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MEMORANDUM

DATE:	2022-02-07	**RWDI Reference No.:** 1701163
TO:	Rajan Sawhney	**EMAIL:** SawhneyR@bv.com
FROM:	Alain Carriere	**EMAIL:** Alain.Carriere@rwdi.com
CC:	Ben Coulson	**EMAIL:** Ben.Coulson@rwdi.com

Air Quality Impact Assessment
Water Resource Recovery Facility (WRRF)
Nobleton, Ontario

Dear Mr. Sawhney,

RWDI was retained by Black & Veatch (B&V) to complete a quantitative assessment of the potential air quality effects related to the wastewater servicing improvements in the community of Nobleton, Ontario. The need for the proposed improvements were identified in the 2016 York Region Water and Wastewater Master Plan and are subject to a Schedule C Municipal Class Environmental Assessment Study (EA). This memo was prepared and issued in July 2021in support of this EA and assesses the potential air quality effects of the selected design concept (Wastewater Servicing Alternative A). Since issuance, the Memo has been updated to address York Region and Ministry of the Environment, Conservation and Parks (MECP) review comments. RWDI has prepared a separate memo focusing on noise effects.

Background

The service and EA study areas are shown in Figure 1 below.

In support of Technical Memo 3, RWDI prepared a high-level qualitative assessment of the potential effects of the proposed changes, dated April 30, 2021. Since the preparation of the qualitative assessment, RWDI conducted a site visit to observe the current operations at all affected facilities.

This assessment expands on the previous qualitative study, by quantifying existing air quality levels from the most significant contaminant sources.

Study Area and Service Area

Figure 1: Study Area and Service Area

Design specifics are currently evolving to meet planning requirements. At this stage, the Nobleton Water Resource Recovery Facility (WRRF) is expected to add new primary, secondary and tertiary treatment infrastructure, and new effluent pump station. These changes are expected to increase the existing capacity and as a result, air quality emissions are expected to also increase, particularly for odour-related contaminants.

The proposed changes to Well #2, Well #5 and the Janet Avenue Pumping Station will increase flowrate through each of these sites but are not expected to increase the emissions associated with any of the equipment. The standby generators at Well #5 and the Janet Avenue Pumping Station are air quality sources that may be upsized as part of the planned upgrades. Ontario Regulation 524/98 (O.Reg. 524/98) outlines a set of air quality and noise parameters for standby generators that, when met, are expected to result in insignificant effects; hence the MECP does not require an environmental approval for such sources. The following O.Reg. 524/98 sections apply to air quality:

1. (6.3) For the purposes of paragraph 26 of subsection 1 (1), the following criteria must be met:

1. *Each exhaust stack that is part of the standby power system and that may discharge a product of combustion from the system into the air is oriented vertically.*
2. *The standby power system uses only one or more of the following as fuel:*
    - i. *Biodiesel.*
    - ii. *Diesel.*
    - iii. *Natural Gas.*
    - iv. *Propane*
3. *Each generation unit that is part of the standby power system and that uses diesel or biodiesel as fuel,*
    - i. *has been designed by the manufacturer of the unit to meet, at a minimum, the Tier 1 Emission Standards set out in Table 1 of 40 CFR 89.112 (United States), or*
    - ii. *is equipped with pollution control equipment specified by the manufacturer of the equipment to limit the discharge of contaminants so that the unit, at a minimum, meets the Tier 1 Emission Standards set out in Table 1 of 40 CFR 89.112 (United States).*
4. *Each generator unit that is part of the standby power system and that uses propane or natural gas as fuel,*
    - i. *has been designed by the manufacturer of the unit to discharge a maximum of 9.2 grams of nitrogen oxides per kilowatt hour, or*
    - ii. *is equipped with pollution control equipment specified by the manufacturer of the equipment to limit the discharge of nitrogen oxides to a maximum of 9.2 grams per kilowatt hour. O. Reg. 14/17, s. 2 (5).*

And

4. (1) 5 Each exhaust stack that may discharge a product of combustion is free of impediments that would prevent the flow of emissions.

The new generators are expected to meet the O.Reg. 524/98 conditions at minimum. Thus, these sources are not expected to have any notable air quality effects and are not assessed further in this memo. The proposed changes to Well #2, Well #5 and the Janet Avenue Pumping Station were assessed qualitatively in the previous memo.

Given the above, the quantitative assessment focussed on the proposed changes to the WRRF, since it is the only alteration expected to have a notable effect on air quality based on its increasing footprint and capacity. The WRRF location and property boundary are shown in Appendix A.

Methodology

The Nobleton WRRF produces a variety of air contaminants as a result of physical, chemical and biological processes. In addition to these processes, there is also auxiliary/support equipment such as heating, ventilation, and air conditioning (HVAC) equipment and emergency generators that also produce emissions. In our experience with similar facilities, besides odour, specific air contaminants of concern that are usually found through sampling include:

- Total Reduced Sulphur (TRS);
- Hydrogen Sulphide (H_2S);
- Ammonia (NH_3);
- Sulphur Dioxide (SO_2); and
- Nitrogen Oxides (NO_X).

The above compounds are included in this assessment along with odour.

The most significant emission sources from the facility were identified as:

- the sludge loading area;
- an emergency diesel-fired generator; and
- three natural gas-fired air make-up units (AMUs).

No sludge loading occurred during a site visit conducted on June 16, 2021. However, RWDI noted strong odours coming from vents for the sludge holding area. In the absence of sludge loading activities, these vents were noted to be a source of odour on site but their odour was not noticeable half-way along the WRRF driveway nor offsite near the closest residence to the north. Furthermore, sludge loading activities are expected to generate more odours due to the disturbance and movement of sludge and should dominate compared to the holding area vents. Therefore, the worst-case operating scenario includes only sludge loading in the quantitative assessment and not the holding area vents which were considered insignificant in comparison to other odours onsite.

Future conditions as part of the WRRF expansion were not assessed due to limited odour information available, however, a future scenario will be included as part of an updated assessment for the detailed design once additional odour data becomes available. That assessment will be submitted for MECP review and comment.

The assessment follows Ontario Regulation 419/05 and guidance developed by the MECP. Air dispersion modelling was conducted using the AERMOD air dispersion model (Version 19191) and in accordance with Guideline A-11: Air Dispersion Modelling Guideline for Ontario Version 3.0 (February 2017). Natural gas combustion sources (e.g. HVAC equipment) and the standby generator, were modelled as point sources, while the load-out activities were assessed as a volume source per industry-standard techniques. Results were assessed against criteria outlined in the MECP publication

"Air Contaminant Benchmark (ACB) List: Standards, guidelines and screening levels for assessing point of impingement" and the Technical Bulletin; Methodology for Modelling Assessments of Contaminants with 10-Minute Average Standards and Guidelines under O.Reg. 419. Air quality effects from construction activities are not assessed.

According to the Technical Bulletin; Methodology for Modelling Assessments of Contaminants with 10-Minute Average Standards, site-specific meteorological data must be used for odour frequency assessments. Site-specific meteorology was not immediately available for this location and the assessment used a standard meteorological data set from the MECP since it will capture the appropriate order of magnitude effects at this stage in the design. The Central Region meteorological data set was chosen based on location of this facility. This includes surface data from Pearson International Airport in Toronto and upper air data from Buffalo, New York. Within each region, the MECP provides alternative data sets with the choice of data set depending on the character of the terrain at the study site. The default data set for "crops" was used. A wind rose for the Toronto crops (AERMET v.19191) data set is provided in Figure 2. The use of site-specific meteorological data during the detailed design stage will be implemented to align with the technical bulletin.

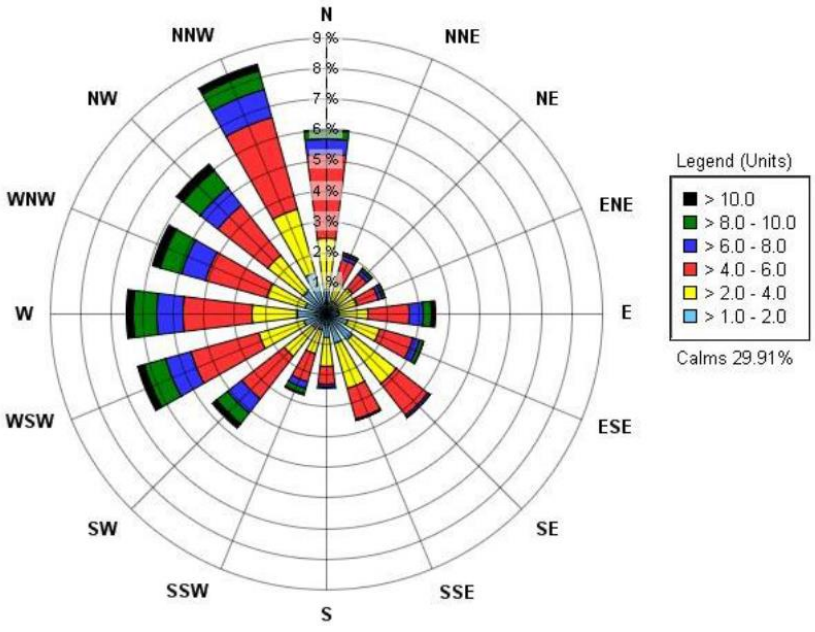


Figure 2: Toronto Crops (AERMET v.19191) Wind Rose

An AERMOD air dispersion model was prepared to assess a reasonable worst-case operating condition of the existing facility which involved the simultaneous operation of the following sources:

- A truck receiving sludge at the loading area;
- All natural gas-fired equipment; and
- The standby generator.

In the absence of facility-specific emission data, RWDI reviewed historical projects that included comparable facilities to obtain surrogate data for model inputs. Data was considered comparable and relevant to the WRRF assessment if it originated from a facility that had a similar maximum capacity and process. The reviewed data suggested that emission rates of comparable facilities vary by a large margin. Given the large variability, RWDI selected data in the middle of the range with the upper range being as much as four times higher. This assumption may not be conservative relative to the actual operation of the WRRF as it is hard to confirm if sludge loading was conducted differently at the historical projects, but is expected to be representative. Source measurements would be required to quantify these sources more reliably. The emission data is summarized in Table 1.

Table 1: Assumed Emission Rates

Contaminant	Emission Rate (g/s)
Hydrogen Sulphide	6.55×10^{-3}
Total Reduced Sulphur Compounds	6.67×10^{-3}
Ammonia	1.61×10^{-4}
Odour	11,147 (OU/s)*
Oxides of Nitrogen	2.36
Sulphur Dioxide	1.55×10^{-1}

Notes:
* OU = Odour units.

The MECP odour guidance indicates that levels should be below 1 odour unit per cubic meter (OU/m^3) at a sensitive receptor location. Odour levels above 1 OU/m^3 are considered acceptable if the frequency of occurrence is less than 0.5% of the time based on a 5-year modelling period[1].

Findings

The maximum predicted concentrations based on the worst-case existing operating scenario are summarized in Table A1 in Appendix A. All contaminants are predicted to be below the applicable limits with the exception of odour.

[1] Technical Bulletin; Methodology for Modelling Assessments of Contaminants with 10-Minute Average Standards and Guidelines under O.Reg. 419/05, September 2016

For odour, the WRRF was expected to be within the 1 OU/m^3 MECP limit at sensitive receptor locations; however, the maximum predicted 10-minute odour concentration for the existing conditions (i.e., without considering any expansion) was 17.6 OU/m^3 at the nearest sensitive receptor R1 to the north of the facility (see Figure 2). Hence, further assessment of the future conditions was not considered and a frequency analysis was conducted to determine the percentage of time that predicted existing odour levels would exceed 1 OU/m^3. Refer to Table A2, in Appendix A, for the frequency results. Modelling outputs are provided in Appendix B at the end of this memo.

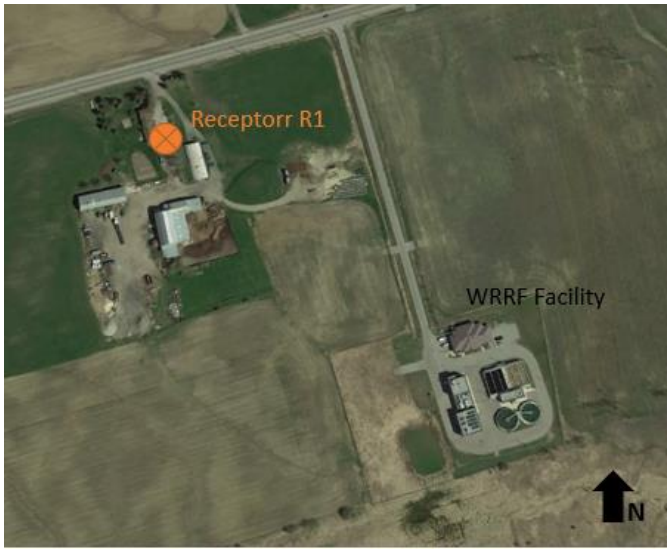


Figure 2: Receptor Location

The frequency analysis determined that the frequency of non-conformances of the MECP limit was 0.57% just above the accepted 0.5% threshold. Therefore, odour mitigation is recommended to be incorporated into the future design based on the current analysis.

Given the predicted elevated at-receptor odour concentration (both at the outdoor amenity space and the second storey window), odour complaints are anticipated. However, since there is no historical evidence of complaints at the nearest residence, the odour assessment may overestimate the existing conditions or the residents may be accustomed to the odours, as odour is subjective, and detection varies from person to person.

The recommendation to mitigate odours is based on the information currently available. The odour emission data is approximate and could be refined. The odour analysis could be re-visited at the detailed design stage, particularly improved odour emissions with either better surrogate data or on-site measurements, to verify the accuracy of the results. Better surrogate data can include sampling conducted at other local water treatment facilities at other towns/municipalities that have similar design. In lieu of better surrogate data, sampling can be conducted on site to obtain representative emission rates. If site-specific sampling is conducted, it should be during sludge loading activities to obtain a representative worst-case scenario. Revising the odour data may not eliminate the need for odour mitigation but would confirm the need for mitigation and refine its design.

If more detailed odour assessment is not considered, mitigation for the truck loading activities must be designed. Mitigation options could include enclosing the truck load-out area and putting odour controls (e.g., biofilter) on any associated vents. Such design measures are not uncommon for sludge handling operations at similar facilities. Given the potency of existing sludge storage vent odours observed at the site, mitigation may be warranted.

The predicted odour levels represent existing conditions and were not carried further since non-conformances were predicted. If the emission rates were scaled to represent the future condition, it would only increase the predicted future levels. Hence, either physical mitigation is necessary based on the current analysis or the odour analysis must be refined to confirm the need for mitigation.

Future zoning changes in the area could potentially create additional sensitive receptors which would need to be included in the modelling. As of the date of this report, there is no available information on any future zoning changes in the area or potential future sensitive receptors to be included in this assessment. The WRRF is already permitted to operate, and this assessment was completed to assess the potential air quality effects related to the wastewater servicing improvements. Should zoning changes or the introduction of sensitive receptors occur in the future, the developers of the new land uses will be obligated to consider the influence of the WRRF in the area. The land use planning authority would ensure this future assessment occurs for any potential land use changes.

Conclusion

The proposed WRRF improvements outlined earlier are typical of those necessary to meet the demand of a growing community. Modelling of existing operations indicate that there may already be odour non-conformances at the nearest existing residence, and some other contaminants are close to their thresholds.

Since there is no history of complaints, the modelled emissions may not be representative. Further refinement of odour emissions is recommended during the detail design stage which could include site-specific odour sampling. For outdoor/fugitive sources, a field odour survey can be conducted using portable dilution meters (known as olfactometers) which helps to validate odour levels at discrete locations (e.g., at property lines or receptors). For indoor/contained sources concentrated samples can be taken to be analyzed using an accredited odour panel. Odour emission rates are then derived from the site-specific data collected. Alternatively, physical mitigation measures must be considered for the sludge holding and handling area. Such mitigation could include an enclosed ventilated load-out area for the sludge transfer or other physical mitigation.

Since future conditions as part of the WRRF expansion were not assessed specifically, physical mitigation may be warranted regardless of any revised odour assessment. The identification of detailed mitigation measures will be completed during the detailed design stage of this project and will include consultation with the MECP, odour sampling, if better surrogate data is not available at the time, and review of the MECP's "Best Management Practices for Industrial Sources of Odour". The work will include the WRRF expansion.

