	604030.000	4594847.000
31	46	0.00	0.00	603764.800	4594983.000
32	47	0.00	0.00	603649.000	4594992.000
33	48	0.00	0.00	603685.500	4594846.000
34	50	0.00	0.00	603713.000	4594847.000
35	51	0.00	0.00	603738.900	4594838.000
36	52	0.00	0.00	603898.900	4594884.000

37	53	0.00	0.00	603926.300	4594856.000
38	54	0.00	0.00	603685.500	4594972.000
39	55	0.00	0.00	603600.200	4594984.000
40	62	0.00	0.00	603639.800	4594741.000
41	63	0.00	0.00	603652.000	4594738.000
42	64	0.00	0.00	603973.600	4594690.000
43	65	0.00	0.00	603959.900	4594690.000
44	66	0.00	0.00	603705.400	4594771.000
45	67	0.00	0.00	603629.200	4594802.000
46	68	0.00	0.00	603929.400	4594835.000
47	70	0.00	0.00	603929.400	4594846.000
48	71	0.00	0.00	603944.600	4594846.000
49	72	0.00	0.00	603897.400	4594715.000
50	73	0.00	0.00	603885.200	4594715.000
51	76	0.00	0.00	603587.200	4594993.000
52	79	0.00	0.00	603486.200	4594996.000
53	80	0.00	0.00	603655.100	4594878.000
54	81	0.00	0.00	603766.300	4594835.000
55	82	0.00	0.00	603781.600	4594832.000
56	83	0.00	0.00	603953.800	4594882.000
57	84	0.00	0.00	603953.800	4594838.000
58	85	0.00	0.00	603684.000	4594823.000

Stack number: 1 Name: 2A

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 94.00 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	30.50	29.25	74.38	S-S	(241)
50	30.50	28.50	73.25	S-S	(241)
60	28.90	38.50	72.25	S-S	(241 253)
70	28.90	37.25	72.25	S-S	(241 253)
80	32.00	31.50	79.25	S-S	(13)
90	32.00	29.00	75.50	S-S	(13)
100	32.00	31.50	79.25	S-S	(13)
110	28.90	34.50	72.25	S-S	(241 253)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	30.50	27.75	72.13	S-S	(241)
170	30.50	25.75	69.13	S-S	(241)
180	30.50	23.00	65.00	S-S	(241)
190	30.50	25.78	69.17	S-S	(241)
200	35.05	216.19	87.63	S-S	(1)
210	35.05	213.50	87.63	S-S	(1)
220	30.50	29.25	74.38	S-S	(241)
230	30.50	28.50	73.25	S-S	(241)
240	28.90	38.25	72.25	S-S	(241 253)
250	28.90	37.25	72.25	S-S	(241 253)
260	28.90	35.00	72.25	S-S	(241 253)
270	28.90	32.00	72.25	S-S	(241 253)
280	28.90	33.50	72.25	S-S	(241 253)
290	28.90	34.50	72.25	S-S	(241 253)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 2 Name: 2B

Structure producing the greatest GEP stack height within 5L: (115 109 121 127)
Height: 43.89 Width: 45.75 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	35.05	211.50	87.63	S-S	(1)
50	35.05	203.25	87.63	S-S	(1)
60	28.90	38.50	72.25	S-S	(241 253)
70	28.90	37.25	72.25	S-S	(241 253)
80	28.90	35.00	72.25	S-S	(241 253)
90	28.90	32.00	72.25	S-S	(241 253)
100	28.90	33.50	72.25	S-S	(241 253)
110	19.20	214.00	48.00	S-S	(43)
120	19.20	204.00	48.00	S-S	(43)
130	19.20	188.25	48.00	S-S	(43)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	19.20	108.50	48.00	S-S	(43)
170	0.00	0.00	0.00	ND	
180	0.00	0.00	0.00	ND	
190	0.00	0.00	0.00	ND	
200	19.20	108.44	48.00	S-S	(43)
210	35.05	213.50	87.63	S-S	(1)
220	35.05	211.50	87.63	S-S	(1)
230	35.05	203.00	87.63	S-S	(1)
240	19.20	204.25	48.00	S-S	(43)
250	19.20	214.00	48.00	S-S	(43)
260	19.20	217.50	48.00	S-S	(43)
270	19.20	214.00	48.00	S-S	(43)
280	19.20	217.50	48.00	S-S	(43)
290	19.20	214.00	48.00	S-S	(43)
300	19.20	204.00	48.00	S-S	(43)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	36.58	93.75	91.45	S-S	(2)
360	36.58	85.38	91.45	S-S	(2)

Stack number: 3 Name: 6A

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 43.94 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	43.89	41.63	106.33	S-S	(109 115 121 127)
20	43.89	44.06	109.72	S-S	(109 115 121 127)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	43.89	40.00	103.89	S-S	(109 115 121 127)
110	43.89	43.00	108.39	S-S	(109 115 121 127)
120	43.89	44.50	109.72	S-S	(109 115 121 127)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)

150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	42.50	107.64	S-S	(109 115 121 127)
300	43.89	44.50	109.72	S-S	(109 115 121 127)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	43.89	39.00	102.39	S-S	(109 115 121 127)

Stack number: 4 Name: 6B

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 43.94 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	43.89	41.63	106.33	S-S	(109 115 121 127)
20	43.89	44.06	109.72	S-S	(109 115 121 127)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	43.89	40.00	103.89	S-S	(109 115 121 127)
110	43.89	43.00	108.39	S-S	(109 115 121 127)
120	43.89	44.50	109.72	S-S	(109 115 121 127)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	42.50	107.64	S-S	(109 115 121 127)
300	43.89	44.50	109.72	S-S	(109 115 121 127)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	43.89	39.00	102.39	S-S	(109 115 121 127)

Stack number: 5 Name: 7

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 43.25 GEP: 108.76

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	32.31	20.67	63.32	S-S	(7)
20	28.35	130.06	70.88	S-S	(20)
30	32.31	28.25	74.68	S-S	(7)
40	32.31	30.75	78.43	S-S	(7)
50	32.31	32.25	80.68	S-S	(7)
60	43.89	43.25	108.76	S-S	(127 109 115 121)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	33.53	55.00	83.82	S-S	(139 133 145 151)
110	33.53	58.00	83.82	S-S	(139 133 145 151)
120	33.53	60.50	83.82	S-S	(139 133 145 151)
130	32.31	32.25	80.68	S-S	(7)
140	32.31	30.75	78.43	S-S	(7)
150	32.31	28.25	74.68	S-S	(7)
160	32.31	24.75	69.43	S-S	(7)
170	32.31	20.63	63.25	S-S	(7)
180	32.31	15.88	56.12	S-S	(7)
190	32.31	20.67	63.32	S-S	(7)
200	32.31	24.81	69.53	S-S	(7)
210	32.31	28.25	74.68	S-S	(7)
220	32.31	31.00	78.81	S-S	(7)
230	32.31	32.25	80.68	S-S	(7)
240	32.31	33.00	80.78	S-S	(7)
250	32.31	32.50	80.78	S-S	(7)
260	32.31	31.00	78.81	S-S	(7)
270	32.31	29.00	75.81	S-S	(7)
280	32.31	31.00	78.81	S-S	(7)
290	32.31	32.50	80.78	S-S	(7)
300	32.31	33.00	80.78	S-S	(7)
310	32.31	32.25	80.68	S-S	(7)
320	32.31	30.75	78.43	S-S	(7)
330	32.31	28.25	74.68	S-S	(7)
340	32.31	24.75	69.43	S-S	(7)
350	32.31	20.75	63.44	S-S	(7)
360	32.31	15.88	56.12	S-S	(7)

Stack number: 6 Name: 10

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	36.58	88.75	91.45	S-S	(2)
30	36.58	86.38	91.45	S-S	(2)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	35.05	188.50	87.63	S-S	(1)
70	19.20	158.50	48.00	S-S	(49)
80	19.20	159.00	48.00	S-S	(49)
90	19.20	155.00	48.00	S-S	(49)
100	19.20	159.50	48.00	S-S	(49)
110	19.20	158.50	48.00	S-S	(49)
120	19.20	153.00	48.00	S-S	(49)
130	19.20	142.75	48.00	S-S	(49)
140	19.20	128.50	48.00	S-S	(49)

150	19.20	110.00	48.00	S-S	(49)
160	19.20	88.25	48.00	S-S	(49)
170	19.20	63.88	48.00	S-S	(49)
180	0.00	0.00	0.00	ND	
190	19.20	63.84	48.00	S-S	(49)
200	19.20	88.25	48.00	S-S	(49)
210	19.20	110.00	48.00	S-S	(49)
220	19.20	128.50	48.00	S-S	(49)
230	19.20	142.75	48.00	S-S	(49)
240	19.20	153.00	48.00	S-S	(49)
250	19.20	158.50	48.00	S-S	(49)
260	19.20	159.00	48.00	S-S	(49)
270	19.20	155.00	48.00	S-S	(49)
280	19.20	159.00	48.00	S-S	(49)
290	19.20	158.50	48.00	S-S	(49)
300	19.20	153.00	48.00	S-S	(49)
310	19.20	142.75	48.00	S-S	(49)
320	33.53	61.50	83.82	S-S	(139 133 145 151)
330	33.53	59.75	83.82	S-S	(139 133 145 151)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	43.89	39.00	102.39	S-S	(109 115 121 127)

Stack number: 7 Name: 11

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	43.89	41.63	106.33	S-S	(109 115 121 127)
20	43.89	44.06	109.72	S-S	(109 115 121 127)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	43.89	40.00	103.89	S-S	(109 115 121 127)
110	43.89	43.00	108.39	S-S	(109 115 121 127)
120	43.89	44.50	109.72	S-S	(109 115 121 127)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	42.50	107.64	S-S	(109 115 121 127)
300	43.89	44.50	109.72	S-S	(109 115 121 127)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	43.89	39.00	102.39	S-S	(109 115 121 127)

Stack number: 8 Name: 14

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 41.50 GEP: 106.14

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	36.58	88.75	91.45	S-S	(2)
30	36.58	86.38	91.45	S-S	(2)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	36.58	69.00	91.45	S-S	(2)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)
150	36.58	101.50	91.45	S-S	(2)
160	36.58	99.25	91.45	S-S	(2)
170	36.58	93.63	91.45	S-S	(2)
180	36.58	85.38	91.45	S-S	(2)
190	36.58	88.42	91.45	S-S	(2)
200	36.58	88.75	91.45	S-S	(2)
210	36.58	86.50	91.45	S-S	(2)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	43.89	41.50	106.14	S-S	(127 109 115 121)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	36.58	69.00	91.45	S-S	(2)
290	36.58	81.00	91.45	S-S	(2)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	36.58	93.75	91.45	S-S	(2)
360	36.58	85.38	91.45	S-S	(2)

Stack number: 9 Name: 15

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 40.00 GEP: 103.89

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	36.58	88.75	91.45	S-S	(2)
30	36.58	86.38	91.45	S-S	(2)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	36.58	69.00	91.45	S-S	(2)
110	36.58	81.00	91.45	S-S	(2)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)

150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	36.58	88.42	91.45	S-S	(2)
200	36.58	88.75	91.45	S-S	(2)
210	36.58	86.50	91.45	S-S	(2)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	36.58	69.00	91.45	S-S	(2)
290	36.58	81.00	91.45	S-S	(2)
300	35.05	202.00	87.63	S-S	(1)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 10 Name: 16

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 39.00 GEP: 102.39

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	36.58	88.75	91.45	S-S	(2)
30	36.58	86.38	91.45	S-S	(2)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	36.58	69.00	91.45	S-S	(2)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)
150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	36.58	88.42	91.45	S-S	(2)
200	36.58	88.75	91.45	S-S	(2)
210	36.58	86.50	91.45	S-S	(2)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	43.89	39.00	102.39	S-S	(127 109 115 121)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	39.00	102.39	S-S	(127 109 115 121)
290	36.58	81.00	91.45	S-S	(2)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 11 Name: 17

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 60.00 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	35.05	147.50	87.63	S-S	(1)
110	35.05	177.50	87.63	S-S	(1)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	35.05	221.98	87.63	S-S	(1)
200	35.05	216.19	87.63	S-S	(1)
210	35.05	213.50	87.63	S-S	(1)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	36.58	63.00	91.45	S-S	(2)
270	36.58	55.00	91.45	S-S	(2)
280	35.05	147.50	87.63	S-S	(1)
290	35.05	177.50	87.63	S-S	(1)
300	35.05	202.00	87.63	S-S	(1)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 12 Name: 18

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	36.58	88.75	91.45	S-S	(2)
30	35.05	213.50	87.63	S-S	(1)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	43.89	40.00	103.89	S-S	(109 115 121 127)
110	43.89	43.00	108.39	S-S	(109 115 121 127)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)

150	36.58	101.50	91.45	S-S	(2)
160	36.58	99.25	91.45	S-S	(2)
170	36.58	93.63	91.45	S-S	(2)
180	36.58	85.38	91.45	S-S	(2)
190	36.58	88.42	91.45	S-S	(2)
200	36.58	88.75	91.45	S-S	(2)
210	35.05	213.50	87.63	S-S	(1)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	42.50	107.64	S-S	(109 115 121 127)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	36.58	93.75	91.45	S-S	(2)
360	36.58	85.38	91.45	S-S	(2)

Stack number: 13 Name: 19

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	0.00	0.00	0.00	ND	
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	35.05	113.00	87.63	S-S	(1)
100	35.05	147.50	87.63	S-S	(1)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)
150	36.58	101.50	91.45	S-S	(2)
160	36.58	99.25	91.45	S-S	(2)
170	36.58	93.63	91.45	S-S	(2)
180	36.58	85.38	91.45	S-S	(2)
190	36.58	88.42	91.45	S-S	(2)
200	0.00	0.00	0.00	ND	
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	35.05	113.00	87.63	S-S	(1)
280	35.05	147.50	87.63	S-S	(1)
290	36.58	81.00	91.45	S-S	(2)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	36.58	93.75	91.45	S-S	(2)
360	36.58	85.38	91.45	S-S	(2)

Stack number: 14 Name: 24

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	36.58	88.75	91.45	S-S	(2)
30	35.05	213.50	87.63	S-S	(1)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	35.05	113.00	87.63	S-S	(1)
100	35.05	147.50	87.63	S-S	(1)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)
150	36.58	101.50	91.45	S-S	(2)
160	36.58	99.25	91.45	S-S	(2)
170	36.58	93.63	91.45	S-S	(2)
180	36.58	85.38	91.45	S-S	(2)
190	36.58	88.42	91.45	S-S	(2)
200	36.58	88.75	91.45	S-S	(2)
210	35.05	213.50	87.63	S-S	(1)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	35.05	113.00	87.63	S-S	(1)
280	35.05	147.50	87.63	S-S	(1)
290	36.58	81.00	91.45	S-S	(2)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	36.58	93.75	91.45	S-S	(2)
360	36.58	85.38	91.45	S-S	(2)

Stack number: 15 Name: 25

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 100.25 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	30.50	28.88	73.81	S-S	(241)
40	30.50	29.25	74.38	S-S	(241)
50	30.50	28.50	73.25	S-S	(241)
60	32.00	33.25	80.00	S-S	(13)
70	32.00	33.00	80.00	S-S	(13)
80	32.00	31.50	79.25	S-S	(13)
90	28.90	32.00	72.25	S-S	(241 253)
100	28.90	33.50	72.25	S-S	(241 253)
110	28.90	34.50	72.25	S-S	(241 253)
120	28.90	34.00	72.25	S-S	(241 253)
130	35.05	220.75	87.63	S-S	(1)
140	30.50	29.25	74.38	S-S	(241)