When a detailed design plan has been completed, the facility will apply for an Environmental Compliance Approval in consultation with all relevant standards and the following documents:

a. Draft Guideline to Address Odour Mixtures in Ontario (MECP, May 2021): https://ero.ontario.ca/notice/019-2768

b. Draft Technical Bulletin Methodology for Completing an Odour Assessment for Odour Mixtures (MECP, March 2021): https://prod-environmental-registry.s3.amazonaws.com/2021-03/Draft%20Odour%20Assessment%20Technical%20Bulletin%202021.pdf

APPENDIX A

Table 1 - Emission Summary Table

RWDI# 1701163

Nobleton WRRF

Receptor	Contaminant	CAS Number	Total Facility Emission Rate (g/s)	Air Dispersion Model Used	Maximum POI Concentration (µg/m³)	Averaging Period (hours)	MECP POI Limit [1] (µg/m³)	Limiting Effect	Regulation Schedule #	Benchmark Category [2]	Percentage of MECP POI Limit (%)
R1 - Residential	Hydrogen sulphide	7783-06-4	6.55E-03	AERMOD	10.3	0.167	13	Odour	Schedule 3	B1	79%
Property Line	Hydrogen sulphide	7783-06-4	6.55E-03	AERMOD	6.3	24	7	Health	Schedule 3	B1	90%
R1 - Residential	Total Reduced Sulphur (TRS) Compounds	N/A-TRS	6.67E-03	AERMOD	10.5	0.167	13	Odour	Schedule 3	B1	81%
Property Line	Total Reduced Sulphur (TRS) Compounds	N/A-TRS	6.67E-03	AERMOD	6.4	24	7	Health	Schedule 3	B1	92%
Property Line	Ammonia	7664-41-7	1.61E-04	AERMOD	2E-01	24	100	Health	Schedule 3	B1	<1%
R1 - Residential	Odour	N/A	11,147 OU/s	AERMOD	17.6 (OU/m³)	0.167	1.0 OU/m3	Odour	N/A	N/A	Above FE [3]
Property Line	Oxides of Nitrogen	10102-44-0	2.36E+00	AERMOD	991	0.5	1880	Health	Schedule 3	N/A	53%
Property Line	Oxides of Nitrogen	10102-44-0	2.36E+00	AERMOD	70	1	400	Health	Schedule 3	B1	17%
Property Line	Oxides of Nitrogen	10102-44-0	2.36E+00	AERMOD	27	24	200	Health	Schedule 3	B1	14%
Property Line	Sulphur dioxide	7446-09-5	1.55E-01	AERMOD	55	1	690	Health & Vegetation	Schedule 3	B1	8%
Property Line	Sulphur dioxide	7446-09-5	1.55E-01	AERMOD	33	24	275	Health & Vegetation	Schedule 3	B1	12%

Notes:

[1] The term "MECP POI Limit" identified in Table D-4 of Guideline A-10 refers to the following information (there may be more than one relevant MECP POI Limit for each contaminant):

- Air quality Standards, Guidelines or SL-JSLs set out the MECP publication, "Air Contaminants Benchmark (ACB) List: Standards, guidelines and screening levels for assessing point of impingement
- The Daily Assessment Values (DAV) from the MECP ACB List;
- The Annual Assessment Values (AAV) from the MECP ACB List; or,
- Upper Risk Threshold (URT) from the MECP ACB List; or,
- An acceptable concentration for contaminants with no standards or guidelines.

[2] Benchmark Categories are set out in the MECP ACB List; Benchmark 1 (B1) refers to Standards or Guidelines, Benchmark 2 (B2) refers to Screening Levels.

[3] Frequency of Exceedence, "Methodology for Modelling Assessments of Contaminants with 10-Minute Average Standards and Guidelines under O. Reg. 419/05" (April 2008)

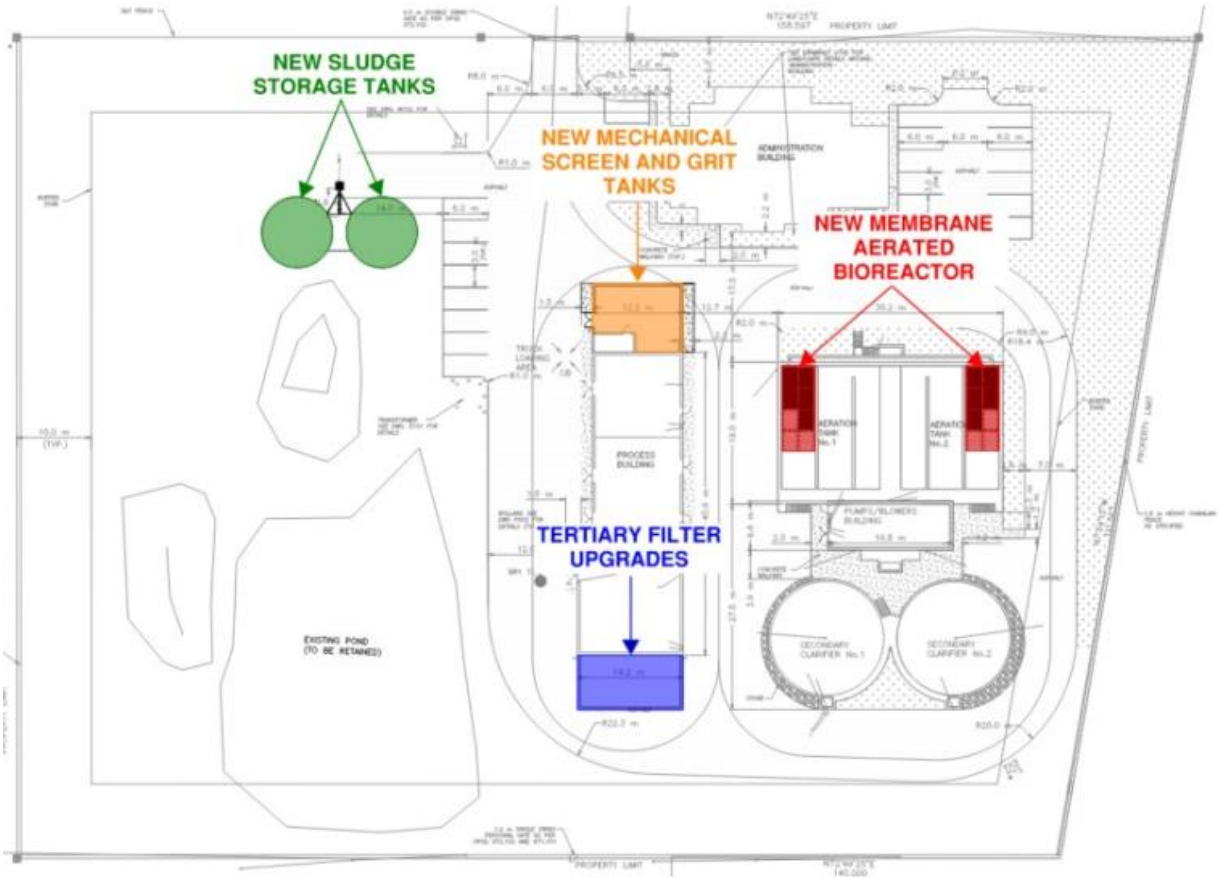
Table 2: Odour Frequency Analysis

RWDI Project# 1701163

Nobleton WRRF

Receptor Information					Maximum Predicted 10-Minute Concentration (OU/m³)	Predcited Excursions Above Specified 10-Minute Values					
						Events > 1 OU		Events > 3 OU		Events > 5 OU	
ID#	Description	X	Y	Z		Count	Frequency	Count	Frequency	Count	Frequency
R1	Residence	604987.3	4860621	1.5	17.6	243	0.566%	73	0.170%	45	0.105%
R2	Residence	604973	4860647.9	4.5	14.4	189	0.441%	64	0.149%	40	0.093%
42899	Hours of valid Meterological Data (enter number of VALID hours in met data file)										


King Road
Existing Forcemain
Property Boundary & Fence
Nobleton WRRF
Outfall


NEW SLUDGE STORAGE TANKS
NEW MECHANICAL SCREEN AND GRIT TANKS
NEW MEMBRANE AERATED BIOREACTOR
TERTIARY FILTER UPGRADES
EXISTING POND (TO BE RETAINED)

APPENDIX B

* AERMOD (19191): Nobleton Odour OU/S 07/13/21

* AERMET (19191): 10:59:33

* MODELING OPTIONS USED: RegDFAULT CONC ELEV FLGPOL RURAL ADJ_U*

* MAXI-FILE FOR 1-HR VALUES >= A THRESHOLD OF 1.000

* FOR SOURCE GROUP: ALL

* FORMAT: (1X,I3,1X,A8,1X,I8.8,2(1X,F13.5),3(1X,F7.2),1X,F13.5)

*AVE	GRP	DATE	X	Y	ZELEV	ZHILL	ZFLAG	AVERAGE CONC
1	ALL	96010415	604987.25000	4860621.03000	250.14	250.14	1.50	1.70312
1	ALL	96011115	604987.25000	4860621.03000	250.14	250.14	1.50	2.03162
1	ALL	96011115	604972.97000	4860647.92000	250.74	250.74	4.50	2.61073
1	ALL	96011117	604987.25000	4860621.03000	250.14	250.14	1.50	2.83839
1	ALL	96011117	604972.97000	4860647.92000	250.74	250.74	4.50	2.75023
1	ALL	96011608	604987.25000	4860621.03000	250.14	250.14	1.50	1.65521
1	ALL	96011608	604972.97000	4860647.92000	250.74	250.74	4.50	1.35886
1	ALL	96011617	604987.25000	4860621.03000	250.14	250.14	1.50	1.59397
1	ALL	96011617	604972.97000	4860647.92000	250.74	250.74	4.50	1.22265
1	ALL	96011715	604987.25000	4860621.03000	250.14	250.14	1.50	12.39701
1	ALL	96011715	604972.97000	4860647.92000	250.74	250.74	4.50	12.54895
1	ALL	96011716	604987.25000	4860621.03000	250.14	250.14	1.50	10.95641
1	ALL	96011716	604972.97000	4860647.92000	250.74	250.74	4.50	10.26555
1	ALL	96011808	604987.25000	4860621.03000	250.14	250.14	1.50	2.59366
1	ALL	96011808	604972.97000	4860647.92000	250.74	250.74	4.50	2.72804
1	ALL	96011809	604987.25000	4860621.03000	250.14	250.14	1.50	2.06078
1	ALL	96011809	604972.97000	4860647.92000	250.74	250.74	4.50	1.94448
1	ALL	96011810	604987.25000	4860621.03000	250.14	250.14	1.50	1.84970
1	ALL	96011810	604972.97000	4860647.92000	250.74	250.74	4.50	1.70512
1	ALL	96011817	604987.25000	4860621.03000	250.14	250.14	1.50	1.16343
1	ALL	96012609	604987.25000	4860621.03000	250.14	250.14	1.50	10.74096
1	ALL	96012609	604972.97000	4860647.92000	250.74	250.74	4.50	10.40572
1	ALL	96012610	604987.25000	4860621.03000	250.14	250.14	1.50	1.14963
1	ALL	96021008	604987.25000	4860621.03000	250.14	250.14	1.50	7.39562
1	ALL	96021008	604972.97000	4860647.92000	250.74	250.74	4.50	6.01634
1	ALL	96021009	604987.25000	4860621.03000	250.14	250.14	1.50	2.94409
1	ALL	96021009	604972.97000	4860647.92000	250.74	250.74	4.50	3.05502
1	ALL	96021010	604987.25000	4860621.03000	250.14	250.14	1.50	2.50284
1	ALL	96021010	604972.97000	4860647.92000	250.74	250.74	4.50	1.24097
1	ALL	96021012	604987.25000	4860621.03000	250.14	250.14	1.50	1.22386
1	ALL	96021910	604987.25000	4860621.03000	250.14	250.14	1.50	1.41594
1	ALL	96021910	604972.97000	4860647.92000	250.74	250.74	4.50	1.26028
1	ALL	96022008	604987.25000	4860621.03000	250.14	250.14	1.50	5.14918
1	ALL	96022008	604972.97000	4860647.92000	250.74	250.74	4.50	5.13876
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1	ALL	96022012	604987.25000	4860621.03000	250.14	250.14	1.50	2.00281
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1	ALL	96022013	604987.25000	4860621.03000	250.14	250.14	1.50	2.09911
1	ALL	96022013	604972.97000	4860647.92000	250.74	250.74	4.50	1.63717
1	ALL	96022014	604987.25000	4860621.03000	250.14	250.14	1.50	2.34286
1	ALL	96022014	604972.97000	4860647.92000	250.74	250.74	4.50	1.96409
1	ALL	96022016	604987.25000	4860621.03000	250.14	250.14	1.50	1.31197
1	ALL	96022016	604972.97000	4860647.92000	250.74	250.74	4.50	1.31269
1	ALL	96022017	604987.25000	4860621.03000	250.14	250.14	1.50	2.48352
1	ALL	96022017	604972.97000	4860647.92000	250.74	250.74	4.50	2.61698
1	ALL	96022308	604987.25000	4860621.03000	250.14	250.14	1.50	4.59783
1	ALL	96022308	604972.97000	4860647.92000	250.74	250.74	4.50	2.16339
1	ALL	96042009	604987.25000	4860621.03000	250.14	250.14	1.50	1.08952
1	ALL	96042009	604972.97000	4860647.92000	250.74	250.74	4.50	1.08870
1	ALL	96042208	604987.25000	4860621.03000	250.14	250.14	1.50	1.08202
1	ALL	96091209	604987.25000	4860621.03000	250.14	250.14	1.50	1.11232
1	ALL	96101917	604987.25000	4860621.03000	250.14	250.14	1.50	1.01340
1	ALL	96102517	604987.25000	4860621.03000	250.14	250.14	1.50	2.17906
1	ALL	96102517	604972.97000	4860647.92000	250.74	250.74	4.50	2.08382
1	ALL	96102617	604987.25000	4860621.03000	250.14	250.14	1.50	2.39836
1	ALL	96102617	604972.97000	4860647.92000	250.74	250.74	4.50	2.54206
1	ALL	96110508	604987.25000	4860621.03000	250.14	250.14	1.50	9.13075