150	30.50	28.75	73.63	S-S	(241)
160	30.50	27.75	72.13	S-S	(241)
170	30.50	25.75	69.13	S-S	(241)
180	30.50	23.00	65.00	S-S	(241)
190	30.50	25.78	69.17	S-S	(241)
200	28.90	30.88	72.25	S-S	(241 253)
210	30.50	28.88	73.81	S-S	(241)
220	30.50	29.25	74.38	S-S	(241)
230	30.50	28.50	73.25	S-S	(241)
240	28.90	38.25	72.25	S-S	(241 253)
250	28.90	37.25	72.25	S-S	(241 253)
260	28.90	35.00	72.25	S-S	(241 253)
270	28.90	32.00	72.25	S-S	(241 253)
280	28.90	33.50	72.25	S-S	(241 253)
290	28.90	34.50	72.25	S-S	(241 253)
300	28.90	34.00	72.25	S-S	(241 253)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 16 Name: 26

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 95.00 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	30.50	29.25	74.38	S-S	(241)
50	30.50	28.50	73.25	S-S	(241)
60	28.90	38.50	72.25	S-S	(241 253)
70	28.90	37.25	72.25	S-S	(241 253)
80	32.00	31.50	79.25	S-S	(13)
90	32.00	29.00	75.50	S-S	(13)
100	32.00	31.50	79.25	S-S	(13)
110	28.90	34.50	72.25	S-S	(241 253)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	30.50	27.75	72.13	S-S	(241)
170	30.50	25.75	69.13	S-S	(241)
180	30.50	23.00	65.00	S-S	(241)
190	30.50	25.78	69.17	S-S	(241)
200	35.05	216.19	87.63	S-S	(1)
210	35.05	213.50	87.63	S-S	(1)
220	30.50	29.25	74.38	S-S	(241)
230	30.50	28.50	73.25	S-S	(241)
240	28.90	38.25	72.25	S-S	(241 253)
250	28.90	37.25	72.25	S-S	(241 253)
260	28.90	35.00	72.25	S-S	(241 253)
270	28.90	32.00	72.25	S-S	(241 253)
280	28.90	33.50	72.25	S-S	(241 253)
290	28.90	34.50	72.25	S-S	(241 253)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 17 Name: 27

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 95.00 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	35.05	211.50	87.63	S-S	(1)
50	30.50	28.50	73.25	S-S	(241)
60	28.90	38.50	72.25	S-S	(241 253)
70	28.90	37.25	72.25	S-S	(241 253)
80	32.00	31.50	79.25	S-S	(13)
90	32.00	29.00	75.50	S-S	(13)
100	32.00	31.50	79.25	S-S	(13)
110	28.90	34.50	72.25	S-S	(241 253)
120	28.90	34.00	72.25	S-S	(241 253)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	0.00	0.00	0.00	ND	
180	0.00	0.00	0.00	ND	
190	0.00	0.00	0.00	ND	
200	35.05	216.19	87.63	S-S	(1)
210	35.05	213.50	87.63	S-S	(1)
220	35.05	211.50	87.63	S-S	(1)
230	30.50	28.50	73.25	S-S	(241)
240	28.90	38.25	72.25	S-S	(241 253)
250	28.90	37.25	72.25	S-S	(241 253)
260	28.90	35.00	72.25	S-S	(241 253)
270	28.90	32.00	72.25	S-S	(241 253)
280	28.90	33.50	72.25	S-S	(241 253)
290	28.90	34.50	72.25	S-S	(241 253)
300	28.90	34.00	72.25	S-S	(241 253)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 18 Name: 28

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 40.00 GEP: 103.89

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	36.58	88.75	91.45	S-S	(2)
30	36.58	86.38	91.45	S-S	(2)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	36.58	69.00	91.45	S-S	(2)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)

Stack number: 20 Name: 31

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	33.53	60.84	83.82	S-S	(121 109 115 127 133 151)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	35.05	113.00	87.63	S-S	(1)
100	35.05	147.50	87.63	S-S	(1)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	33.53	54.30	83.82	S-S	(139 133 145 151)
200	28.35	130.06	70.88	S-S	(20)
210	28.35	127.88	70.88	S-S	(20)
220	32.31	31.00	78.81	S-S	(7)
230	32.31	32.25	80.68	S-S	(7)
240	32.31	33.00	80.78	S-S	(7)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	43.89	39.00	102.39	S-S	(109 115 121 127)

Stack number: 21 Name: 33

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 43.75 GEP: 109.51

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	43.89	41.63	106.33	S-S	(109 115 121 127)
20	43.89	43.75	109.51	S-S	(127 109 115 121)
30	43.89	43.75	109.51	S-S	(127 109 115 121)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	35.05	147.50	87.63	S-S	(1)
110	35.05	177.50	87.63	S-S	(1)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)

150	36.58	101.50	91.45	S-S	(2)
160	36.58	99.25	91.45	S-S	(2)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	43.75	109.51	S-S	(127 109 115 121)
210	43.89	43.75	109.51	S-S	(127 109 115 121)
220	28.35	121.50	70.88	S-S	(20)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	28.35	120.50	70.88	S-S	(20)
340	35.05	234.75	87.63	S-S	(1)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 22 Name: 35

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	35.05	147.50	87.63	S-S	(1)
110	35.05	177.50	87.63	S-S	(1)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	33.53	54.30	83.82	S-S	(139 133 145 151)
200	28.35	130.06	70.88	S-S	(20)
210	28.35	127.88	70.88	S-S	(20)
220	32.31	31.00	78.81	S-S	(7)
230	32.31	32.25	80.68	S-S	(7)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 23 Name: 36

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	35.05	147.50	87.63	S-S	(1)
110	35.05	177.50	87.63	S-S	(1)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	33.53	54.30	83.82	S-S	(139 133 145 151)
200	28.35	130.06	70.88	S-S	(20)
210	28.35	127.88	70.88	S-S	(20)
220	28.35	121.50	70.88	S-S	(20)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	28.35	120.50	70.88	S-S	(20)
340	28.35	125.00	70.88	S-S	(20)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 24 Name: 37

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	35.05	147.50	87.63	S-S	(1)
110	35.05	177.50	87.63	S-S	(1)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)

150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	33.53	50.31	83.82	S-S	(139 133 145 151)
190	28.35	128.36	70.88	S-S	(20)
200	28.35	130.06	70.88	S-S	(20)
210	28.35	127.88	70.88	S-S	(20)
220	28.35	121.50	70.88	S-S	(20)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	28.35	120.50	70.88	S-S	(20)
340	28.35	125.00	70.88	S-S	(20)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 25 Name: 38

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	28.35	52.00	70.88	S-S	(20)
110	28.35	69.00	70.88	S-S	(20)
120	28.35	85.50	70.88	S-S	(20)
130	28.35	100.50	70.88	S-S	(20)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	33.53	50.31	83.82	S-S	(139 133 145 151)
190	28.35	128.36	70.88	S-S	(20)
200	28.35	130.06	70.88	S-S	(20)
210	28.35	127.88	70.88	S-S	(20)
220	28.35	121.50	70.88	S-S	(20)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	28.35	120.50	70.88	S-S	(20)
340	28.35	125.00	70.88	S-S	(20)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 26 Name: 39

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.25 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	28.35	52.00	70.88	S-S	(20)
110	28.35	69.00	70.88	S-S	(20)
120	28.35	85.50	70.88	S-S	(20)
130	28.35	100.50	70.88	S-S	(20)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	33.53	54.25	83.82	S-S	(139 133 145 151)
180	28.35	122.75	70.88	S-S	(20)
190	28.35	128.36	70.88	S-S	(20)
200	28.35	130.06	70.88	S-S	(20)
210	28.35	127.88	70.88	S-S	(20)
220	28.35	121.50	70.88	S-S	(20)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	28.35	120.50	70.88	S-S	(20)
340	28.35	125.00	70.88	S-S	(20)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 27 Name: 40

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	35.05	147.50	87.63	S-S	(1)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)