68	1 ALL	96110508	604972.97000	4860647.92000	250.74	250.74	4.50	5.54142
69	1 ALL	96110617	604987.25000	4860621.03000	250.14	250.14	1.50	5.26940
70	1 ALL	96110617	604972.97000	4860647.92000	250.74	250.74	4.50	3.37035
71	1 ALL	96110708	604987.25000	4860621.03000	250.14	250.14	1.50	1.13968
72	1 ALL	96110708	604972.97000	4860647.92000	250.74	250.74	4.50	1.09130
73	1 ALL	96111608	604987.25000	4860621.03000	250.14	250.14	1.50	5.10837
74	1 ALL	96111608	604972.97000	4860647.92000	250.74	250.74	4.50	5.29503
75	1 ALL	96112517	604987.25000	4860621.03000	250.14	250.14	1.50	1.82163
76	1 ALL	96112517	604972.97000	4860647.92000	250.74	250.74	4.50	1.77607
77	1 ALL	96113017	604987.25000	4860621.03000	250.14	250.14	1.50	1.06542
78	1 ALL	96120110	604987.25000	4860621.03000	250.14	250.14	1.50	1.14534
79	1 ALL	96120111	604987.25000	4860621.03000	250.14	250.14	1.50	1.10306
80	1 ALL	96120111	604972.97000	4860647.92000	250.74	250.74	4.50	1.07066
81	1 ALL	96121712	604987.25000	4860621.03000	250.14	250.14	1.50	1.26219
82	1 ALL	96121712	604972.97000	4860647.92000	250.74	250.74	4.50	1.12489
83	1 ALL	96122308	604987.25000	4860621.03000	250.14	250.14	1.50	4.58187
84	1 ALL	96122308	604972.97000	4860647.92000	250.74	250.74	4.50	4.23846
85	1 ALL	96122309	604987.25000	4860621.03000	250.14	250.14	1.50	2.59250
86	1 ALL	96122309	604972.97000	4860647.92000	250.74	250.74	4.50	2.72709
87	1 ALL	96122311	604987.25000	4860621.03000	250.14	250.14	1.50	1.43238
88	1 ALL	96122311	604972.97000	4860647.92000	250.74	250.74	4.50	1.49720
89	1 ALL	96122312	604987.25000	4860621.03000	250.14	250.14	1.50	1.91858
90	1 ALL	96122312	604972.97000	4860647.92000	250.74	250.74	4.50	1.82056
91	1 ALL	96122317	604987.25000	4860621.03000	250.14	250.14	1.50	1.36257
92	1 ALL	96122808	604987.25000	4860621.03000	250.14	250.14	1.50	4.92011
93	1 ALL	96122808	604972.97000	4860647.92000	250.74	250.74	4.50	4.24171
94	1 ALL	96122810	604987.25000	4860621.03000	250.14	250.14	1.50	12.15791
95	1 ALL	96122810	604972.97000	4860647.92000	250.74	250.74	4.50	5.69937
96	1 ALL	96122812	604987.25000	4860621.03000	250.14	250.14	1.50	14.38963
97	1 ALL	96122812	604972.97000	4860647.92000	250.74	250.74	4.50	12.52021
98	1 ALL	96123116	604987.25000	4860621.03000	250.14	250.14	1.50	15.09607
99	1 ALL	96123116	604972.97000	4860647.92000	250.74	250.74	4.50	14.38212
100	1 ALL	97010115	604987.25000	4860621.03000	250.14	250.14	1.50	1.98891
101	1 ALL	97010115	604972.97000	4860647.92000	250.74	250.74	4.50	1.83335
102	1 ALL	97010116	604987.25000	4860621.03000	250.14	250.14	1.50	1.10818
103	1 ALL	97010116	604972.97000	4860647.92000	250.74	250.74	4.50	1.13044
104	1 ALL	97010117	604987.25000	4860621.03000	250.14	250.14	1.50	1.40147
105	1 ALL	97010215	604987.25000	4860621.03000	250.14	250.14	1.50	3.49350
106	1 ALL	97010215	604972.97000	4860647.92000	250.74	250.74	4.50	1.56097
107	1 ALL	97010216	604972.97000	4860647.92000	250.74	250.74	4.50	1.02782
108	1 ALL	97010217	604987.25000	4860621.03000	250.14	250.14	1.50	2.59367
109	1 ALL	97010217	604972.97000	4860647.92000	250.74	250.74	4.50	2.72804
110	1 ALL	97012113	604987.25000	4860621.03000	250.14	250.14	1.50	1.20989
111	1 ALL	97012115	604987.25000	4860621.03000	250.14	250.14	1.50	1.09216
112	1 ALL	97012717	604987.25000	4860621.03000	250.14	250.14	1.50	1.43981
113	1 ALL	97013017	604987.25000	4860621.03000	250.14	250.14	1.50	1.31466
114	1 ALL	97020208	604987.25000	4860621.03000	250.14	250.14	1.50	16.47145
115	1 ALL	97020208	604972.97000	4860647.92000	250.74	250.74	4.50	11.05473
116	1 ALL	97020212	604987.25000	4860621.03000	250.14	250.14	1.50	1.47101
117	1 ALL	97020212	604972.97000	4860647.92000	250.74	250.74	4.50	1.57805
118	1 ALL	97020214	604987.25000	4860621.03000	250.14	250.14	1.50	1.62623
119	1 ALL	97020214	604972.97000	4860647.92000	250.74	250.74	4.50	1.75625
120	1 ALL	97020216	604987.25000	4860621.03000	250.14	250.14	1.50	2.15003
121	1 ALL	97020216	604972.97000	4860647.92000	250.74	250.74	4.50	2.38166
122	1 ALL	97022109	604987.25000	4860621.03000	250.14	250.14	1.50	14.95888
123	1 ALL	97022109	604972.97000	4860647.92000	250.74	250.74	4.50	8.39982
124	1 ALL	97022110	604987.25000	4860621.03000	250.14	250.14	1.50	13.25324
125	1 ALL	97022110	604972.97000	4860647.92000	250.74	250.74	4.50	8.93936
126	1 ALL	97022112	604987.25000	4860621.03000	250.14	250.14	1.50	2.43166
127	1 ALL	97022112	604972.97000	4860647.92000	250.74	250.74	4.50	2.51309
128	1 ALL	97022114	604987.25000	4860621.03000	250.14	250.14	1.50	1.87933
129	1 ALL	97022114	604972.97000	4860647.92000	250.74	250.74	4.50	1.80835
130	1 ALL	97022115	604987.25000	4860621.03000	250.14	250.14	1.50	2.71178
131	1 ALL	97022115	604972.97000	4860647.92000	250.74	250.74	4.50	2.10665
132	1 ALL	97022812	604987.25000	4860621.03000	250.14	250.14	1.50	1.32281
133	1 ALL	97022812	604972.97000	4860647.92000	250.74	250.74	4.50	1.21736
134	1 ALL	97030115	604987.25000	4860621.03000	250.14	250.14	1.50	1.32123
135	1 ALL	97032109	604987.25000	4860621.03000	250.14	250.14	1.50	2.42273
136	1 ALL	97032109	604972.97000	4860647.92000	250.74	250.74	4.50	2.07518

1	ALL	97032110	604987.25000	4860621.03000	250.14	250.14	1.50	1.54915
1	ALL	97032110	604972.97000	4860647.92000	250.74	250.74	4.50	1.07217
1	ALL	97032514	604987.25000	4860621.03000	250.14	250.14	1.50	1.20479
1	ALL	97032809	604987.25000	4860621.03000	250.14	250.14	1.50	1.12477
1	ALL	97040510	604987.25000	4860621.03000	250.14	250.14	1.50	1.43205
1	ALL	97040510	604972.97000	4860647.92000	250.74	250.74	4.50	1.01127
1	ALL	97040512	604987.25000	4860621.03000	250.14	250.14	1.50	1.28569
1	ALL	97040512	604972.97000	4860647.92000	250.74	250.74	4.50	1.13613
1	ALL	97042709	604987.25000	4860621.03000	250.14	250.14	1.50	1.39071
1	ALL	97042709	604972.97000	4860647.92000	250.74	250.74	4.50	1.01168
1	ALL	97060708	604987.25000	4860621.03000	250.14	250.14	1.50	1.04038
1	ALL	97082610	604987.25000	4860621.03000	250.14	250.14	1.50	1.01953
1	ALL	97102417	604987.25000	4860621.03000	250.14	250.14	1.50	4.32822
1	ALL	97102417	604972.97000	4860647.92000	250.74	250.74	4.50	4.53189
1	ALL	97112917	604987.25000	4860621.03000	250.14	250.14	1.50	5.83827
1	ALL	97112917	604972.97000	4860647.92000	250.74	250.74	4.50	3.95631
1	ALL	97120309	604987.25000	4860621.03000	250.14	250.14	1.50	3.87681
1	ALL	97120309	604972.97000	4860647.92000	250.74	250.74	4.50	1.03083
1	ALL	97120313	604987.25000	4860621.03000	250.14	250.14	1.50	1.28451
1	ALL	97120816	604987.25000	4860621.03000	250.14	250.14	1.50	17.55249
1	ALL	97120816	604972.97000	4860647.92000	250.74	250.74	4.50	12.39425
1	ALL	97122409	604987.25000	4860621.03000	250.14	250.14	1.50	8.08671
1	ALL	97122409	604972.97000	4860647.92000	250.74	250.74	4.50	8.37301
1	ALL	97122410	604987.25000	4860621.03000	250.14	250.14	1.50	1.86047
1	ALL	97122410	604972.97000	4860647.92000	250.74	250.74	4.50	1.83029
1	ALL	97122411	604987.25000	4860621.03000	250.14	250.14	1.50	1.30676
1	ALL	97122411	604972.97000	4860647.92000	250.74	250.74	4.50	1.04588
1	ALL	97122915	604987.25000	4860621.03000	250.14	250.14	1.50	1.91192
1	ALL	97122915	604972.97000	4860647.92000	250.74	250.74	4.50	1.85069
1	ALL	97122917	604987.25000	4860621.03000	250.14	250.14	1.50	13.28289
1	ALL	97122917	604972.97000	4860647.92000	250.74	250.74	4.50	9.77284
1	ALL	98010511	604987.25000	4860621.03000	250.14	250.14	1.50	6.03684
1	ALL	98010511	604972.97000	4860647.92000	250.74	250.74	4.50	1.83005
1	ALL	98010512	604987.25000	4860621.03000	250.14	250.14	1.50	3.14900
1	ALL	98010512	604972.97000	4860647.92000	250.74	250.74	4.50	1.08898
1	ALL	98010910	604987.25000	4860621.03000	250.14	250.14	1.50	9.17512
1	ALL	98010910	604972.97000	4860647.92000	250.74	250.74	4.50	9.27986
1	ALL	98010912	604987.25000	4860621.03000	250.14	250.14	1.50	1.91430
1	ALL	98011213	604987.25000	4860621.03000	250.14	250.14	1.50	1.40608
1	ALL	98011213	604972.97000	4860647.92000	250.74	250.74	4.50	1.10977
1	ALL	98011215	604987.25000	4860621.03000	250.14	250.14	1.50	1.26633
1	ALL	98011216	604987.25000	4860621.03000	250.14	250.14	1.50	1.60419
1	ALL	98012316	604987.25000	4860621.03000	250.14	250.14	1.50	1.65149
1	ALL	98012316	604972.97000	4860647.92000	250.74	250.74	4.50	1.55395
1	ALL	98012812	604987.25000	4860621.03000	250.14	250.14	1.50	2.85755
1	ALL	98012812	604972.97000	4860647.92000	250.74	250.74	4.50	3.54902
1	ALL	98012908	604987.25000	4860621.03000	250.14	250.14	1.50	4.02368
1	ALL	98012908	604972.97000	4860647.92000	250.74	250.74	4.50	3.93826
1	ALL	98012909	604987.25000	4860621.03000	250.14	250.14	1.50	4.31972
1	ALL	98012909	604972.97000	4860647.92000	250.74	250.74	4.50	4.11708
1	ALL	98012910	604987.25000	4860621.03000	250.14	250.14	1.50	1.35847
1	ALL	98012910	604972.97000	4860647.92000	250.74	250.74	4.50	1.43151
1	ALL	98012911	604987.25000	4860621.03000	250.14	250.14	1.50	1.61709
1	ALL	98012911	604972.97000	4860647.92000	250.74	250.74	4.50	1.52481
1	ALL	98020115	604987.25000	4860621.03000	250.14	250.14	1.50	1.10647
1	ALL	98020115	604972.97000	4860647.92000	250.74	250.74	4.50	1.08134
1	ALL	98020817	604987.25000	4860621.03000	250.14	250.14	1.50	3.33901
1	ALL	98020817	604972.97000	4860647.92000	250.74	250.74	4.50	3.56293
1	ALL	98020916	604987.25000	4860621.03000	250.14	250.14	1.50	1.23718
1	ALL	98020916	604972.97000	4860647.92000	250.74	250.74	4.50	1.34032
1	ALL	98021015	604987.25000	4860621.03000	250.14	250.14	1.50	1.46627
1	ALL	98021015	604972.97000	4860647.92000	250.74	250.74	4.50	1.32872
1	ALL	98021016	604987.25000	4860621.03000	250.14	250.14	1.50	1.45045
1	ALL	98021016	604972.97000	4860647.92000	250.74	250.74	4.50	1.44610
1	ALL	98021113	604987.25000	4860621.03000	250.14	250.14	1.50	1.19136
1	ALL	98021514	604987.25000	4860621.03000	250.14	250.14	1.50	1.00295
1	ALL	98021516	604987.25000	4860621.03000	250.14	250.14	1.50	1.30026
1	ALL	98021517	604987.25000	4860621.03000	250.14	250.14	1.50	1.78011
1	ALL	98021517	604972.97000	4860647.92000	250.74	250.74	4.50	1.72030

1	ALL	98022617	604987.25000	4860621.03000	250.14	250.14	1.50	3.50600
1	ALL	98022617	604972.97000	4860647.92000	250.74	250.74	4.50	2.69614
1	ALL	98022814	604987.25000	4860621.03000	250.14	250.14	1.50	1.60433
1	ALL	98022814	604972.97000	4860647.92000	250.74	250.74	4.50	1.12336
1	ALL	98030608	604987.25000	4860621.03000	250.14	250.14	1.50	1.62810
1	ALL	98030608	604972.97000	4860647.92000	250.74	250.74	4.50	1.51506
1	ALL	98030615	604987.25000	4860621.03000	250.14	250.14	1.50	1.07915
1	ALL	98040108	604987.25000	4860621.03000	250.14	250.14	1.50	1.00293
1	ALL	98040110	604987.25000	4860621.03000	250.14	250.14	1.50	1.32243
1	ALL	98040110	604972.97000	4860647.92000	250.74	250.74	4.50	1.15112
1	ALL	98041308	604987.25000	4860621.03000	250.14	250.14	1.50	1.38587
1	ALL	98041308	604972.97000	4860647.92000	250.74	250.74	4.50	1.15629
1	ALL	98062608	604987.25000	4860621.03000	250.14	250.14	1.50	1.11789
1	ALL	98070408	604987.25000	4860621.03000	250.14	250.14	1.50	1.39079
1	ALL	98070408	604972.97000	4860647.92000	250.74	250.74	4.50	1.15214
1	ALL	98101210	604987.25000	4860621.03000	250.14	250.14	1.50	1.28336
1	ALL	98101210	604972.97000	4860647.92000	250.74	250.74	4.50	1.17500
1	ALL	98101617	604987.25000	4860621.03000	250.14	250.14	1.50	1.34890
1	ALL	98101617	604972.97000	4860647.92000	250.74	250.74	4.50	1.15406
1	ALL	98101709	604987.25000	4860621.03000	250.14	250.14	1.50	1.15170
1	ALL	98101709	604972.97000	4860647.92000	250.74	250.74	4.50	1.08278
1	ALL	98101717	604987.25000	4860621.03000	250.14	250.14	1.50	1.76957
1	ALL	98101717	604972.97000	4860647.92000	250.74	250.74	4.50	1.56424
1	ALL	98102709	604987.25000	4860621.03000	250.14	250.14	1.50	1.15481
1	ALL	98110817	604987.25000	4860621.03000	250.14	250.14	1.50	4.15845
1	ALL	98110817	604972.97000	4860647.92000	250.74	250.74	4.50	4.35562
1	ALL	98110917	604987.25000	4860621.03000	250.14	250.14	1.50	2.80909
1	ALL	98110917	604972.97000	4860647.92000	250.74	250.74	4.50	2.83508
1	ALL	98111408	604987.25000	4860621.03000	250.14	250.14	1.50	3.55328
1	ALL	98111408	604972.97000	4860647.92000	250.74	250.74	4.50	1.03251
1	ALL	98111611	604987.25000	4860621.03000	250.14	250.14	1.50	1.65908
1	ALL	98111611	604972.97000	4860647.92000	250.74	250.74	4.50	1.28791
1	ALL	98111612	604987.25000	4860621.03000	250.14	250.14	1.50	1.26815
1	ALL	98111817	604987.25000	4860621.03000	250.14	250.14	1.50	3.69279
1	ALL	98111817	604972.97000	4860647.92000	250.74	250.74	4.50	3.14154
1	ALL	98111908	604987.25000	4860621.03000	250.14	250.14	1.50	1.79241
1	ALL	98111908	604972.97000	4860647.92000	250.74	250.74	4.50	1.14634
1	ALL	98112509	604987.25000	4860621.03000	250.14	250.14	1.50	2.35202
1	ALL	98112509	604972.97000	4860647.92000	250.74	250.74	4.50	1.10064
1	ALL	98112908	604987.25000	4860621.03000	250.14	250.14	1.50	2.11404
1	ALL	98112917	604987.25000	4860621.03000	250.14	250.14	1.50	2.28010
1	ALL	98112917	604972.97000	4860647.92000	250.74	250.74	4.50	1.71621
1	ALL	98120608	604987.25000	4860621.03000	250.14	250.14	1.50	16.58837
1	ALL	98120608	604972.97000	4860647.92000	250.74	250.74	4.50	11.10119
1	ALL	98120610	604987.25000	4860621.03000	250.14	250.14	1.50	2.26372
1	ALL	98120611	604987.25000	4860621.03000	250.14	250.14	1.50	2.67247
1	ALL	98120611	604972.97000	4860647.92000	250.74	250.74	4.50	2.96693
1	ALL	98120615	604987.25000	4860621.03000	250.14	250.14	1.50	6.09848
1	ALL	98120615	604972.97000	4860647.92000	250.74	250.74	4.50	4.80048
1	ALL	98120616	604987.25000	4860621.03000	250.14	250.14	1.50	12.72475
1	ALL	98120616	604972.97000	4860647.92000	250.74	250.74	4.50	9.43804
1	ALL	98120617	604987.25000	4860621.03000	250.14	250.14	1.50	5.08782
1	ALL	98120617	604972.97000	4860647.92000	250.74	250.74	4.50	5.53913
1	ALL	98121616	604987.25000	4860621.03000	250.14	250.14	1.50	15.06207
1	ALL	98121616	604972.97000	4860647.92000	250.74	250.74	4.50	14.33448
1	ALL	98121617	604987.25000	4860621.03000	250.14	250.14	1.50	1.30665
1	ALL	98121617	604972.97000	4860647.92000	250.74	250.74	4.50	1.39872
1	ALL	98121813	604987.25000	4860621.03000	250.14	250.14	1.50	1.19562
1	ALL	98121813	604972.97000	4860647.92000	250.74	250.74	4.50	1.09265
1	ALL	98121815	604987.25000	4860621.03000	250.14	250.14	1.50	1.16863
1	ALL	98122109	604987.25000	4860621.03000	250.14	250.14	1.50	2.45561
1	ALL	98122109	604972.97000	4860647.92000	250.74	250.74	4.50	2.62731
1	ALL	98122112	604987.25000	4860621.03000	250.14	250.14	1.50	3.79469
1	ALL	98122112	604972.97000	4860647.92000	250.74	250.74	4.50	4.45121
1	ALL	99010309	604987.25000	4860621.03000	250.14	250.14	1.50	1.37987
1	ALL	99010309	604972.97000	4860647.92000	250.74	250.74	4.50	1.41579
1	ALL	99011710	604987.25000	4860621.03000	250.14	250.14	1.50	11.44227
1	ALL	99011710	604972.97000	4860647.92000	250.74	250.74	4.50	5.36341
1	ALL	99011711	604987.25000	4860621.03000	250.14	250.14	1.50	1.69921

1	ALL	99011711	604972.97000	4860647.92000	250.74	250.74	4.50	1.88894
1	ALL	99011714	604987.25000	4860621.03000	250.14	250.14	1.50	1.62549
1	ALL	99011714	604972.97000	4860647.92000	250.74	250.74	4.50	1.24136
1	ALL	99012310	604987.25000	4860621.03000	250.14	250.14	1.50	1.55928
1	ALL	99012310	604972.97000	4860647.92000	250.74	250.74	4.50	1.32230
1	ALL	99012315	604987.25000	4860621.03000	250.14	250.14	1.50	1.54005
1	ALL	99012315	604972.97000	4860647.92000	250.74	250.74	4.50	1.34224
1	ALL	99012916	604987.25000	4860621.03000	250.14	250.14	1.50	14.70212
1	ALL	99012916	604972.97000	4860647.92000	250.74	250.74	4.50	8.32882
1	ALL	99013110	604987.25000	4860621.03000	250.14	250.14	1.50	1.27402
1	ALL	99013110	604972.97000	4860647.92000	250.74	250.74	4.50	1.21783
1	ALL	99013111	604987.25000	4860621.03000	250.14	250.14	1.50	1.24273
1	ALL	99013112	604987.25000	4860621.03000	250.14	250.14	1.50	1.02487
1	ALL	99013113	604987.25000	4860621.03000	250.14	250.14	1.50	1.32617
1	ALL	99013113	604972.97000	4860647.92000	250.74	250.74	4.50	1.01101
1	ALL	99013114	604987.25000	4860621.03000	250.14	250.14	1.50	1.36919
1	ALL	99020115	604987.25000	4860621.03000	250.14	250.14	1.50	1.37489
1	ALL	99020115	604972.97000	4860647.92000	250.74	250.74	4.50	1.42527
1	ALL	99020209	604987.25000	4860621.03000	250.14	250.14	1.50	15.89676
1	ALL	99020209	604972.97000	4860647.92000	250.74	250.74	4.50	9.81701
1	ALL	99020210	604987.25000	4860621.03000	250.14	250.14	1.50	10.62279
1	ALL	99020210	604972.97000	4860647.92000	250.74	250.74	4.50	10.99906
1	ALL	99020214	604987.25000	4860621.03000	250.14	250.14	1.50	1.69120
1	ALL	99020214	604972.97000	4860647.92000	250.74	250.74	4.50	1.85921
1	ALL	99021109	604987.25000	4860621.03000	250.14	250.14	1.50	12.37473
1	ALL	99021109	604972.97000	4860647.92000	250.74	250.74	4.50	11.29500
1	ALL	99021609	604987.25000	4860621.03000	250.14	250.14	1.50	7.72599
1	ALL	99021609	604972.97000	4860647.92000	250.74	250.74	4.50	8.17212
1	ALL	99021617	604987.25000	4860621.03000	250.14	250.14	1.50	3.49385
1	ALL	99021617	604972.97000	4860647.92000	250.74	250.74	4.50	2.03613
1	ALL	99022414	604987.25000	4860621.03000	250.14	250.14	1.50	1.00386
1	ALL	99022708	604987.25000	4860621.03000	250.14	250.14	1.50	14.84256
1	ALL	99022708	604972.97000	4860647.92000	250.74	250.74	4.50	14.17172
1	ALL	99022712	604987.25000	4860621.03000	250.14	250.14	1.50	1.13626
1	ALL	99022716	604987.25000	4860621.03000	250.14	250.14	1.50	1.02291
1	ALL	99022808	604987.25000	4860621.03000	250.14	250.14	1.50	1.12004
1	ALL	99040117	604987.25000	4860621.03000	250.14	250.14	1.50	1.04388
1	ALL	99040308	604987.25000	4860621.03000	250.14	250.14	1.50	2.57288
1	ALL	99040308	604972.97000	4860647.92000	250.74	250.74	4.50	1.59935
1	ALL	99040309	604987.25000	4860621.03000	250.14	250.14	1.50	1.86549
1	ALL	99040309	604972.97000	4860647.92000	250.74	250.74	4.50	1.23043
1	ALL	99040310	604987.25000	4860621.03000	250.14	250.14	1.50	1.47375
1	ALL	99040310	604972.97000	4860647.92000	250.74	250.74	4.50	1.02236
1	ALL	99042208	604972.97000	4860647.92000	250.74	250.74	4.50	1.03271
1	ALL	99052408	604987.25000	4860621.03000	250.14	250.14	1.50	1.65905
1	ALL	99052408	604972.97000	4860647.92000	250.74	250.74	4.50	1.44540
1	ALL	99092708	604987.25000	4860621.03000	250.14	250.14	1.50	1.19731
1	ALL	99100808	604987.25000	4860621.03000	250.14	250.14	1.50	2.44110
1	ALL	99100808	604972.97000	4860647.92000	250.74	250.74	4.50	2.04544
1	ALL	99101210	604987.25000	4860621.03000	250.14	250.14	1.50	1.06987
1	ALL	99101211	604987.25000	4860621.03000	250.14	250.14	1.50	1.09478
1	ALL	99101217	604987.25000	4860621.03000	250.14	250.14	1.50	1.10498
1	ALL	99110108	604987.25000	4860621.03000	250.14	250.14	1.50	5.26899
1	ALL	99110108	604972.97000	4860647.92000	250.74	250.74	4.50	5.42058
1	ALL	99111117	604987.25000	4860621.03000	250.14	250.14	1.50	2.50186
1	ALL	99111117	604972.97000	4860647.92000	250.74	250.74	4.50	2.56151
1	ALL	99111908	604987.25000	4860621.03000	250.14	250.14	1.50	6.93327
1	ALL	99111908	604972.97000	4860647.92000	250.74	250.74	4.50	6.19669
1	ALL	99112117	604987.25000	4860621.03000	250.14	250.14	1.50	3.09013
1	ALL	99112117	604972.97000	4860647.92000	250.74	250.74	4.50	2.15779
1	ALL	99112208	604987.25000	4860621.03000	250.14	250.14	1.50	3.30475
1	ALL	99112208	604972.97000	4860647.92000	250.74	250.74	4.50	3.29281
1	ALL	99112517	604987.25000	4860621.03000	250.14	250.14	1.50	2.56557
1	ALL	99112517	604972.97000	4860647.92000	250.74	250.74	4.50	2.26159
1	ALL	99120217	604987.25000	4860621.03000	250.14	250.14	1.50	4.12109
1	ALL	99120217	604972.97000	4860647.92000	250.74	250.74	4.50	4.49797
1	ALL	99120310	604987.25000	4860621.03000	250.14	250.14	1.50	1.40458
1	ALL	99120310	604972.97000	4860647.92000	250.74	250.74	4.50	1.82685
1	ALL	99121213	604987.25000	4860621.03000	250.14	250.14	1.50	2.57139

1	ALL	99121213	604972.97000	4860647.92000	250.74	250.74	4.50	1.98528
1	ALL	99121516	604987.25000	4860621.03000	250.14	250.14	1.50	4.69619
1	ALL	99121516	604972.97000	4860647.92000	250.74	250.74	4.50	3.73988
1	ALL	99121808	604987.25000	4860621.03000	250.14	250.14	1.50	4.62946
1	ALL	99121808	604972.97000	4860647.92000	250.74	250.74	4.50	4.67689
1	ALL	99121817	604987.25000	4860621.03000	250.14	250.14	1.50	6.84927
1	ALL	99121817	604972.97000	4860647.92000	250.74	250.74	4.50	7.04578
1	ALL	99122009	604987.25000	4860621.03000	250.14	250.14	1.50	1.68266
1	ALL	99122009	604972.97000	4860647.92000	250.74	250.74	4.50	1.68454
1	ALL	00010210	604987.25000	4860621.03000	250.14	250.14	1.50	4.38241
1	ALL	00010210	604972.97000	4860647.92000	250.74	250.74	4.50	4.48581
1	ALL	00010211	604987.25000	4860621.03000	250.14	250.14	1.50	3.02480
1	ALL	00011008	604987.25000	4860621.03000	250.14	250.14	1.50	2.52487
1	ALL	00011008	604972.97000	4860647.92000	250.74	250.74	4.50	1.71595
1	ALL	00011009	604987.25000	4860621.03000	250.14	250.14	1.50	1.59388
1	ALL	00011009	604972.97000	4860647.92000	250.74	250.74	4.50	1.22257
1	ALL	00011011	604987.25000	4860621.03000	250.14	250.14	1.50	1.07693
1	ALL	00011815	604987.25000	4860621.03000	250.14	250.14	1.50	5.71110
1	ALL	00011815	604972.97000	4860647.92000	250.74	250.74	4.50	5.18003
1	ALL	00012216	604987.25000	4860621.03000	250.14	250.14	1.50	12.79695
1	ALL	00012216	604972.97000	4860647.92000	250.74	250.74	4.50	12.86579
1	ALL	00012913	604987.25000	4860621.03000	250.14	250.14	1.50	1.77329
1	ALL	00012913	604972.97000	4860647.92000	250.74	250.74	4.50	1.69841
1	ALL	00013010	604987.25000	4860621.03000	250.14	250.14	1.50	6.00927
1	ALL	00013010	604972.97000	4860647.92000	250.74	250.74	4.50	5.59788
1	ALL	00013011	604987.25000	4860621.03000	250.14	250.14	1.50	1.23749
1	ALL	00013011	604972.97000	4860647.92000	250.74	250.74	4.50	1.54200
1	ALL	00013014	604972.97000	4860647.92000	250.74	250.74	4.50	1.14671
1	ALL	00013015	604987.25000	4860621.03000	250.14	250.14	1.50	8.75804
1	ALL	00013015	604972.97000	4860647.92000	250.74	250.74	4.50	6.75466
1	ALL	00013017	604987.25000	4860621.03000	250.14	250.14	1.50	1.89476
1	ALL	00013017	604972.97000	4860647.92000	250.74	250.74	4.50	2.02262
1	ALL	00020314	604987.25000	4860621.03000	250.14	250.14	1.50	1.08827
1	ALL	00020314	604972.97000	4860647.92000	250.74	250.74	4.50	1.22797
1	ALL	00020315	604987.25000	4860621.03000	250.14	250.14	1.50	3.76624
1	ALL	00020315	604972.97000	4860647.92000	250.74	250.74	4.50	3.56454
1	ALL	00022409	604987.25000	4860621.03000	250.14	250.14	1.50	4.11184
1	ALL	00022409	604972.97000	4860647.92000	250.74	250.74	4.50	1.79888
1	ALL	00022512	604987.25000	4860621.03000	250.14	250.14	1.50	2.47736
1	ALL	00022512	604972.97000	4860647.92000	250.74	250.74	4.50	1.72544
1	ALL	00022517	604987.25000	4860621.03000	250.14	250.14	1.50	2.71147
1	ALL	00022517	604972.97000	4860647.92000	250.74	250.74	4.50	2.20224
1	ALL	00022615	604987.25000	4860621.03000	250.14	250.14	1.50	1.00539
1	ALL	00022908	604987.25000	4860621.03000	250.14	250.14	1.50	3.58288
1	ALL	00022908	604972.97000	4860647.92000	250.74	250.74	4.50	3.56816
1	ALL	00022910	604987.25000	4860621.03000	250.14	250.14	1.50	1.71545
1	ALL	00022910	604972.97000	4860647.92000	250.74	250.74	4.50	1.14717
1	ALL	00031516	604987.25000	4860621.03000	250.14	250.14	1.50	1.03463
1	ALL	00032711	604987.25000	4860621.03000	250.14	250.14	1.50	1.05976
1	ALL	00032711	604972.97000	4860647.92000	250.74	250.74	4.50	1.01790
1	ALL	00040209	604987.25000	4860621.03000	250.14	250.14	1.50	1.67317
1	ALL	00040209	604972.97000	4860647.92000	250.74	250.74	4.50	1.57721
1	ALL	00052316	604987.25000	4860621.03000	250.14	250.14	1.50	1.05632
1	ALL	00052317	604987.25000	4860621.03000	250.14	250.14	1.50	1.22448
1	ALL	00091008	604987.25000	4860621.03000	250.14	250.14	1.50	1.38670
1	ALL	00091008	604972.97000	4860647.92000	250.74	250.74	4.50	1.14569
1	ALL	00101617	604987.25000	4860621.03000	250.14	250.14	1.50	1.46827
1	ALL	00101617	604972.97000	4860647.92000	250.74	250.74	4.50	1.50845
1	ALL	00102008	604987.25000	4860621.03000	250.14	250.14	1.50	3.75484
1	ALL	00102008	604972.97000	4860647.92000	250.74	250.74	4.50	4.02112
1	ALL	00102217	604987.25000	4860621.03000	250.14	250.14	1.50	5.61267
1	ALL	00102217	604972.97000	4860647.92000	250.74	250.74	4.50	4.86069
1	ALL	00102609	604987.25000	4860621.03000	250.14	250.14	1.50	1.26106
1	ALL	00102609	604972.97000	4860647.92000	250.74	250.74	4.50	1.34455
1	ALL	00102610	604987.25000	4860621.03000	250.14	250.14	1.50	1.32410
1	ALL	00102610	604972.97000	4860647.92000	250.74	250.74	4.50	1.24339
1	ALL	00110217	604987.25000	4860621.03000	250.14	250.14	1.50	2.11822
1	ALL	00110217	604972.97000	4860647.92000	250.74	250.74	4.50	2.19413
1	ALL	00110617	604987.25000	4860621.03000	250.14	250.14	1.50	1.65994