150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	33.53	50.31	83.82	S-S	(139 133 145 151)
190	28.35	128.36	70.88	S-S	(20)
200	28.35	130.06	70.88	S-S	(20)
210	32.31	28.25	74.68	S-S	(7)
220	32.31	31.00	78.81	S-S	(7)
230	32.31	32.25	80.68	S-S	(7)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 28 Name: 41

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 45.50 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	28.35	52.00	70.88	S-S	(20)
110	28.35	69.00	70.88	S-S	(20)
120	28.35	85.50	70.88	S-S	(20)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	33.53	54.25	83.82	S-S	(139 133 145 151)
180	28.35	122.75	70.88	S-S	(20)
190	28.35	128.36	70.88	S-S	(20)
200	28.35	130.06	70.88	S-S	(20)
210	32.31	28.25	74.68	S-S	(7)
220	28.35	121.50	70.88	S-S	(20)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	28.35	120.50	70.88	S-S	(20)
340	28.35	125.00	70.88	S-S	(20)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 29 Name: 44

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.50 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	28.35	52.00	70.88	S-S	(20)
110	28.35	69.00	70.88	S-S	(20)
120	43.89	44.50	109.72	S-S	(109 115 121 127)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	33.53	57.50	83.82	S-S	(139 133 145 151)
170	33.53	54.25	83.82	S-S	(139 133 145 151)
180	28.35	122.75	70.88	S-S	(20)
190	28.35	128.36	70.88	S-S	(20)
200	28.35	130.06	70.88	S-S	(20)
210	32.31	28.25	74.68	S-S	(7)
220	32.31	31.00	78.81	S-S	(7)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	28.35	125.00	70.88	S-S	(20)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 30 Name: 45

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 42.50 GEP: 107.64

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	32.31	28.25	74.68	S-S	(7)
40	32.31	30.75	78.43	S-S	(7)
50	32.31	32.25	80.68	S-S	(7)
60	32.31	33.00	80.78	S-S	(7)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	33.53	55.00	83.82	S-S	(139 133 145 151)
110	33.53	58.00	83.82	S-S	(139 133 145 151)
120	33.53	60.50	83.82	S-S	(139 133 145 151)
130	33.53	61.25	83.82	S-S	(139 133 145 151)
140	32.31	30.75	78.43	S-S	(7)

150	32.31	28.25	74.68	S-S	(7)
160	32.31	24.75	69.43	S-S	(7)
170	32.31	20.63	63.25	S-S	(7)
180	0.00	0.00	0.00	ND	
190	32.31	20.67	63.32	S-S	(7)
200	32.31	24.81	69.53	S-S	(7)
210	32.31	28.25	74.68	S-S	(7)
220	32.31	31.00	78.81	S-S	(7)
230	32.31	32.25	80.68	S-S	(7)
240	32.31	33.00	80.78	S-S	(7)
250	32.31	32.50	80.78	S-S	(7)
260	32.31	31.00	78.81	S-S	(7)
270	32.31	29.00	75.81	S-S	(7)
280	32.31	31.00	78.81	S-S	(7)
290	32.31	32.50	80.78	S-S	(7)
300	32.31	33.00	80.78	S-S	(7)
310	32.31	32.25	80.68	S-S	(7)
320	32.31	30.75	78.43	S-S	(7)
330	32.31	28.25	74.68	S-S	(7)
340	32.31	24.75	69.43	S-S	(7)
350	32.31	20.75	63.44	S-S	(7)
360	0.00	0.00	0.00	ND	

Stack number: 31 Name: 46

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 45.50 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	35.05	211.50	87.63	S-S	(1)
50	35.05	203.25	87.63	S-S	(1)
60	35.05	188.50	87.63	S-S	(1)
70	19.20	214.00	48.00	S-S	(43)
80	28.90	35.00	72.25	S-S	(241 253)
90	28.90	32.00	72.25	S-S	(241 253)
100	28.90	33.50	72.25	S-S	(241 253)
110	28.90	34.50	72.25	S-S	(241 253)
120	19.20	204.00	48.00	S-S	(43)
130	19.20	188.25	48.00	S-S	(43)
140	36.58	100.75	91.45	S-S	(2)
150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	0.00	0.00	0.00	ND	
180	0.00	0.00	0.00	ND	
190	19.20	74.09	48.00	S-S	(43)
200	19.20	108.44	48.00	S-S	(43)
210	35.05	213.50	87.63	S-S	(1)
220	35.05	211.50	87.63	S-S	(1)
230	35.05	203.00	87.63	S-S	(1)
240	35.05	188.50	87.63	S-S	(1)
250	19.20	214.00	48.00	S-S	(43)
260	19.20	217.50	48.00	S-S	(43)
270	19.20	214.00	48.00	S-S	(43)
280	19.20	217.50	48.00	S-S	(43)
290	33.53	58.00	83.82	S-S	(139 133 145 151)
300	33.53	60.00	83.82	S-S	(139 133 145 151)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	36.58	99.00	91.45	S-S	(2)
350	36.58	93.75	91.45	S-S	(2)
360	36.58	85.38	91.45	S-S	(2)

Stack number: 32 Name: 47

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 97.00 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	30.50	28.88	73.81	S-S	(241)
40	30.50	29.25	74.38	S-S	(241)
50	30.50	28.50	73.25	S-S	(241)
60	32.00	33.25	80.00	S-S	(13)
70	32.00	33.00	80.00	S-S	(13)
80	32.00	31.50	79.25	S-S	(13)
90	32.00	29.00	75.50	S-S	(13)
100	32.00	31.50	79.25	S-S	(13)
110	28.90	34.50	72.25	S-S	(241 253)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)
150	30.50	28.75	73.63	S-S	(241)
160	30.50	27.75	72.13	S-S	(241)
170	30.50	25.75	69.13	S-S	(241)
180	30.50	23.00	65.00	S-S	(241)
190	30.50	25.78	69.17	S-S	(241)
200	35.05	216.19	87.63	S-S	(1)
210	30.50	28.88	73.81	S-S	(241)
220	30.50	29.25	74.38	S-S	(241)
230	30.50	28.50	73.25	S-S	(241)
240	28.90	38.25	72.25	S-S	(241 253)
250	28.90	37.25	72.25	S-S	(241 253)
260	28.90	35.00	72.25	S-S	(241 253)
270	28.90	32.00	72.25	S-S	(241 253)
280	28.90	33.50	72.25	S-S	(241 253)
290	28.90	34.50	72.25	S-S	(241 253)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 33 Name: 48

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 55.00 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	35.05	211.50	87.63	S-S	(1)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	36.58	69.00	91.45	S-S	(2)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)

150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	35.05	221.98	87.63	S-S	(1)
200	35.05	216.19	87.63	S-S	(1)
210	35.05	213.50	87.63	S-S	(1)
220	35.05	211.50	87.63	S-S	(1)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	36.58	63.00	91.45	S-S	(2)
270	36.58	55.00	91.45	S-S	(2)
280	36.58	69.00	91.45	S-S	(2)
290	36.58	81.00	91.45	S-S	(2)
300	36.58	90.50	91.45	S-S	(2)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 34 Name: 50

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 40.50 GEP: 104.64

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	36.58	86.38	91.45	S-S	(2)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	36.58	69.00	91.45	S-S	(2)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)
150	36.58	101.50	91.45	S-S	(2)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	35.05	221.98	87.63	S-S	(1)
200	35.05	216.19	87.63	S-S	(1)
210	36.58	86.50	91.45	S-S	(2)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	36.58	63.00	91.45	S-S	(2)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	36.58	81.00	91.45	S-S	(2)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 35 Name: 51