1	ALL	00110617	604972.97000	4860647.92000	250.74	250.74	4.50	1.69116
1	ALL	00110813	604987.25000	4860621.03000	250.14	250.14	1.50	1.03025
1	ALL	00111317	604987.25000	4860621.03000	250.14	250.14	1.50	1.06164
1	ALL	00111610	604987.25000	4860621.03000	250.14	250.14	1.50	1.36266
1	ALL	00111610	604972.97000	4860647.92000	250.74	250.74	4.50	1.35174
1	ALL	00112615	604987.25000	4860621.03000	250.14	250.14	1.50	1.15416
1	ALL	00112615	604972.97000	4860647.92000	250.74	250.74	4.50	1.19318
1	ALL	00121008	604987.25000	4860621.03000	250.14	250.14	1.50	11.75590
1	ALL	00121008	604972.97000	4860647.92000	250.74	250.74	4.50	10.90077
1	ALL	00121009	604987.25000	4860621.03000	250.14	250.14	1.50	1.93676
1	ALL	00121009	604972.97000	4860647.92000	250.74	250.74	4.50	1.63761
1	ALL	00121309	604987.25000	4860621.03000	250.14	250.14	1.50	5.07180
1	ALL	00121309	604972.97000	4860647.92000	250.74	250.74	4.50	5.52502
1	ALL	00121316	604987.25000	4860621.03000	250.14	250.14	1.50	12.32957
1	ALL	00121316	604972.97000	4860647.92000	250.74	250.74	4.50	12.38023
1	ALL	00121509	604987.25000	4860621.03000	250.14	250.14	1.50	14.93245
1	ALL	00121509	604972.97000	4860647.92000	250.74	250.74	4.50	14.22233
1	ALL	00121513	604987.25000	4860621.03000	250.14	250.14	1.50	3.01962
1	ALL	00121513	604972.97000	4860647.92000	250.74	250.74	4.50	3.25126
1	ALL	00121516	604987.25000	4860621.03000	250.14	250.14	1.50	1.38764
1	ALL	00121516	604972.97000	4860647.92000	250.74	250.74	4.50	1.45602
1	ALL	00121517	604987.25000	4860621.03000	250.14	250.14	1.50	11.75586
1	ALL	00121517	604972.97000	4860647.92000	250.74	250.74	4.50	10.90078
1	ALL	00121611	604987.25000	4860621.03000	250.14	250.14	1.50	1.00488
1	ALL	00122110	604987.25000	4860621.03000	250.14	250.14	1.50	1.21096
1	ALL	00122110	604972.97000	4860647.92000	250.74	250.74	4.50	1.19875
1	ALL	00122111	604987.25000	4860621.03000	250.14	250.14	1.50	1.20440
1	ALL	00122111	604972.97000	4860647.92000	250.74	250.74	4.50	1.17257

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**************************************
** AERMOD Control Pathway
**************************************
**
**
CO STARTING
   TITLEONE Nobleton Odour OU/S
   MODELOPT DFAULT CONC
   AVERTIME 1
   POLLUTID ODOUR
   FLAGPOLE 0.00
   RUNORNOT RUN
   ERRORFIL Nobltn_OU.err
CO FINISHED
**
**************************************
** AERMOD Source Pathway
**************************************
**
**
SO STARTING
** Source Location **
** Source ID - Type - X Coord. - Y Coord. **
   LOCATION VOL1          VOLUME     605189.452  4860459.875      246.000
** DESCRSRC Truck_Loading
   LOCATION STCK1         POINT      605199.650  4860442.270      245.980
** DESCRSRC Generator Exhaust
   LOCATION STCK2         POINTHOR   605195.220  4860501.730      246.820
** DESCRSRC A/C
   LOCATION STCK3         POINT      605200.840  4860446.240      246.000
** DESCRSRC MAU1
   LOCATION STCK4         POINT      605204.810  4860447.430      246.000
** DESCRSRC MAU2
** Source Parameters **
   SRCPARAM VOL1           11147.0     3.500     0.465     4.116
   SRCPARAM STCK1              0.0     8.000   734.150  34.83583     0.250
   SRCPARAM STCK2              0.0     1.000   455.150   1.18836     0.150
   SRCPARAM STCK3              0.0     6.550   455.150   1.67049     0.250
   SRCPARAM STCK4              0.0     6.550   455.150   1.42603     0.250

** Building Downwash **
   BUILDHGT STCK1            8.85     8.85     8.85     8.85     7.65     7.65
   BUILDHGT STCK1            7.65     7.65     7.65     7.65     7.65     7.65
   BUILDHGT STCK1            7.65     8.85     8.85     8.85     8.85     8.85
   BUILDHGT STCK1            8.85     8.85     8.85     8.85     7.65     7.65
   BUILDHGT STCK1            7.65     7.65     7.65     7.65     7.65     7.65
   BUILDHGT STCK1            7.65     8.85     8.85     8.85     8.85     8.85

   BUILDHGT STCK2            8.85     5.70     0.00     0.00     0.00     5.70
   BUILDHGT STCK2            5.70     5.70     5.70     5.70     5.70     5.70
   BUILDHGT STCK2            5.70     5.70     5.70     5.70     5.70     5.70
   BUILDHGT STCK2            5.70     5.70     0.00     0.00     0.00     5.70
   BUILDHGT STCK2            5.70     5.70     5.70     5.70     5.70     5.70
   BUILDHGT STCK2            5.70     5.70     5.70     8.85     8.85     8.85

   BUILDHGT STCK3            8.85     8.85     8.85     8.85     8.85     7.65
   BUILDHGT STCK3            4.85     4.85     7.65     7.65     8.85     8.85
   BUILDHGT STCK3            8.85     8.85     8.85     8.85     8.85     8.85
   BUILDHGT STCK3            8.85     8.85     8.85     8.85     8.85     7.65
   BUILDHGT STCK3            4.85     4.85     7.65     7.65     8.85     8.85
   BUILDHGT STCK3            8.85     8.85     8.85     8.85     8.85     8.85

   BUILDHGT STCK4            8.85     8.85     8.85     8.85     7.65     7.65
   BUILDHGT STCK4            4.85     4.85     4.85     8.85     8.85     8.85
   BUILDHGT STCK4            8.85     8.85     8.85     8.85     8.85     8.85
   BUILDHGT STCK4            8.85     8.85     8.85     8.85     7.65     7.65
   BUILDHGT STCK4            4.85     4.85     4.85     8.85     8.85     8.85
   BUILDHGT STCK4            8.85     8.85     8.85     8.85     8.85     8.85

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```
BUILDWID STCK1          15.73    16.51    16.79    16.55    20.96    19.67
BUILDWID STCK1          17.77    17.58    19.40    20.63    21.24    21.20
BUILDWID STCK1          20.52    14.81    13.96    12.68    12.77    14.47
BUILDWID STCK1          15.73    16.51    16.79    16.55    20.96    19.67
BUILDWID STCK1          17.77    17.58    19.40    20.63    21.24    21.20
BUILDWID STCK1          20.52    14.81    13.96    12.68    12.77    14.47

BUILDWID STCK2          15.73    31.69     0.00     0.00     0.00    23.70
BUILDWID STCK2          21.56    22.02    23.69    25.92    28.89    31.24
BUILDWID STCK2          32.64    33.05    32.45    30.87    31.23    32.37
BUILDWID STCK2          32.52    31.69     0.00     0.00     0.00    23.70
BUILDWID STCK2          21.56    22.02    23.69    25.92    28.89    31.24
BUILDWID STCK2          32.64    33.05    32.45    12.68    12.77    14.47

BUILDWID STCK3          15.73    16.51    16.79    16.55    15.82    19.67
BUILDWID STCK3          41.53    40.82    19.40    20.63    14.65    15.17
BUILDWID STCK3          15.22    14.81    13.96    12.68    12.77    14.47
BUILDWID STCK3          15.73    16.51    16.79    16.55    15.82    19.67
BUILDWID STCK3          41.53    40.82    19.40    20.63    14.65    15.17
BUILDWID STCK3          15.22    14.81    13.96    12.68    12.77    14.47

BUILDWID STCK4          15.73    16.51    16.79    16.55    20.96    19.67
BUILDWID STCK4          41.53    40.82    40.78    13.69    14.65    15.17
BUILDWID STCK4          15.22    14.81    13.96    12.68    12.77    14.47
BUILDWID STCK4          15.73    16.51    16.79    16.55    20.96    19.67
BUILDWID STCK4          41.53    40.82    40.78    13.69    14.65    15.17
BUILDWID STCK4          15.22    14.81    13.96    12.68    12.77    14.47

BUILDLEN STCK1          13.69    14.65    15.17    15.22    19.21    17.32
BUILDLEN STCK1          14.90    15.36    17.79    19.68    20.97    21.63
BUILDLEN STCK1          21.62    15.82    14.60    12.95    12.08    12.62
BUILDLEN STCK1          13.69    14.65    15.17    15.22    19.21    17.32
BUILDLEN STCK1          14.90    15.36    17.79    19.68    20.97    21.63
BUILDLEN STCK1          21.62    15.82    14.60    12.95    12.08    12.62

BUILDLEN STCK2          13.69    28.89     0.00     0.00     0.00    32.45
BUILDLEN STCK2          30.87    31.23    32.37    32.52    31.69    29.89
BUILDLEN STCK2          28.53    26.52    23.70    21.56    22.02    23.69
BUILDLEN STCK2          25.92    28.89     0.00     0.00     0.00    32.45
BUILDLEN STCK2          30.87    31.23    32.37    32.52    31.69    29.89
BUILDLEN STCK2          28.53    26.52    23.70    12.95    12.08    12.62

BUILDLEN STCK3          13.69    14.65    15.17    15.22    14.81    17.32
BUILDLEN STCK3          16.86    15.64    17.79    19.68    16.51    16.79
BUILDLEN STCK3          16.55    15.82    14.60    12.95    12.08    12.62
BUILDLEN STCK3          13.69    14.65    15.17    15.22    14.81    17.32
BUILDLEN STCK3          16.86    15.64    17.79    19.68    16.51    16.79
BUILDLEN STCK3          16.55    15.82    14.60    12.95    12.08    12.62

BUILDLEN STCK4          13.69    14.65    15.17    15.22    19.21    17.32
BUILDLEN STCK4          16.86    15.64    22.25    15.73    16.51    16.79
BUILDLEN STCK4          16.55    15.82    14.60    12.95    12.08    12.62
BUILDLEN STCK4          13.69    14.65    15.17    15.22    19.21    17.32
BUILDLEN STCK4          16.86    15.64    22.25    15.73    16.51    16.79
BUILDLEN STCK4          16.55    15.82    14.60    12.95    12.08    12.62

XBADJ    STCK1           9.06     7.89     6.47     4.86   -10.56    -7.81
XBADJ    STCK1          -4.82    -3.32    -2.94    -2.47    -1.92    -1.32
XBADJ    STCK1          -0.68   -21.00   -22.07   -22.46   -22.64   -22.58
XBADJ    STCK1         -22.75   -22.53   -21.64   -20.08    -8.65    -9.51
XBADJ    STCK1         -10.08   -12.04   -14.85   -17.21   -19.05   -20.31
XBADJ    STCK1         -20.95     5.18     7.46     9.52    10.56     9.96

XBADJ    STCK2         -48.73   -17.41     0.00     0.00     0.00    -7.18
XBADJ    STCK2          -3.86    -1.75    -0.38     1.00     2.36     3.64
XBADJ    STCK2           3.46     2.96     2.38     1.72    -0.39    -3.36
XBADJ    STCK2          -7.12   -11.49     0.00     0.00     0.00   -25.27
XBADJ    STCK2         -27.02   -29.48   -31.99   -33.53   -34.04   -33.52
XBADJ    STCK2         -31.99   -29.48   -26.08   -47.87   -48.77   -49.50
```

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139
140       XBADJ    STCK3             4.94     3.75     2.44     1.05    -0.36   -10.83
141       XBADJ    STCK3            -7.30    -5.47    -4.13    -2.95   -13.97   -16.06
142       XBADJ    STCK3           -17.66   -18.73   -19.23   -19.14   -18.94   -18.61
143       XBADJ    STCK3           -18.63   -18.40   -17.60   -16.27   -14.45    -6.50
144       XBADJ    STCK3            -9.56   -10.18   -13.66   -16.73    -2.54    -0.73
145       XBADJ    STCK3             1.11     2.91     4.62     6.19     6.85     5.99
146
147       XBADJ    STCK4             3.08     1.27    -0.58    -2.41   -17.83   -14.86
148       XBADJ    STCK4           -11.44    -9.58   -12.56   -15.16   -17.29   -18.90
149       XBADJ    STCK4           -19.94   -20.37   -20.18   -19.38   -18.46   -17.42
150       XBADJ    STCK4           -16.77   -15.92   -14.59   -12.81    -1.38    -2.46
151       XBADJ    STCK4            -5.42    -6.06    -9.69    -0.57     0.78     2.12
152       XBADJ    STCK4             3.38     4.55     5.57     6.43     6.37     4.80
153
154       YBADJ    STCK1             3.11     5.95     8.62    11.02   -10.47   -10.49
155       YBADJ    STCK1           -10.18    -9.39    -8.50    -7.35    -5.97    -4.42
156       YBADJ    STCK1            -2.73    10.51     8.23     5.69     2.78    -0.17
157       YBADJ    STCK1            -3.11    -5.95    -8.62   -11.02    10.47    10.49
158       YBADJ    STCK1            10.18     9.39     8.50     7.35     5.97     4.42
159       YBADJ    STCK1             2.73   -10.51    -8.23    -5.69    -2.78     0.17
160
161       YBADJ    STCK2           -11.58   -18.20     0.00     0.00     0.00   -14.23
162       YBADJ    STCK2           -12.49   -10.62    -8.48    -5.84    -2.96     0.14
163       YBADJ    STCK2             3.24     6.24     9.05    11.58    13.87    15.81
164       YBADJ    STCK2            17.26    18.20     0.00     0.00     0.00    14.23
165       YBADJ    STCK2            12.49    10.62     8.48     5.84     2.96    -0.14
166       YBADJ    STCK2            -3.24    -6.24    -9.05    10.48     3.18    -4.27
167
168       YBADJ    STCK3             3.59     5.71     7.67     9.38    10.82   -13.33
169       YBADJ    STCK3            -1.63    -1.47   -12.47   -11.46    11.07    10.02
170       YBADJ    STCK3             8.66     7.04     5.21     3.22     0.92    -1.36
171       YBADJ    STCK3            -3.59    -5.71    -7.67    -9.38   -10.82    13.33
172       YBADJ    STCK3             1.63     1.47    12.47    11.46   -11.07   -10.02
173       YBADJ    STCK3            -8.66    -7.04    -5.21    -3.22    -0.92     1.36
174
175       YBADJ    STCK4             7.29     9.04    10.51    11.66   -11.11   -12.37
176       YBADJ    STCK4            -1.39    -1.96    -2.97     9.93     8.60     7.00
177       YBADJ    STCK4             5.20     3.24     1.18    -0.92    -3.20    -5.33
178       YBADJ    STCK4            -7.29    -9.04   -10.51   -11.66    11.11    12.37
179       YBADJ    STCK4             1.39     1.96     2.97    -9.93    -8.60    -7.00
180       YBADJ    STCK4            -5.20    -3.24    -1.18     0.92     3.20     5.33
181
182
183   ** Variable Emissions Type: "By Hour-of-Day (HROFDY)"
184   ** Variable Emission Scenario: "Scenario 1"
185      EMISFACT VOL1         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
186      EMISFACT VOL1         HROFDY 0.0 1.65 1.65 1.65 1.65 1.65
187      EMISFACT VOL1         HROFDY 1.65 1.65 1.65 1.65 1.65 0.0
188      EMISFACT VOL1         HROFDY 0.0 0.0 0.0 0.0 0.0 0.0
189      CONCUNIT 1 OU/S OU/M**3
190      SRCGROUP ALL
191   SO FINISHED
192   **
193   ****************************************
194   ** AERMOD Receptor Pathway
195   ****************************************
196   **
197   **
198   RE STARTING
199      INCLUDED Nobleton_Odour.rou
200   RE FINISHED
201   **
202   ****************************************
203   ** AERMOD Meteorology Pathway
204   ****************************************
205   **
206   **
207   ME STARTING
```

```
   SURFFILE Toronto_crops_19191.SFC
   PROFFILE Toronto_crops_19191.PFL
   SURFDATA 61587 1996 TORONTO
   UAIRDATA 725280 1996 BUFFALO
   PROFBASE 173.0 METERS
ME FINISHED
**
**************************************
** AERMOD Output Pathway
**************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   MAXTABLE ALLAVE 500
   MAXIFILE 1 ALL 1 1hr.MAX 31
** Auto-Generated Plotfiles
   PLOTFILE 1 ALL 1ST 01H1GALL.PLT 32
   SUMMFILE Nobltn_OU.sum
OU FINISHED


  *** Message Summary For AERMOD Model Setup ***

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

 A Total of            0 Fatal Error Message(s)
 A Total of            5 Warning Message(s)
 A Total of            0 Informational Message(s)


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


    ********   WARNING MESSAGES   ********
 SO W320      36        PPARM: Input Parameter May Be Out-of-Range for
 Parameter             QS
 SO W320      37        PPARM: Input Parameter May Be Out-of-Range for
 Parameter             QS
 SO W320      38        PPARM: Input Parameter May Be Out-of-Range for
 Parameter             QS
 SO W320      39        PPARM: Input Parameter May Be Out-of-Range for
 Parameter             QS
 ME W187     213         MEOPEN: ADJ_U* Option for Stable Low Winds used in
 AERMET

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

FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
OU/S                                                    ***        07/13/21
 *** AERMET - VERSION  19191 ***
 ***                                                                    ***
 10:59:33

                              PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

                                            ***     MODEL SETUP OPTIONS SUMMARY       ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - -

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

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
```

```
**NO PARTICLE DEPOSITION Data Provided.
**Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
**Model Uses NO WET DEPLETION.  WETDPLT  =  F

**Model Uses RURAL Dispersion Only.

**Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.

**Other Options Specified:
        ADJ_U*   - Use ADJ_U* option for SBL in AERMET
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

**Model Accepts FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  ODOUR

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

**This Run Includes:      5 Source(s);       1 Source Group(s); and       2 Receptor(s)

               with:      4 POINT(s), including
                          0 POINTCAP(s) and      1 POINTHOR(s)
                and:      1 VOLUME source(s)
                and:      0 AREA type source(s)
                and:      0 LINE source(s)
                and:      0 RLINE/RLINEXT source(s)
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with      0 line(s)


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

**The AERMET Input Meteorological Data Version Date:  19191

**Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
         Keyword)
         Model Outputs Tables of Overall Maximum Short Term Values (MAXTABLE Keyword)
         Model Outputs External File(s) of Threshold Violations (MAXIFILE Keyword)
         Model Outputs External File(s) of High Values for Plotting (PLOTFILE Keyword)
         Model Outputs Separate Summary File of High Ranked Values (SUMMFILE Keyword)

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

**Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   173.00 ;  Decay Coef.
=    0.000     ;  Rot. Angle =     0.0
                  Emission Units = OU/S                                    ;  Emission
                  Rate Unit Factor =    1.0000
                  Output Units   = OU/M**3

**Approximate Storage Requirements of Model =      3.5 MB of RAM.

**Input Runstream File:
aermod.inp

**Output Print File:
aermod.out


**Detailed Error/Message File:
```

```
      Nobltn_OU.err

328   **File for Summary of Results:
      Nobltn_OU.sum

329   FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
      OU/S                                              ***        07/13/21
330    *** AERMET - VERSION  19191 ***
       ***                                                          ***
       10:59:33
331
                                  PAGE   2
332    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*
333
334
335                                                *** POINT SOURCE DATA ***
336
337                NUMBER EMISSION RATE                     BASE     STACK   STACK
                   STACK     STACK    BLDG   URBAN  CAP/  EMIS RATE
338      SOURCE       PART. (USER UNITS)     X        Y      ELEV.    HEIGHT  TEMP.   EXIT
         VEL. DIAMETER  EXISTS SOURCE HOR   SCALAR
339        ID         CATS.                (METERS) (METERS) (METERS) (METERS) (DEG.K)
           (M/SEC)   (METERS)                    VARY BY
340    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
341
342    STCK1            0   0.00000E+00  605199.7 4860442.3   246.0     8.00   734.15
       34.84     0.25    YES     NO    NO
343    STCK2            0   0.00000E+00  605195.2 4860501.7   246.8     1.00   455.15
       1.19      0.15    YES     NO   HOR
344    STCK3            0   0.00000E+00  605200.8 4860446.2   246.0     6.55   455.15
       1.67      0.25    YES     NO    NO
345    STCK4            0   0.00000E+00  605204.8 4860447.4   246.0     6.55   455.15
       1.43      0.25    YES     NO    NO
346   FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
      OU/S                                              ***        07/13/21
347    *** AERMET - VERSION  19191 ***
       ***                                                          ***
       10:59:33
348
                                  PAGE    3
349    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*
350
351
352                                                *** VOLUME SOURCE DATA ***
353
354                NUMBER EMISSION RATE                     BASE    RELEASE    INIT.
                   INIT.   URBAN  EMISSION RATE
355      SOURCE       PART. (USER UNITS)     X        Y      ELEV.   HEIGHT      SY
         SZ     SOURCE  SCALAR VARY
356        ID         CATS.                (METERS) (METERS) (METERS) (METERS) (METERS)
           (METERS)              BY
357    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
358
359    VOL1             0   0.11147E+05  605189.5 4860459.9   246.0     3.50     0.47
       4.12      NO    HROFDY
360   FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
      OU/S                                              ***        07/13/21
361    *** AERMET - VERSION  19191 ***
       ***                                                          ***
       10:59:33
362
                                  PAGE   4
363    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*
364
365
366                                             *** SOURCE IDs DEFINING SOURCE GROUPS ***
367
```

```
 SRCGROUP ID                                                SOURCE IDs
 -----------                                                ----------


  ALL        VOL1        , STCK1       , STCK2       , STCK3       , STCK4       ,
FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
OU/S                                                  ***        07/13/21
 *** AERMET - VERSION  19191 ***
 ***                                                                ***
 10:59:33

                              PAGE   5
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

                                       *** DIRECTION SPECIFIC BUILDING DIMENSIONS ***


 SOURCE ID: STCK1
  IFV    BH      BW      BL     XADJ    YADJ     IFV    BH      BW      BL     XADJ
  YADJ
    1    8.9,   15.7,   13.7,    9.1,    3.1,      2    8.9,   16.5,   14.7,    7.9,
    6.0,
    3    8.9,   16.8,   15.2,    6.5,    8.6,      4    8.9,   16.6,   15.2,    4.9,
   11.0,
    5    7.6,   21.0,   19.2,  -10.6,  -10.5,      6    7.6,   19.7,   17.3,   -7.8,
  -10.5,
    7    7.6,   17.8,   14.9,   -4.8,  -10.2,      8    7.6,   17.6,   15.4,   -3.3,
   -9.4,
    9    7.6,   19.4,   17.8,   -2.9,   -8.5,     10    7.6,   20.6,   19.7,   -2.5,
   -7.3,
   11    7.6,   21.2,   21.0,   -1.9,   -6.0,     12    7.6,   21.2,   21.6,   -1.3,
   -4.4,
   13    7.6,   20.5,   21.6,   -0.7,   -2.7,     14    8.9,   14.8,   15.8,  -21.0,
   10.5,
   15    8.9,   14.0,   14.6,  -22.1,    8.2,     16    8.9,   12.7,   13.0,  -22.5,
    5.7,
   17    8.9,   12.8,   12.1,  -22.6,    2.8,     18    8.9,   14.5,   12.6,  -22.6,
   -0.2,
   19    8.9,   15.7,   13.7,  -22.8,   -3.1,     20    8.9,   16.5,   14.7,  -22.5,
   -6.0,
   21    8.9,   16.8,   15.2,  -21.6,   -8.6,     22    8.9,   16.6,   15.2,  -20.1,
  -11.0,
   23    7.6,   21.0,   19.2,   -8.7,   10.5,     24    7.6,   19.7,   17.3,   -9.5,
   10.5,
   25    7.6,   17.8,   14.9,  -10.1,   10.2,     26    7.6,   17.6,   15.4,  -12.0,
    9.4,
   27    7.6,   19.4,   17.8,  -14.9,    8.5,     28    7.6,   20.6,   19.7,  -17.2,
    7.3,
   29    7.6,   21.2,   21.0,  -19.1,    6.0,     30    7.6,   21.2,   21.6,  -20.3,
    4.4,
   31    7.6,   20.5,   21.6,  -20.9,    2.7,     32    8.9,   14.8,   15.8,    5.2,
  -10.5,
   33    8.9,   14.0,   14.6,    7.5,   -8.2,     34    8.9,   12.7,   13.0,    9.5,
   -5.7,
   35    8.9,   12.8,   12.1,   10.6,   -2.8,     36    8.9,   14.5,   12.6,   10.0,
    0.2,


 SOURCE ID: STCK2
  IFV    BH      BW      BL     XADJ    YADJ     IFV    BH      BW      BL     XADJ
  YADJ
    1    8.9,   15.7,   13.7,  -48.7,  -11.6,      2    5.7,   31.7,   28.9,  -17.4,
  -18.2,
    3    0.0,    0.0,    0.0,    0.0,    0.0,      4    0.0,    0.0,    0.0,    0.0,
    0.0,
    5    0.0,    0.0,    0.0,    0.0,    0.0,      6    5.7,   23.7,   32.4,   -7.2,
  -14.2,
    7    5.7,   21.6,   30.9,   -3.9,  -12.5,      8    5.7,   22.0,   31.2,   -1.8,
  -10.6,
```

```
 9    5.7,   23.7,   32.4,   -0.4,   -8.5,     10    5.7,   25.9,   32.5,    1.0,
 -5.8,
11    5.7,   28.9,   31.7,    2.4,   -3.0,     12    5.7,   31.2,   29.9,    3.6,
 0.1,
13    5.7,   32.6,   28.5,    3.5,    3.2,     14    5.7,   33.0,   26.5,    3.0,
 6.2,
15    5.7,   32.4,   23.7,    2.4,    9.1,     16    5.7,   30.9,   21.6,    1.7,
 11.6,
17    5.7,   31.2,   22.0,   -0.4,   13.9,     18    5.7,   32.4,   23.7,   -3.4,
 15.8,
19    5.7,   32.5,   25.9,   -7.1,   17.3,     20    5.7,   31.7,   28.9,  -11.5,
 18.2,
21    0.0,    0.0,    0.0,    0.0,    0.0,     22    0.0,    0.0,    0.0,    0.0,
 0.0,
23    0.0,    0.0,    0.0,    0.0,    0.0,     24    5.7,   23.7,   32.4,  -25.3,
 14.2,
25    5.7,   21.6,   30.9,  -27.0,   12.5,     26    5.7,   22.0,   31.2,  -29.5,
 10.6,
27    5.7,   23.7,   32.4,  -32.0,    8.5,     28    5.7,   25.9,   32.5,  -33.5,
 5.8,
29    5.7,   28.9,   31.7,  -34.0,    3.0,     30    5.7,   31.2,   29.9,  -33.5,
 -0.1,
31    5.7,   32.6,   28.5,  -32.0,   -3.2,     32    5.7,   33.0,   26.5,  -29.5,
 -6.2,
33    5.7,   32.4,   23.7,  -26.1,   -9.1,     34    8.9,   12.7,   13.0,  -47.9,
 10.5,