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 40.50 GEP: 104.64

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	36.58	88.75	91.45	S-S	(2)
30	36.58	86.38	91.45	S-S	(2)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	36.58	69.00	91.45	S-S	(2)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)
150	36.58	101.50	91.45	S-S	(2)
160	36.58	99.25	91.45	S-S	(2)
170	36.58	93.63	91.45	S-S	(2)
180	36.58	85.38	91.45	S-S	(2)
190	36.58	88.42	91.45	S-S	(2)
200	36.58	88.75	91.45	S-S	(2)
210	36.58	86.50	91.45	S-S	(2)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	36.58	81.00	91.45	S-S	(2)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	36.58	93.75	91.45	S-S	(2)
360	36.58	85.38	91.45	S-S	(2)

Stack number: 36 Name: 52

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	43.89	41.63	106.33	S-S	(109 115 121 127)
20	43.89	44.06	109.72	S-S	(109 115 121 127)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	33.53	55.00	83.82	S-S	(139 133 145 151)
110	33.53	58.00	83.82	S-S	(139 133 145 151)
120	33.53	60.50	83.82	S-S	(139 133 145 151)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)

150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	36.58	63.00	91.45	S-S	(2)
270	36.58	55.00	91.45	S-S	(2)
280	33.53	55.00	83.82	S-S	(139 133 145 151)
290	33.53	58.00	83.82	S-S	(139 133 145 151)
300	33.53	60.00	83.82	S-S	(139 133 145 151)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	43.89	39.00	102.39	S-S	(109 115 121 127)

Stack number: 37 Name: 53

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 43.94 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	43.89	41.63	106.33	S-S	(109 115 121 127)
20	43.89	44.06	109.72	S-S	(109 115 121 127)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	43.89	40.00	103.89	S-S	(109 115 121 127)
110	43.89	43.00	108.39	S-S	(109 115 121 127)
120	43.89	44.50	109.72	S-S	(109 115 121 127)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	42.50	107.64	S-S	(109 115 121 127)
300	43.89	44.50	109.72	S-S	(109 115 121 127)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	43.89	39.00	102.39	S-S	(109 115 121 127)

Stack number: 38 Name: 54

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 93.00 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	35.05	211.50	87.63	S-S	(1)
50	30.50	28.50	73.25	S-S	(241)
60	28.90	38.50	72.25	S-S	(241 253)
70	28.90	37.25	72.25	S-S	(241 253)
80	32.00	31.50	79.25	S-S	(13)
90	32.00	29.00	75.50	S-S	(13)
100	32.00	31.50	79.25	S-S	(13)
110	28.90	34.50	72.25	S-S	(241 253)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	30.50	25.75	69.13	S-S	(241)
180	30.50	23.00	65.00	S-S	(241)
190	35.05	221.98	87.63	S-S	(1)
200	35.05	216.19	87.63	S-S	(1)
210	35.05	213.50	87.63	S-S	(1)
220	35.05	211.50	87.63	S-S	(1)
230	30.50	28.50	73.25	S-S	(241)
240	28.90	38.25	72.25	S-S	(241 253)
250	28.90	37.25	72.25	S-S	(241 253)
260	28.90	35.00	72.25	S-S	(241 253)
270	28.90	32.00	72.25	S-S	(241 253)
280	28.90	33.50	72.25	S-S	(241 253)
290	28.90	34.50	72.25	S-S	(241 253)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 39 Name: 55

Structure producing the greatest GEP stack height within 5L: (1)
Height: 35.05 Width: 218.00 GEP: 87.63

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	18.29	8.33	30.78	S-S	(61)
20	17.68	30.50	44.20	S-S	(61 55)
30	17.68	29.75	44.20	S-S	(61 55)
40	32.00	31.25	78.88	S-S	(13)
50	32.00	32.75	80.00	S-S	(13)
60	32.00	33.25	80.00	S-S	(13)
70	32.00	33.00	80.00	S-S	(13)
80	32.00	31.50	79.25	S-S	(13)
90	32.00	29.00	75.50	S-S	(13)
100	32.00	31.50	79.25	S-S	(13)
110	32.00	33.00	80.00	S-S	(13)
120	35.05	202.00	87.63	S-S	(1)
130	32.00	32.75	80.00	S-S	(13)
140	17.68	29.50	44.20	S-S	(61 55)

150	17.68	31.00	44.20	S-S	(61 55)
160	17.68	31.00	44.20	S-S	(61 55)
170	18.29	8.38	30.85	S-S	(61)
180	18.29	6.69	28.32	S-S	(61)
190	18.29	8.31	30.76	S-S	(61)
200	17.68	30.50	44.20	S-S	(61 55)
210	17.68	29.88	44.20	S-S	(61 55)
220	32.00	31.25	78.88	S-S	(13)
230	32.00	32.75	80.00	S-S	(13)
240	32.00	33.50	80.00	S-S	(13)
250	32.00	33.00	80.00	S-S	(13)
260	32.00	31.50	79.25	S-S	(13)
270	32.00	29.00	75.50	S-S	(13)
280	32.00	31.50	79.25	S-S	(13)
290	32.00	33.00	80.00	S-S	(13)
300	35.05	202.00	87.63	S-S	(1)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 40 Name: 62

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 72.50 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	35.05	211.50	87.63	S-S	(1)
50	35.05	203.25	87.63	S-S	(1)
60	35.05	188.50	87.63	S-S	(1)
70	35.05	168.00	87.63	S-S	(1)
80	35.05	142.50	87.63	S-S	(1)
90	23.77	49.00	59.43	S-S	(211)
100	23.77	47.50	59.43	S-S	(211)
110	35.05	177.50	87.63	S-S	(1)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	35.05	221.98	87.63	S-S	(1)
200	35.05	216.19	87.63	S-S	(1)
210	35.05	213.50	87.63	S-S	(1)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	35.05	168.25	87.63	S-S	(1)
260	35.05	142.50	87.63	S-S	(1)
270	23.77	49.00	59.43	S-S	(211)
280	23.77	47.50	59.43	S-S	(211)
290	35.05	177.50	87.63	S-S	(1)
300	35.05	202.00	87.63	S-S	(1)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 41 Name: 63

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 73.25 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	35.05	211.50	87.63	S-S	(1)
50	35.05	203.25	87.63	S-S	(1)
60	35.05	188.50	87.63	S-S	(1)
70	35.05	168.00	87.63	S-S	(1)
80	35.05	142.50	87.63	S-S	(1)
90	23.77	49.00	59.43	S-S	(211)
100	23.77	47.50	59.43	S-S	(211)
110	35.05	177.50	87.63	S-S	(1)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	35.05	221.98	87.63	S-S	(1)
200	35.05	216.19	87.63	S-S	(1)
210	36.58	86.50	91.45	S-S	(2)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	35.05	168.25	87.63	S-S	(1)
260	35.05	142.50	87.63	S-S	(1)
270	23.77	49.00	59.43	S-S	(211)
280	23.77	47.50	59.43	S-S	(211)
290	35.05	177.50	87.63	S-S	(1)
300	35.05	202.00	87.63	S-S	(1)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 42 Name: 64

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	28.35	52.00	70.88	S-S	(20)
110	28.35	69.00	70.88	S-S	(20)
120	28.35	85.50	70.88	S-S	(20)
130	28.35	100.50	70.88	S-S	(20)
140	43.89	46.00	109.72	S-S	(109 115 121 127)

150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	33.53	54.25	83.82	S-S	(139 133 145 151)
180	28.35	122.75	70.88	S-S	(20)
190	28.35	128.36	70.88	S-S	(20)
200	28.35	130.06	70.88	S-S	(20)
210	28.35	127.88	70.88	S-S	(20)
220	28.35	121.50	70.88	S-S	(20)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	28.35	120.50	70.88	S-S	(20)
340	28.35	125.00	70.88	S-S	(20)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 43 Name: 65

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	28.35	52.00	70.88	S-S	(20)
110	28.35	69.00	70.88	S-S	(20)
120	28.35	85.50	70.88	S-S	(20)
130	28.35	100.50	70.88	S-S	(20)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	33.53	50.31	83.82	S-S	(139 133 145 151)
190	28.35	128.36	70.88	S-S	(20)
200	28.35	130.06	70.88	S-S	(20)
210	28.35	127.88	70.88	S-S	(20)
220	28.35	121.50	70.88	S-S	(20)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	28.35	120.50	70.88	S-S	(20)
340	28.35	125.00	70.88	S-S	(20)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 44 Name: 66