35    8.9,   12.8,   12.1,  -48.8,    3.2,     36    8.9,   14.5,   12.6,  -49.5,
 -4.3,


SOURCE ID: STCK3
 IFV    BH      BW      BL     XADJ    YADJ     IFV    BH      BW      BL     XADJ
 YADJ
 1    8.9,   15.7,   13.7,    4.9,    3.6,      2    8.9,   16.5,   14.7,    3.8,
  5.7,
 3    8.9,   16.8,   15.2,    2.4,    7.7,      4    8.9,   16.6,   15.2,    1.1,
  9.4,
 5    8.9,   15.8,   14.8,   -0.4,   10.8,      6    7.6,   19.7,   17.3,  -10.8,
  -13.3,
 7    4.8,   41.5,   16.9,   -7.3,   -1.6,      8    4.8,   40.8,   15.6,   -5.5,
  -1.5,
 9    7.6,   19.4,   17.8,   -4.1,  -12.5,     10    7.6,   20.6,   19.7,   -2.9,
  -11.5,
11    8.9,   14.7,   16.5,  -14.0,   11.1,     12    8.9,   15.2,   16.8,  -16.1,
 10.0,
13    8.9,   15.2,   16.6,  -17.7,    8.7,     14    8.9,   14.8,   15.8,  -18.7,
 7.0,
15    8.9,   14.0,   14.6,  -19.2,    5.2,     16    8.9,   12.7,   13.0,  -19.1,
 3.2,
17    8.9,   12.8,   12.1,  -18.9,    0.9,     18    8.9,   14.5,   12.6,  -18.6,
 -1.4,
19    8.9,   15.7,   13.7,  -18.6,   -3.6,     20    8.9,   16.5,   14.7,  -18.4,
 -5.7,
21    8.9,   16.8,   15.2,  -17.6,   -7.7,     22    8.9,   16.6,   15.2,  -16.3,
 -9.4,
23    8.9,   15.8,   14.8,  -14.5,  -10.8,     24    7.6,   19.7,   17.3,   -6.5,
 13.3,
25    4.8,   41.5,   16.9,   -9.6,    1.6,     26    4.8,   40.8,   15.6,  -10.2,
 1.5,
27    7.6,   19.4,   17.8,  -13.7,   12.5,     28    7.6,   20.6,   19.7,  -16.7,
 11.5,
29    8.9,   14.7,   16.5,   -2.5,  -11.1,     30    8.9,   15.2,   16.8,   -0.7,
 -10.0,
31    8.9,   15.2,   16.6,    1.1,   -8.7,     32    8.9,   14.8,   15.8,    2.9,
 -7.0,
33    8.9,   14.0,   14.6,    4.6,   -5.2,     34    8.9,   12.7,   13.0,    6.2,
 -3.2,
35    8.9,   12.8,   12.1,    6.8,   -0.9,     36    8.9,   14.5,   12.6,    6.0,
 1.4,
```

```
445
446
447    SOURCE ID: STCK4
448     IFV    BH      BW      BL     XADJ    YADJ     IFV    BH      BW      BL     XADJ
        YADJ
449       1    8.9,   15.7,   13.7,    3.1,    7.3,       2    8.9,   16.5,   14.7,    1.3,
          9.0,
450       3    8.9,   16.8,   15.2,   -0.6,   10.5,       4    8.9,   16.6,   15.2,   -2.4,
          11.7,
451       5    7.6,   21.0,   19.2,  -17.8,  -11.1,       6    7.6,   19.7,   17.3,  -14.9,
          -12.4,
452       7    4.8,   41.5,   16.9,  -11.4,   -1.4,       8    4.8,   40.8,   15.6,   -9.6,
          -2.0,
453       9    4.8,   40.8,   22.2,  -12.6,   -3.0,      10    8.9,   13.7,   15.7,  -15.2,
          9.9,
454      11    8.9,   14.7,   16.5,  -17.3,    8.6,      12    8.9,   15.2,   16.8,  -18.9,
          7.0,
455      13    8.9,   15.2,   16.6,  -19.9,    5.2,      14    8.9,   14.8,   15.8,  -20.4,
          3.2,
456      15    8.9,   14.0,   14.6,  -20.2,    1.2,      16    8.9,   12.7,   13.0,  -19.4,
          -0.9,
457      17    8.9,   12.8,   12.1,  -18.5,   -3.2,      18    8.9,   14.5,   12.6,  -17.4,
          -5.3,
458      19    8.9,   15.7,   13.7,  -16.8,   -7.3,      20    8.9,   16.5,   14.7,  -15.9,
          -9.0,
459      21    8.9,   16.8,   15.2,  -14.6,  -10.5,      22    8.9,   16.6,   15.2,  -12.8,
          -11.7,
460      23    7.6,   21.0,   19.2,   -1.4,   11.1,      24    7.6,   19.7,   17.3,   -2.5,
          12.4,
461      25    4.8,   41.5,   16.9,   -5.4,    1.4,      26    4.8,   40.8,   15.6,   -6.1,
          2.0,
462      27    4.8,   40.8,   22.2,   -9.7,    3.0,      28    8.9,   13.7,   15.7,   -0.6,
          -9.9,
463      29    8.9,   14.7,   16.5,    0.8,   -8.6,      30    8.9,   15.2,   16.8,    2.1,
          -7.0,
464      31    8.9,   15.2,   16.6,    3.4,   -5.2,      32    8.9,   14.8,   15.8,    4.5,
          -3.2,
465      33    8.9,   14.0,   14.6,    5.6,   -1.2,      34    8.9,   12.7,   13.0,    6.4,
          0.9,
466      35    8.9,   12.8,   12.1,    6.4,    3.2,      36    8.9,   14.5,   12.6,    4.8,
          5.3,
467
468    FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
       OU/S                                          ***        07/13/21
469     *** AERMET - VERSION  19191 ***
        ***                                                          ***
        10:59:33
470
                                  PAGE   6
471    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*
472
473                             * SOURCE EMISSION RATE SCALARS WHICH VARY FOR EACH HOUR OF
                                THE DAY *
474
475        HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR      HOUR    SCALAR
           HOUR    SCALAR      HOUR    SCALAR
476    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
477
478
479    SOURCE ID = VOL1         ; SOURCE TYPE = VOLUME   :
480          1   .00000E+00       2   .00000E+00       3   .00000E+00       4   .00000E+00
              5   .00000E+00       6   .00000E+00
481          7   .00000E+00       8   .16500E+01       9   .16500E+01      10   .16500E+01
             11   .16500E+01      12   .16500E+01
482         13   .16500E+01      14   .16500E+01      15   .16500E+01      16   .16500E+01
             17   .16500E+01      18   .00000E+00
483          19   .00000E+00      20   .00000E+00      21   .00000E+00      22   .00000E+00
             23   .00000E+00      24   .00000E+00
```

```
 *** AERMOD - VERSION  19191 ***   *** Nobleton Odour OU/S                             ***        07/13/21
 *** AERMET - VERSION  19191 ***
 ***                                                                                         ***        10:59:33

                                         PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

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

      ( 604987.2, 4860621.0,     250.1,     250.1,       1.5);         ( 604973.0, 4860647.9,     250.7,     250.7,       4.5);
 *** AERMOD - VERSION  19191 ***   *** Nobleton Odour OU/S                             ***        07/13/21
 *** AERMET - VERSION  19191 ***
 ***                                                                                         ***        10:59:33

                                         PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

                                                  *** METEOROLOGICAL DAYS SELECTED FOR PROCESSING ***
                                                                   (1=YES; 0=NO)

            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
            1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1

                NOTE:  METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.



                                         *** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
                                                                  (METERS/SEC)

                                                        1.54,   3.09,   5.14,   8.23,  10.80,
 *** AERMOD - VERSION  19191 ***   *** Nobleton Odour OU/S                             ***        07/13/21
 *** AERMET - VERSION  19191 ***
 ***                                                                                         ***        10:59:33

                                         PAGE   9
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

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

   Surface file:   Toronto_crops_19191.SFC
```

```
      Met Version:  19191
      Profile file:
      Toronto_crops_19191.PFL
      Surface format:
      FREE

      Profile format:
      FREE

      Surface station no.:    61587                  Upper air station no.:   725280
                     Name: TORONTO                                    Name:
                     BUFFALO
                     Year:   1996                                     Year:   1996

 First 24 hours of scalar data
 YR MO DY JDY HR     H0     U*     W*  DT/DZ ZICNV ZIMCH  M-O LEN    Z0  BOWEN ALBEDO
 REF WS   WD     HT  REF TA     HT
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 96 01 01   1 01  -21.5  0.212 -9.000 -9.000 -999.  234.     49.3  0.10   0.50
 1.00    2.60   41.   10.0  273.1    2.0
 96 01 01   1 02  -21.5  0.212 -9.000 -9.000 -999.  234.     49.3  0.10   0.50
 1.00    2.60   38.   10.0  273.1    2.0
 96 01 01   1 03  -34.6  0.341 -9.000 -9.000 -999.  477.    127.6  0.10   0.50
 1.00    4.10   44.   10.0  273.1    2.0
 96 01 01   1 04  -34.6  0.341 -9.000 -9.000 -999.  477.    127.6  0.10   0.50
 1.00    4.10   73.   10.0  273.1    2.0
 96 01 01   1 05  -43.6  0.427 -9.000 -9.000 -999.  671.    201.0  0.10   0.50
 1.00    5.10   63.   10.0  272.5    2.0
 96 01 01   1 06  -39.2  0.384 -9.000 -9.000 -999.  572.    162.1  0.10   0.50
 1.00    4.60   82.   10.0  272.0    2.0
 96 01 01   1 07  -43.6  0.427 -9.000 -9.000 -999.  670.    201.0  0.10   0.50
 1.00    5.10   75.   10.0  272.0    2.0
 96 01 01   1 08  -39.3  0.384 -9.000 -9.000 -999.  572.    162.1  0.10   0.50
 1.00    4.60   83.   10.0  271.4    2.0
 96 01 01   1 09  -33.7  0.341 -9.000 -9.000 -999.  479.    127.7  0.10   0.50
 0.82    4.10   67.   10.0  270.4    2.0
 96 01 01   1 10  -25.9  0.343 -9.000 -9.000 -999.  481.    137.3  0.10   0.50
 0.69    4.10   61.   10.0  269.9    2.0
 96 01 01   1 11  -18.7  0.435 -9.000 -9.000 -999.  689.    390.6  0.10   0.50
 0.64    5.10   54.   10.0  269.9    2.0
 96 01 01   1 12   -6.0  0.353 -9.000 -9.000 -999.  507.    650.3  0.10   0.50
 0.62    4.10   66.   10.0  269.2    2.0
 96 01 01   1 13   -3.1  0.355 -9.000 -9.000 -999.  508.   1282.7  0.10   0.50
 0.62    4.10   73.   10.0  269.2    2.0
 96 01 01   1 14   -8.0  0.351 -9.000 -9.000 -999.  499.    478.4  0.10   0.50
 0.63    4.10   59.   10.0  269.2    2.0
 96 01 01   1 15  -20.4  0.389 -9.000 -9.000 -999.  583.    256.7  0.10   0.50
 0.65    4.60   62.   10.0  268.8    2.0
 96 01 01   1 16  -32.4  0.385 -9.000 -9.000 -999.  574.    163.4  0.10   0.50
 0.72    4.60   34.   10.0  268.8    2.0
 96 01 01   1 17  -22.1  0.211 -9.000 -9.000 -999.  257.     49.2  0.10   0.50
 0.89    2.60   31.   10.0  265.9    2.0
 96 01 01   1 18  -39.9  0.384 -9.000 -9.000 -999.  570.    162.0  0.10   0.50
 1.00    4.60    7.   10.0  267.0    2.0
 96 01 01   1 19  -35.4  0.340 -9.000 -9.000 -999.  478.    127.5  0.10   0.50
 1.00    4.10   14.   10.0  267.0    2.0
 96 01 01   1 20  -35.5  0.340 -9.000 -9.000 -999.  477.    127.4  0.10   0.50
 1.00    4.10    7.   10.0  266.4    2.0
 96 01 01   1 21  -44.5  0.427 -9.000 -9.000 -999.  670.    200.8  0.10   0.50
 1.00    5.10   10.   10.0  266.4    2.0
 96 01 01   1 22  -44.6  0.427 -9.000 -9.000 -999.  670.    200.8  0.10   0.50
 1.00    5.10   32.   10.0  265.9    2.0
 96 01 01   1 23  -31.1  0.297 -9.000 -9.000 -999.  401.     97.2  0.10   0.50
 1.00    3.60   30.   10.0  265.9    2.0
 96 01 01   1 24  -35.5  0.340 -9.000 -9.000 -999.  476.    127.4  0.10   0.50
 1.00    4.10   30.   10.0  265.9    2.0
```

```
 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 96 01 01 01   10.0 1   41.    2.60   273.2   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
OU/S                                                ***        07/13/21
 *** AERMET - VERSION  19191 ***
 ***                                                                ***
 10:59:33

                              PAGE  10
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
                              VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL1        , STCK1       ,
                                  STCK2       , STCK3       , STCK4       ,

                                           *** DISCRETE CARTESIAN RECEPTOR POINTS ***

                                        ** CONC OF ODOUR    IN
                                        OU/M**3                                 **

      X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
      Y-COORD (M)        CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - -
        604987.25   4860621.03       17.55249  (97120816)               604972.97
        4860647.92       14.38212  (96123116)
FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
OU/S                                                ***        07/13/21
 *** AERMET - VERSION  19191 ***
 ***                                                                ***
 10:59:33

                              PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

                              *** THE MAXIMUM  500   1-HR AVERAGE CONCENTRATION
                              VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL1        , STCK1       ,
                                  STCK2       , STCK3       , STCK4       ,

                                        ** CONC OF ODOUR    IN
                                        OU/M**3                                 **

 RANK        CONC     (YYMMDDHH) AT      RECEPTOR (XR,YR) OF TYPE    RANK        CONC
 (YYMMDDHH) AT      RECEPTOR (XR,YR) OF TYPE
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - -
    1.      17.55249 (97120816) AT ( 604987.25, 4860621.03)  DC       41.      10.40572
    (96012609) AT ( 604972.97, 4860647.92)  DC
    2.      16.58837 (98120608) AT ( 604987.25, 4860621.03)  DC       42.      10.26555
    (96011716) AT ( 604972.97, 4860647.92)  DC
    3.      16.47145 (97020208) AT ( 604987.25, 4860621.03)  DC       43.       9.81701
    (99020209) AT ( 604972.97, 4860647.92)  DC
    4.      15.89676 (99020209) AT ( 604987.25, 4860621.03)  DC       44.       9.77284
    (97122917) AT ( 604972.97, 4860647.92)  DC
    5.      15.09607 (96123116) AT ( 604987.25, 4860621.03)  DC       45.       9.43804
    (98120616) AT ( 604972.97, 4860647.92)  DC
    6.      15.06207 (98121616) AT ( 604987.25, 4860621.03)  DC       46.       9.27986
    (98010910) AT ( 604972.97, 4860647.92)  DC
    7.      14.95888 (97022109) AT ( 604987.25, 4860621.03)  DC       47.       9.17512
    (98010910) AT ( 604987.25, 4860621.03)  DC
    8.      14.93245 (00121509) AT ( 604987.25, 4860621.03)  DC       48.       9.13075
    (96110508) AT ( 604987.25, 4860621.03)  DC
    9.      14.84256 (99022708) AT ( 604987.25, 4860621.03)  DC       49.       8.93936
    (97022110) AT ( 604972.97, 4860647.92)  DC
```

```
605      10.      14.70212 (99012916) AT ( 604987.25, 4860621.03)  DC       50.       8.75804
         (00013015) AT ( 604987.25, 4860621.03)  DC
606      11.      14.38963 (96122812) AT ( 604987.25, 4860621.03)  DC       51.       8.39982
         (97022109) AT ( 604972.97, 4860647.92)  DC
607      12.      14.38212 (96123116) AT ( 604972.97, 4860647.92)  DC       52.       8.37301
         (97122409) AT ( 604972.97, 4860647.92)  DC
608      13.      14.33448 (98121616) AT ( 604972.97, 4860647.92)  DC       53.       8.32882
         (99012916) AT ( 604972.97, 4860647.92)  DC
609      14.      14.22233 (00121509) AT ( 604972.97, 4860647.92)  DC       54.       8.17212
         (99021609) AT ( 604972.97, 4860647.92)  DC
610      15.      14.17172 (99022708) AT ( 604972.97, 4860647.92)  DC       55.       8.08671
         (97122409) AT ( 604987.25, 4860621.03)  DC
611      16.      13.28289 (97122917) AT ( 604987.25, 4860621.03)  DC       56.       7.72599
         (99021609) AT ( 604987.25, 4860621.03)  DC
612      17.      13.25324 (97022110) AT ( 604987.25, 4860621.03)  DC       57.       7.39562
         (96021008) AT ( 604987.25, 4860621.03)  DC
613      18.      12.86579 (00012216) AT ( 604972.97, 4860647.92)  DC       58.       7.04578
         (99121817) AT ( 604972.97, 4860647.92)  DC
614      19.      12.79695 (00012216) AT ( 604987.25, 4860621.03)  DC       59.       6.93327
         (99111908) AT ( 604987.25, 4860621.03)  DC
615      20.      12.72475 (98120616) AT ( 604987.25, 4860621.03)  DC       60.       6.84927
         (99121817) AT ( 604987.25, 4860621.03)  DC
616      21.      12.54895 (96011715) AT ( 604972.97, 4860647.92)  DC       61.       6.75466