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 43.00 GEP: 108.39

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	36.58	88.75	91.45	S-S	(2)
30	36.58	86.38	91.45	S-S	(2)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	35.05	142.50	87.63	S-S	(1)
90	35.05	113.00	87.63	S-S	(1)
100	35.05	147.50	87.63	S-S	(1)
110	35.05	177.50	87.63	S-S	(1)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	35.05	221.98	87.63	S-S	(1)
200	36.58	88.75	91.45	S-S	(2)
210	36.58	86.50	91.45	S-S	(2)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	35.05	113.00	87.63	S-S	(1)
280	35.05	147.50	87.63	S-S	(1)
290	35.05	177.50	87.63	S-S	(1)
300	35.05	202.00	87.63	S-S	(1)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 45 Name: 67

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 60.00 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	35.05	211.50	87.63	S-S	(1)
50	35.05	203.25	87.63	S-S	(1)
60	35.05	188.50	87.63	S-S	(1)
70	35.05	168.00	87.63	S-S	(1)
80	35.05	142.50	87.63	S-S	(1)
90	35.05	113.00	87.63	S-S	(1)
100	35.05	147.50	87.63	S-S	(1)
110	35.05	177.50	87.63	S-S	(1)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)

150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	35.05	221.98	87.63	S-S	(1)
200	35.05	216.19	87.63	S-S	(1)
210	35.05	213.50	87.63	S-S	(1)
220	35.05	211.50	87.63	S-S	(1)
230	35.05	203.00	87.63	S-S	(1)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	36.58	63.00	91.45	S-S	(2)
270	36.58	55.00	91.45	S-S	(2)
280	35.05	147.50	87.63	S-S	(1)
290	35.05	177.50	87.63	S-S	(1)
300	35.05	202.00	87.63	S-S	(1)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 46 Name: 68

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 43.94 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	43.89	41.63	106.33	S-S	(109 115 121 127)
20	43.89	44.06	109.72	S-S	(109 115 121 127)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	43.89	40.00	103.89	S-S	(109 115 121 127)
110	43.89	43.00	108.39	S-S	(109 115 121 127)
120	43.89	44.50	109.72	S-S	(109 115 121 127)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	42.50	107.64	S-S	(109 115 121 127)
300	43.89	44.50	109.72	S-S	(109 115 121 127)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	43.89	39.00	102.39	S-S	(109 115 121 127)

Stack number: 47 Name: 70

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 43.94 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	43.89	41.63	106.33	S-S	(109 115 121 127)
20	43.89	44.06	109.72	S-S	(109 115 121 127)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	43.89	40.00	103.89	S-S	(109 115 121 127)
110	43.89	43.00	108.39	S-S	(109 115 121 127)
120	43.89	44.50	109.72	S-S	(109 115 121 127)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)
150	43.89	45.75	109.72	S-S	(109 115 121 127)
160	43.89	44.00	109.72	S-S	(109 115 121 127)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	42.50	107.64	S-S	(109 115 121 127)
300	43.89	44.50	109.72	S-S	(109 115 121 127)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	43.89	45.75	109.72	S-S	(109 115 121 127)
340	43.89	44.00	109.72	S-S	(109 115 121 127)
350	43.89	41.63	106.33	S-S	(109 115 121 127)
360	43.89	39.00	102.39	S-S	(109 115 121 127)

Stack number: 48 Name: 71

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	43.89	41.63	106.33	S-S	(109 115 121 127)
20	43.89	44.06	109.72	S-S	(109 115 121 127)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	43.89	40.00	103.89	S-S	(109 115 121 127)
110	43.89	43.00	108.39	S-S	(109 115 121 127)
120	43.89	44.50	109.72	S-S	(109 115 121 127)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	43.89	46.00	109.72	S-S	(109 115 121 127)

150	33.53	59.75	83.82	S-S	(139 133 145 151)
160	33.53	55.75	83.82	S-S	(115 109 121 127 133)
170	33.53	48.50	83.82	S-S	(115 109 121 127 133)
180	33.53	50.31	83.82	S-S	(139 133 145 151)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	42.50	107.64	S-S	(109 115 121 127)
300	43.89	44.50	109.72	S-S	(109 115 121 127)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	43.89	46.00	109.72	S-S	(109 115 121 127)
330	33.53	59.75	83.82	S-S	(139 133 145 151)
340	33.53	55.75	83.82	S-S	(115 109 121 127 133)
350	33.53	48.50	83.82	S-S	(115 109 121 127 133)
360	33.53	50.31	83.82	S-S	(139 133 145 151)

Stack number: 49 Name: 72

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 42.56 GEP: 107.73

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	43.89	42.56	107.73	S-S	(127 109 115 121)
30	28.35	127.75	70.88	S-S	(20)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	35.05	147.50	87.63	S-S	(1)
110	35.05	177.50	87.63	S-S	(1)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)
150	36.58	101.50	91.45	S-S	(2)
160	43.89	42.56	107.73	S-S	(127 109 115 121)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	42.56	107.73	S-S	(127 109 115 121)
210	28.35	127.88	70.88	S-S	(20)
220	28.35	121.50	70.88	S-S	(20)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	28.35	120.50	70.88	S-S	(20)
340	43.89	42.56	107.73	S-S	(127 109 115 121)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 50 Name: 73

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 43.94 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	28.35	128.34	70.88	S-S	(20)
20	28.35	130.06	70.88	S-S	(20)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	28.35	121.75	70.88	S-S	(20)
50	28.35	111.75	70.88	S-S	(20)
60	28.35	98.75	70.88	S-S	(20)
70	28.35	82.50	70.88	S-S	(20)
80	28.35	63.50	70.88	S-S	(20)
90	28.35	43.00	70.88	S-S	(20)
100	35.05	147.50	87.63	S-S	(1)
110	35.05	177.50	87.63	S-S	(1)
120	35.05	202.00	87.63	S-S	(1)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)
150	36.58	101.50	91.45	S-S	(2)
160	36.58	99.25	91.45	S-S	(2)
170	43.89	41.63	106.33	S-S	(109 115 121 127)
180	43.89	39.00	102.39	S-S	(109 115 121 127)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	28.35	121.50	70.88	S-S	(20)
230	28.35	112.00	70.88	S-S	(20)
240	28.35	98.75	70.88	S-S	(20)
250	28.35	82.25	70.88	S-S	(20)
260	28.35	63.50	70.88	S-S	(20)
270	28.35	43.00	70.88	S-S	(20)
280	28.35	52.50	70.88	S-S	(20)
290	28.35	69.00	70.88	S-S	(20)
300	28.35	85.50	70.88	S-S	(20)
310	28.35	100.50	70.88	S-S	(20)
320	28.35	112.00	70.88	S-S	(20)
330	28.35	120.50	70.88	S-S	(20)
340	28.35	125.00	70.88	S-S	(20)
350	28.35	125.75	70.88	S-S	(20)
360	28.35	122.75	70.88	S-S	(20)

Stack number: 51 Name: 76

Structure producing the greatest GEP stack height within 5L: (1)
Height: 35.05 Width: 224.50 GEP: 87.63

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	17.68	30.23	44.20	S-S	(13 55)
20	32.00	25.31	69.97	S-S	(13)
30	32.00	28.63	74.94	S-S	(13)
40	32.00	31.25	78.88	S-S	(13)
50	32.00	32.75	80.00	S-S	(13)
60	32.00	33.25	80.00	S-S	(13)
70	32.00	33.00	80.00	S-S	(13)
80	32.00	31.50	79.25	S-S	(13)
90	32.00	29.00	75.50	S-S	(13)
100	32.00	31.50	79.25	S-S	(13)
110	32.00	33.00	80.00	S-S	(13)
120	32.00	33.00	80.00	S-S	(13)
130	32.00	32.75	80.00	S-S	(13)
140	32.00	31.00	78.50	S-S	(13)

150	32.00	28.75	75.13	S-S	(13)
160	17.68	31.00	44.20	S-S	(61 55)
170	17.68	31.38	44.20	S-S	(13 55)
180	17.68	27.88	44.20	S-S	(13 55)
190	17.68	30.23	44.20	S-S	(13 55)
200	32.00	25.31	69.97	S-S	(13)
210	32.00	28.75	75.13	S-S	(13)
220	32.00	31.25	78.88	S-S	(13)
230	32.00	32.75	80.00	S-S	(13)
240	32.00	33.50	80.00	S-S	(13)
250	32.00	33.00	80.00	S-S	(13)
260	32.00	31.50	79.25	S-S	(13)
270	32.00	29.00	75.50	S-S	(13)
280	32.00	31.50	79.25	S-S	(13)
290	32.00	33.00	80.00	S-S	(13)
300	35.05	202.00	87.63	S-S	(1)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	17.68	27.88	44.20	S-S	(13 55)

Stack number: 52 Name: 79

Structure producing the greatest GEP stack height within 5L: (1)
Height: 35.05 Width: 226.00 GEP: 87.63

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	22.86	7.08	33.48	S-S	(67)
20	22.86	7.81	34.58	S-S	(67)
30	22.86	8.25	35.24	S-S	(67)
40	22.86	8.50	35.61	S-S	(67)
50	22.86	8.50	35.61	S-S	(67)
60	19.81	93.00	49.52	S-S	(37)
70	19.81	76.50	49.52	S-S	(37)
80	32.00	31.50	79.25	S-S	(13)
90	19.81	37.00	49.52	S-S	(37)
100	19.81	58.00	49.52	S-S	(37)
110	22.86	8.00	34.86	S-S	(67)
120	32.00	33.00	80.00	S-S	(13)
130	0.00	0.00	0.00	ND	
140	0.00	0.00	0.00	ND	
150	0.00	0.00	0.00	ND	
160	0.00	0.00	0.00	ND	
170	0.00	0.00	0.00	ND	
180	0.00	0.00	0.00	ND	
190	22.86	7.06	33.45	S-S	(67)
200	22.86	7.81	34.58	S-S	(67)
210	22.86	8.25	35.24	S-S	(67)
220	22.86	8.50	35.61	S-S	(67)
230	22.86	8.50	35.61	S-S	(67)
240	22.86	8.25	35.24	S-S	(67)
250	22.86	7.75	34.49	S-S	(67)
260	32.00	31.50	79.25	S-S	(13)
270	32.00	29.00	75.50	S-S	(13)
280	32.00	31.50	79.25	S-S	(13)
290	35.05	177.50	87.63	S-S	(1)
300	35.05	202.00	87.63	S-S	(1)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	0.00	0.00	0.00	ND	
350	0.00	0.00	0.00	ND	
360	0.00	0.00	0.00	ND	

Stack number: 53 Name: 80

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 56.50 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	35.05	211.50	87.63	S-S	(1)
50	35.05	203.25	87.63	S-S	(1)
60	35.05	188.50	87.63	S-S	(1)
70	35.05	168.00	87.63	S-S	(1)
80	35.05	142.50	87.63	S-S	(1)
90	35.05	113.00	87.63	S-S	(1)
100	35.05	147.50	87.63	S-S	(1)
110	35.05	177.50	87.63	S-S	(1)
120	35.05	202.00	87.63	S-S	(1)
130	36.58	97.00	91.45	S-S	(2)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	35.05	221.98	87.63	S-S	(1)
200	35.05	216.19	87.63	S-S	(1)
210	35.05	213.50	87.63	S-S	(1)
220	35.05	211.50	87.63	S-S	(1)
230	35.05	203.00	87.63	S-S	(1)
240	35.05	188.50	87.63	S-S	(1)
250	35.05	168.25	87.63	S-S	(1)
260	35.05	142.50	87.63	S-S	(1)
270	36.58	55.00	91.45	S-S	(2)
280	36.58	69.00	91.45	S-S	(2)
290	36.58	81.00	91.45	S-S	(2)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

Stack number: 54 Name: 81

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 40.50 GEP: 104.64

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	36.58	88.75	91.45	S-S	(2)
30	36.58	86.38	91.45	S-S	(2)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	36.58	69.00	91.45	S-S	(2)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)

150	36.58	101.50	91.45	S-S	(2)
160	36.58	99.25	91.45	S-S	(2)
170	36.58	93.63	91.45	S-S	(2)
180	36.58	85.38	91.45	S-S	(2)
190	36.58	88.42	91.45	S-S	(2)
200	36.58	88.75	91.45	S-S	(2)
210	36.58	86.50	91.45	S-S	(2)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	40.50	104.64	S-S	(127 109 115 121)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	36.58	93.75	91.45	S-S	(2)
360	36.58	85.38	91.45	S-S	(2)

Stack number: 55 Name: 82

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 40.50 GEP: 104.64

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	36.58	88.42	91.45	S-S	(2)
20	36.58	88.75	91.45	S-S	(2)
30	36.58	86.38	91.45	S-S	(2)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	36.58	69.00	91.45	S-S	(2)
110	36.58	81.00	91.45	S-S	(2)
120	36.58	90.00	91.45	S-S	(2)
130	36.58	97.00	91.45	S-S	(2)
140	36.58	100.75	91.45	S-S	(2)
150	36.58	101.50	91.45	S-S	(2)
160	36.58	99.25	91.45	S-S	(2)
170	36.58	93.63	91.45	S-S	(2)
180	36.58	85.38	91.45	S-S	(2)
190	36.58	88.42	91.45	S-S	(2)
200	36.58	88.75	91.45	S-S	(2)
210	36.58	86.50	91.45	S-S	(2)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	40.50	104.64	S-S	(127 109 115 121)
300	36.58	90.50	91.45	S-S	(2)
310	36.58	97.00	91.45	S-S	(2)
320	36.58	100.75	91.45	S-S	(2)
330	36.58	101.50	91.45	S-S	(2)
340	36.58	99.00	91.45	S-S	(2)
350	36.58	93.75	91.45	S-S	(2)
360	36.58	85.38	91.45	S-S	(2)

Stack number: 56 Name: 83

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.75 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	43.89	41.63	106.33	S-S	(109 115 121 127)
20	43.89	44.06	109.72	S-S	(109 115 121 127)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	33.53	55.00	83.82	S-S	(139 133 145 151)
110	33.53	58.00	83.82	S-S	(139 133 145 151)
120	33.53	60.50	83.82	S-S	(139 133 145 151)
130	33.53	61.25	83.82	S-S	(139 133 145 151)
140	33.53	61.50	83.82	S-S	(139 133 145 151)
150	33.53	59.75	83.82	S-S	(139 133 145 151)
160	33.53	57.50	83.82	S-S	(139 133 145 151)
170	33.53	54.25	83.82	S-S	(139 133 145 151)
180	33.53	50.31	83.82	S-S	(139 133 145 151)
190	43.89	41.61	106.30	S-S	(109 115 121 127)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	33.53	54.50	83.82	S-S	(139 133 145 151)
270	33.53	50.00	83.82	S-S	(139 133 145 151)
280	33.53	55.00	83.82	S-S	(139 133 145 151)
290	33.53	58.00	83.82	S-S	(139 133 145 151)
300	33.53	60.00	83.82	S-S	(139 133 145 151)
310	33.53	61.25	83.82	S-S	(139 133 145 151)
320	33.53	61.50	83.82	S-S	(139 133 145 151)
330	33.53	59.75	83.82	S-S	(139 133 145 151)
340	33.53	57.50	83.82	S-S	(139 133 145 151)
350	33.53	54.38	83.82	S-S	(139 133 145 151)
360	33.53	50.31	83.82	S-S	(139 133 145 151)

Stack number: 57 Name: 84

Structure producing the greatest GEP stack height within 5L: (109 115 121 127)
Height: 43.89 Width: 44.00 GEP: 109.72

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	33.53	54.31	83.82	S-S	(139 133 145 151)
20	43.89	44.06	109.72	S-S	(109 115 121 127)
30	43.89	45.75	109.72	S-S	(109 115 121 127)
40	43.89	46.00	109.72	S-S	(109 115 121 127)
50	43.89	45.50	109.72	S-S	(109 115 121 127)
60	43.89	44.75	109.72	S-S	(109 115 121 127)
70	43.89	42.50	107.64	S-S	(109 115 121 127)
80	43.89	40.00	103.89	S-S	(109 115 121 127)
90	43.89	36.00	97.89	S-S	(109 115 121 127)
100	43.89	40.00	103.89	S-S	(109 115 121 127)
110	43.89	43.00	108.39	S-S	(109 115 121 127)
120	43.89	44.50	109.72	S-S	(109 115 121 127)
130	43.89	45.50	109.72	S-S	(109 115 121 127)
140	33.53	61.50	83.82	S-S	(139 133 145 151)

150	33.53	59.75	83.82	S-S	(139 133 145 151)
160	33.53	57.50	83.82	S-S	(139 133 145 151)
170	33.53	54.25	83.82	S-S	(139 133 145 151)
180	33.53	50.31	83.82	S-S	(139 133 145 151)
190	33.53	54.30	83.82	S-S	(139 133 145 151)
200	43.89	44.06	109.72	S-S	(109 115 121 127)
210	43.89	45.75	109.72	S-S	(109 115 121 127)
220	43.89	46.00	109.72	S-S	(109 115 121 127)
230	43.89	45.50	109.72	S-S	(109 115 121 127)
240	43.89	44.75	109.72	S-S	(109 115 121 127)
250	43.89	42.75	108.01	S-S	(109 115 121 127)
260	43.89	40.00	103.89	S-S	(109 115 121 127)
270	43.89	36.00	97.89	S-S	(109 115 121 127)
280	43.89	40.00	103.89	S-S	(109 115 121 127)
290	43.89	42.50	107.64	S-S	(109 115 121 127)
300	43.89	44.50	109.72	S-S	(109 115 121 127)
310	43.89	45.50	109.72	S-S	(109 115 121 127)
320	33.53	61.50	83.82	S-S	(139 133 145 151)
330	33.53	59.75	83.82	S-S	(139 133 145 151)
340	33.53	57.50	83.82	S-S	(139 133 145 151)
350	33.53	54.38	83.82	S-S	(139 133 145 151)
360	33.53	50.31	83.82	S-S	(139 133 145 151)

Stack number: 58 Name: 85

Structure producing the greatest GEP stack height within 5L: (2)
Height: 36.58 Width: 55.00 GEP: 91.45

Direction Specific Building Downwash

Degree	Height	Width	GEP	Method	Dominant Structure
10	35.05	221.98	87.63	S-S	(1)
20	35.05	216.19	87.63	S-S	(1)
30	35.05	213.50	87.63	S-S	(1)
40	36.58	81.25	91.45	S-S	(2)
50	36.58	75.50	91.45	S-S	(2)
60	36.58	73.50	91.45	S-S	(2)
70	36.58	69.50	91.45	S-S	(2)
80	36.58	63.00	91.45	S-S	(2)
90	36.58	55.00	91.45	S-S	(2)
100	36.58	69.00	91.45	S-S	(2)
110	35.05	177.50	87.63	S-S	(1)
120	35.05	202.00	87.63	S-S	(1)
130	35.05	220.75	87.63	S-S	(1)
140	35.05	232.50	87.63	S-S	(1)
150	35.05	237.25	87.63	S-S	(1)
160	35.05	235.00	87.63	S-S	(1)
170	35.05	225.25	87.63	S-S	(1)
180	35.05	221.00	87.63	S-S	(1)
190	35.05	221.98	87.63	S-S	(1)
200	35.05	216.19	87.63	S-S	(1)
210	35.05	213.50	87.63	S-S	(1)
220	36.58	81.50	91.45	S-S	(2)
230	36.58	75.50	91.45	S-S	(2)
240	36.58	73.50	91.45	S-S	(2)
250	36.58	69.50	91.45	S-S	(2)
260	36.58	63.00	91.45	S-S	(2)
270	36.58	55.00	91.45	S-S	(2)
280	36.58	69.00	91.45	S-S	(2)
290	35.05	177.50	87.63	S-S	(1)
300	35.05	202.00	87.63	S-S	(1)
310	35.05	220.75	87.63	S-S	(1)
320	35.05	232.50	87.63	S-S	(1)
330	35.05	237.25	87.63	S-S	(1)
340	35.05	234.75	87.63	S-S	(1)
350	35.05	225.25	87.63	S-S	(1)
360	35.05	221.00	87.63	S-S	(1)

****

Run ended on: 10/31/1997 at 14:05:31
****

The following files are provided in the attached diskettes.

```
 Volume in drive U is VOL1

 Directory of U:\P\1997\9781-032\SEND-DEQ


.               <DIR>
..              <DIR>
09CF87   DAT        60,982  10-31-97  8:49p
09CF87   LST       718,482  10-31-97  9:11p
09CF88   DAT        60,982  11-01-97 12:12a
09CF88   LST       718,482  11-01-97 12:38a
09CF89   DAT        60,982  11-01-97  3:37a
09CF89   LST       718,482  11-01-97  4:03a
09CF90   DAT        60,982  11-01-97  6:54a
09CF90   LST       718,482  11-01-97  7:19a
09CF91   DAT        60,982  11-01-97 10:08a
09CF91   LST       718,482  11-01-97 10:32a
09NF87   DAT        64,052  10-31-97  9:11p
09NF87   LST       415,411  10-31-97  9:38p
09NF88   DAT        64,052  11-01-97 12:38a
09NF88   LST       415,411  11-01-97  1:07a
09NF89   DAT        64,052  11-01-97  4:03a
09NF89   LST       415,411  11-01-97  4:32a
09NF90   DAT        64,052  11-01-97  7:20a
09NF90   LST       415,411  11-01-97  7:47a
09NF91   DAT        64,052  11-01-97 10:32a
09NF91   LST       415,411  11-01-97 10:59a
09PF87   DAT       111,188  10-31-97  6:43p
09PF87   LST     2,649,312  10-31-97  8:48p
09PF88   DAT       111,188  10-31-97  9:51p
09PF88   LST     2,649,312  11-01-97 12:12a
09PF89   DAT       111,188  11-01-97  1:21a
09PF89   LST     2,649,312  11-01-97  3:36a
09PF90   DAT       111,188  11-01-97  4:45a
09PF90   LST     2,649,312  11-01-97  6:54a
09PF91   DAT       111,188  11-01-97  8:01a
09PF91   LST     2,649,312  11-01-97 10:08a
09SF87   DAT        56,655  10-31-97  9:38p
09SF87   LST       802,330  10-31-97  9:51p
09SF88   DAT        56,655  11-01-97  1:07a
09SF88   LST       802,330  11-01-97  1:21a
09SF89   DAT        56,655  11-01-97  4:32a
09SF89   LST       802,330  11-01-97  4:45a
09SF90   DAT        56,655  11-01-97  7:48a
09SF90   LST       802,330  11-01-97  8:01a
09SF91   DAT        56,655  11-01-97 10:59a
09SF91   LST       802,330  11-01-97 11:13a
RKS87    ASC       438,029  10-16-97  1:44p
RKS88    ASC       439,229  10-16-97  1:44p
RKS89    ASC       438,029  10-16-97  1:43p
RKS90    ASC       438,029  10-16-97  1:22p
RKS91    ASC       438,029  10-16-97  1:31p
SEND-DEQ TXT             0  11-04-97  6:50p
SOLVAY11 BPI        16,241  10-31-97  1:24p
SOLVAY11 BPO       369,135  10-31-97  2:11p
        48 file(s)     26,968,781 bytes
         2 dir(s)     760,283,136 bytes free
```