         (00013015) AT ( 604972.97, 4860647.92)  DC
617      22.      12.52021 (96122812) AT ( 604972.97, 4860647.92)  DC       62.       6.19669
         (99111908) AT ( 604972.97, 4860647.92)  DC
618      23.      12.39701 (96011715) AT ( 604987.25, 4860621.03)  DC       63.       6.09848
         (98120615) AT ( 604987.25, 4860621.03)  DC
619      24.      12.39425 (97120816) AT ( 604972.97, 4860647.92)  DC       64.       6.03684
         (98010511) AT ( 604987.25, 4860621.03)  DC
620      25.      12.38023 (00121316) AT ( 604972.97, 4860647.92)  DC       65.       6.01634
         (96021008) AT ( 604972.97, 4860647.92)  DC
621      26.      12.37473 (99021109) AT ( 604987.25, 4860621.03)  DC       66.       6.00927
         (00013010) AT ( 604987.25, 4860621.03)  DC
622      27.      12.32957 (00121316) AT ( 604987.25, 4860621.03)  DC       67.       5.83827
         (97112917) AT ( 604987.25, 4860621.03)  DC
623      28.      12.15791 (96122810) AT ( 604987.25, 4860621.03)  DC       68.       5.71110
         (00011815) AT ( 604987.25, 4860621.03)  DC
624      29.      11.75590 (00121008) AT ( 604987.25, 4860621.03)  DC       69.       5.69937
         (96122810) AT ( 604972.97, 4860647.92)  DC
625      30.      11.75586 (00121517) AT ( 604987.25, 4860621.03)  DC       70.       5.61267
         (00102217) AT ( 604987.25, 4860621.03)  DC
626      31.      11.44227 (99011710) AT ( 604987.25, 4860621.03)  DC       71.       5.59788
         (00013010) AT ( 604972.97, 4860647.92)  DC
627      32.      11.29500 (99021109) AT ( 604972.97, 4860647.92)  DC       72.       5.54142
         (96110508) AT ( 604972.97, 4860647.92)  DC
628      33.      11.10119 (98120608) AT ( 604972.97, 4860647.92)  DC       73.       5.53913
         (98120617) AT ( 604972.97, 4860647.92)  DC
629      34.      11.05473 (97020208) AT ( 604972.97, 4860647.92)  DC       74.       5.52502
         (00121309) AT ( 604972.97, 4860647.92)  DC
630      35.      10.99906 (99020210) AT ( 604972.97, 4860647.92)  DC       75.       5.42058
         (99110108) AT ( 604972.97, 4860647.92)  DC
631      36.      10.95641 (96011716) AT ( 604987.25, 4860621.03)  DC       76.       5.36341
         (99011710) AT ( 604972.97, 4860647.92)  DC
632      37.      10.90078 (00121517) AT ( 604972.97, 4860647.92)  DC       77.       5.29503
         (96111608) AT ( 604972.97, 4860647.92)  DC
633      38.      10.90077 (00121008) AT ( 604972.97, 4860647.92)  DC       78.       5.26940
         (96110617) AT ( 604987.25, 4860621.03)  DC
634      39.      10.74096 (96012609) AT ( 604987.25, 4860621.03)  DC       79.       5.26899
         (99110108) AT ( 604987.25, 4860621.03)  DC
635      40.      10.62279 (99020210) AT ( 604987.25, 4860621.03)  DC       80.       5.18003
         (00011815) AT ( 604972.97, 4860647.92)  DC
636  FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
     OU/S                                                ***        07/13/21
637      *** AERMET - VERSION  19191 ***
         ***                                                                  ***
         10:59:33
638
                                    PAGE  12
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*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL ADJ_U*

*** THE MAXIMUM 500 1-HR **AVERAGE** CONCENTRATION VALUES FOR SOURCE GROUP: ALL *** INCLUDING SOURCE(S): VOL1 , STCK1 , STCK2 , STCK3 , STCK4 ,

** CONC OF ODOUR IN OU/M**3 **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE
81.	5.14918	(96022008)	(604987.25, 4860621.03) DC	121.	3.56293	(98020817)	(604972.97, 4860647.92) DC
82.	5.13876	(96022008)	(604972.97, 4860647.92) DC	122.	3.55328	(98111408)	(604987.25, 4860621.03) DC
83.	5.10837	(96111608)	(604987.25, 4860621.03) DC	123.	3.54902	(98012812)	(604972.97, 4860647.92) DC
84.	5.08782	(98120617)	(604987.25, 4860621.03) DC	124.	3.50600	(98022617)	(604987.25, 4860621.03) DC
85.	5.07180	(00121309)	(604987.25, 4860621.03) DC	125.	3.49385	(99021617)	(604987.25, 4860621.03) DC
86.	4.92011	(96122808)	(604987.25, 4860621.03) DC	126.	3.49350	(97010215)	(604987.25, 4860621.03) DC
87.	4.86069	(00102217)	(604972.97, 4860647.92) DC	127.	3.37035	(96110617)	(604972.97, 4860647.92) DC
88.	4.80048	(98120615)	(604972.97, 4860647.92) DC	128.	3.33901	(98020817)	(604987.25, 4860621.03) DC
89.	4.69619	(99121516)	(604987.25, 4860621.03) DC	129.	3.30475	(99112208)	(604987.25, 4860621.03) DC
90.	4.67689	(99121808)	(604972.97, 4860647.92) DC	130.	3.29281	(99112208)	(604972.97, 4860647.92) DC
91.	4.62946	(99121808)	(604987.25, 4860621.03) DC	131.	3.25126	(00121513)	(604972.97, 4860647.92) DC
92.	4.59783	(96022308)	(604987.25, 4860621.03) DC	132.	3.14900	(98010512)	(604987.25, 4860621.03) DC
93.	4.58187	(96122308)	(604987.25, 4860621.03) DC	133.	3.14154	(98111817)	(604972.97, 4860647.92) DC
94.	4.53189	(97102417)	(604972.97, 4860647.92) DC	134.	3.09013	(99112117)	(604987.25, 4860621.03) DC
95.	4.49797	(99120217)	(604972.97, 4860647.92) DC	135.	3.05502	(96021009)	(604972.97, 4860647.92) DC
96.	4.48581	(00010210)	(604972.97, 4860647.92) DC	136.	3.02480	(00010211)	(604987.25, 4860621.03) DC
97.	4.45121	(98122112)	(604972.97, 4860647.92) DC	137.	3.01962	(00121513)	(604987.25, 4860621.03) DC
98.	4.38241	(00010210)	(604987.25, 4860621.03) DC	138.	2.96693	(98120611)	(604972.97, 4860647.92) DC
99.	4.35562	(98110817)	(604972.97, 4860647.92) DC	139.	2.94409	(96021009)	(604987.25, 4860621.03) DC
100.	4.32822	(97102417)	(604987.25, 4860621.03) DC	140.	2.85755	(98012812)	(604987.25, 4860621.03) DC
101.	4.31972	(98012909)	(604987.25, 4860621.03) DC	141.	2.83839	(96011117)	(604987.25, 4860621.03) DC
102.	4.24171	(96122808)	(604972.97, 4860647.92) DC	142.	2.83508	(98110917)	(604972.97, 4860647.92) DC
103.	4.23846	(96122308)	(604972.97, 4860647.92) DC	143.	2.80909	(98110917)	(604987.25, 4860621.03) DC
104.	4.15845	(98110817)	(604987.25, 4860621.03) DC	144.	2.75023	(96011117)	(604972.97, 4860647.92) DC
105.	4.12109	(99120217)	(604987.25, 4860621.03) DC	145.	2.72804	(97010217)	(604972.97, 4860647.92) DC
106.	4.11708	(98012909)	(604972.97, 4860647.92) DC	146.	2.72804	(96011808)	(604972.97, 4860647.92) DC
107.	4.11184	(00022409)	(604987.25, 4860621.03) DC	147.	2.72709	(96122309)	(604972.97, 4860647.92) DC
108.	4.02368	(98012908)	(604987.25, 4860621.03) DC	148.	2.71178		

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 (97022115) AT ( 604987.25, 4860621.03)  DC
 109.        4.02112 (00102008) AT ( 604972.97, 4860647.92)  DC      149.       2.71147
 (00022517) AT ( 604987.25, 4860621.03)  DC
 110.        3.95631 (97112917) AT ( 604972.97, 4860647.92)  DC      150.       2.69614
 (98022617) AT ( 604972.97, 4860647.92)  DC
 111.        3.93826 (98012908) AT ( 604972.97, 4860647.92)  DC      151.       2.67247
 (98120611) AT ( 604987.25, 4860621.03)  DC
 112.        3.87681 (97120309) AT ( 604987.25, 4860621.03)  DC      152.       2.62731
 (98122109) AT ( 604972.97, 4860647.92)  DC
 113.        3.79469 (98122112) AT ( 604987.25, 4860621.03)  DC      153.       2.61698
 (96022017) AT ( 604972.97, 4860647.92)  DC
 114.        3.76624 (00020315) AT ( 604987.25, 4860621.03)  DC      154.       2.61073
 (96011115) AT ( 604972.97, 4860647.92)  DC
 115.        3.75484 (00102008) AT ( 604987.25, 4860621.03)  DC      155.       2.59367
 (97010217) AT ( 604987.25, 4860621.03)  DC
 116.        3.73988 (99121516) AT ( 604972.97, 4860647.92)  DC      156.       2.59366
 (96011808) AT ( 604987.25, 4860621.03)  DC
 117.        3.69279 (98111817) AT ( 604987.25, 4860621.03)  DC      157.       2.59250
 (96122309) AT ( 604987.25, 4860621.03)  DC
 118.        3.58288 (00022908) AT ( 604987.25, 4860621.03)  DC      158.       2.57288
 (99040308) AT ( 604987.25, 4860621.03)  DC
 119.        3.56816 (00022908) AT ( 604972.97, 4860647.92)  DC      159.       2.57139
 (99121213) AT ( 604987.25, 4860621.03)  DC
 120.        3.56454 (00020315) AT ( 604972.97, 4860647.92)  DC      160.       2.56557
 (99112517) AT ( 604987.25, 4860621.03)  DC
FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
OU/S                                                    ***        07/13/21
 *** AERMET - VERSION  19191 ***
 ***                                                                              ***
 10:59:33

                              PAGE  13
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

                              *** THE MAXIMUM  500   1-HR AVERAGE CONCENTRATION
                              VALUES FOR SOURCE GROUP:  ALL      ***
                                  INCLUDING SOURCE(S):     VOL1        , STCK1       ,
                                  STCK2       , STCK3       , STCK4      ,

                                       ** CONC OF ODOUR    IN
                                       OU/M**3                                ** 

 RANK        CONC    (YYMMDDHH) AT      RECEPTOR (XR,YR) OF TYPE    RANK        CONC
 (YYMMDDHH) AT      RECEPTOR (XR,YR) OF TYPE
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 161.        2.56151 (99111117) AT ( 604972.97, 4860647.92)  DC      201.       1.96409
 (96022014) AT ( 604972.97, 4860647.92)  DC
 162.        2.54206 (96102617) AT ( 604972.97, 4860647.92)  DC      202.       1.94448
 (96011809) AT ( 604972.97, 4860647.92)  DC
 163.        2.52487 (00011008) AT ( 604987.25, 4860621.03)  DC      203.       1.93676
 (00121009) AT ( 604987.25, 4860621.03)  DC
 164.        2.51309 (97022112) AT ( 604972.97, 4860647.92)  DC      204.       1.91858
 (96122312) AT ( 604987.25, 4860621.03)  DC
 165.        2.50284 (96021010) AT ( 604987.25, 4860621.03)  DC      205.       1.91430
 (98010912) AT ( 604987.25, 4860621.03)  DC
 166.        2.50186 (99111117) AT ( 604987.25, 4860621.03)  DC      206.       1.91192
 (97122915) AT ( 604987.25, 4860621.03)  DC
 167.        2.48352 (96022017) AT ( 604987.25, 4860621.03)  DC      207.       1.89476
 (00013017) AT ( 604987.25, 4860621.03)  DC
 168.        2.47736 (00022512) AT ( 604987.25, 4860621.03)  DC      208.       1.88894
 (99011711) AT ( 604972.97, 4860647.92)  DC
 169.        2.45561 (98122109) AT ( 604987.25, 4860621.03)  DC      209.       1.87933
 (97022114) AT ( 604987.25, 4860621.03)  DC
 170.        2.44110 (99100808) AT ( 604987.25, 4860621.03)  DC      210.       1.86549
 (99040309) AT ( 604987.25, 4860621.03)  DC
 171.        2.43166 (97022112) AT ( 604987.25, 4860621.03)  DC      211.       1.86047
 (97122410) AT ( 604987.25, 4860621.03)  DC
 172.        2.42273 (97032109) AT ( 604987.25, 4860621.03)  DC      212.       1.85921
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(99020214) AT (604972.97, 4860647.92) DC
712 173. 2.39836 (96102617) AT (604987.25, 4860621.03) DC 213. 1.85432
(96022012) AT (604972.97, 4860647.92) DC
713 174. 2.38166 (97020216) AT (604972.97, 4860647.92) DC 214. 1.85069
(97122915) AT (604972.97, 4860647.92) DC
714 175. 2.35202 (98112509) AT (604987.25, 4860621.03) DC 215. 1.84970
(96011810) AT (604987.25, 4860621.03) DC
715 176. 2.34286 (96022014) AT (604987.25, 4860621.03) DC 216. 1.83335
(97010115) AT (604972.97, 4860647.92) DC
716 177. 2.28010 (98112917) AT (604987.25, 4860621.03) DC 217. 1.83029
(97122410) AT (604972.97, 4860647.92) DC
717 178. 2.26372 (98120610) AT (604987.25, 4860621.03) DC 218. 1.83005
(98010511) AT (604972.97, 4860647.92) DC
718 179. 2.26159 (99112517) AT (604972.97, 4860647.92) DC 219. 1.82685
(99120310) AT (604972.97, 4860647.92) DC
719 180. 2.20224 (00022517) AT (604972.97, 4860647.92) DC 220. 1.82163
(96112517) AT (604987.25, 4860621.03) DC
720 181. 2.19413 (00110217) AT (604972.97, 4860647.92) DC 221. 1.82056
(96122312) AT (604972.97, 4860647.92) DC
721 182. 2.17906 (96102517) AT (604987.25, 4860621.03) DC 222. 1.80835
(97022114) AT (604972.97, 4860647.92) DC
722 183. 2.16339 (96022308) AT (604972.97, 4860647.92) DC 223. 1.79888
(00022409) AT (604972.97, 4860647.92) DC
723 184. 2.15779 (99112117) AT (604972.97, 4860647.92) DC 224. 1.79241
(98111908) AT (604987.25, 4860621.03) DC
724 185. 2.15103 (96022009) AT (604987.25, 4860621.03) DC 225. 1.78011
(98021517) AT (604987.25, 4860621.03) DC
725 186. 2.15003 (97020216) AT (604987.25, 4860621.03) DC 226. 1.77607
(96112517) AT (604972.97, 4860647.92) DC
726 187. 2.11822 (00110217) AT (604987.25, 4860621.03) DC 227. 1.77329
(00012913) AT (604987.25, 4860621.03) DC
727 188. 2.11404 (98112908) AT (604987.25, 4860621.03) DC 228. 1.76957
(98101717) AT (604987.25, 4860621.03) DC
728 189. 2.10665 (97022115) AT (604972.97, 4860647.92) DC 229. 1.75625
(97020214) AT (604972.97, 4860647.92) DC
729 190. 2.09911 (96022013) AT (604987.25, 4860621.03) DC 230. 1.72544
(00022512) AT (604972.97, 4860647.92) DC
730 191. 2.08382 (96102517) AT (604972.97, 4860647.92) DC 231. 1.72030
(98021517) AT (604972.97, 4860647.92) DC
731 192. 2.07518 (97032109) AT (604972.97, 4860647.92) DC 232. 1.71621
(98112917) AT (604972.97, 4860647.92) DC
732 193. 2.06078 (96011809) AT (604987.25, 4860621.03) DC 233. 1.71595
(00011008) AT (604972.97, 4860647.92) DC
733 194. 2.04544 (99100808) AT (604972.97, 4860647.92) DC 234. 1.71545
(00022910) AT (604987.25, 4860621.03) DC
734 195. 2.03613 (99021617) AT (604972.97, 4860647.92) DC 235. 1.70512
(96011810) AT (604972.97, 4860647.92) DC
735 196. 2.03162 (96011115) AT (604987.25, 4860621.03) DC 236. 1.70312
(96010415) AT (604987.25, 4860621.03) DC
736 197. 2.02262 (00013017) AT (604972.97, 4860647.92) DC 237. 1.69921
(99011711) AT (604987.25, 4860621.03) DC
737 198. 2.00281 (96022012) AT (604987.25, 4860621.03) DC 238. 1.69841
(00012913) AT (604972.97, 4860647.92) DC
738 199. 1.98891 (97010115) AT (604987.25, 4860621.03) DC 239. 1.69120
(99020214) AT (604987.25, 4860621.03) DC
739 200. 1.98528 (99121213) AT (604972.97, 4860647.92) DC 240. 1.69116
(00110617) AT (604972.97, 4860647.92) DC
740 FF *** AERMOD - VERSION 19191 *** *** Nobleton Odour
OU/S *** 07/13/21
741 *** AERMET - VERSION 19191 ***
*** ***
10:59:33
742
PAGE 14
743 *** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL ADJ_U*
744
745 *** THE MAXIMUM 500 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL ***
746 INCLUDING SOURCE(S): VOL1 , STCK1 ,

STCK2 , STCK3 , STCK4 ,

** CONC OF ODOUR IN OU/M**3 **

RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE		RANK	CONC	(YYMMDDHH) AT	RECEPTOR (XR,YR) OF TYPE	
241.	1.68454	(99122009)	(604972.97, 4860647.92)	DC	281.	1.43981	(97012717)	(604987.25, 4860621.03)	DC
242.	1.68266	(99122009)	(604987.25, 4860621.03)	DC	282.	1.43238	(96122311)	(604987.25, 4860621.03)	DC
243.	1.67317	(00040209)	(604987.25, 4860621.03)	DC	283.	1.43205	(97040510)	(604987.25, 4860621.03)	DC
244.	1.65994	(00110617)	(604987.25, 4860621.03)	DC	284.	1.43151	(98012910)	(604972.97, 4860647.92)	DC
245.	1.65908	(98111611)	(604987.25, 4860621.03)	DC	285.	1.42527	(99020115)	(604972.97, 4860647.92)	DC
246.	1.65905	(99052408)	(604987.25, 4860621.03)	DC	286.	1.41594	(96021910)	(604987.25, 4860621.03)	DC
247.	1.65521	(96011608)	(604987.25, 4860621.03)	DC	287.	1.41579	(99010309)	(604972.97, 4860647.92)	DC
248.	1.65149	(98012316)	(604987.25, 4860621.03)	DC	288.	1.40608	(98011213)	(604987.25, 4860621.03)	DC
249.	1.63761	(00121009)	(604972.97, 4860647.92)	DC	289.	1.40458	(99120310)	(604987.25, 4860621.03)	DC
250.	1.63717	(96022013)	(604972.97, 4860647.92)	DC	290.	1.40147	(97010117)	(604987.25, 4860621.03)	DC
251.	1.62810	(98030608)	(604987.25, 4860621.03)	DC	291.	1.39872	(98121617)	(604972.97, 4860647.92)	DC
252.	1.62623	(97020214)	(604987.25, 4860621.03)	DC	292.	1.39079	(98070408)	(604987.25, 4860621.03)	DC
253.	1.62549	(99011714)	(604987.25, 4860621.03)	DC	293.	1.39071	(97042709)	(604987.25, 4860621.03)	DC
254.	1.61709	(98012911)	(604987.25, 4860621.03)	DC	294.	1.38764	(00121516)	(604987.25, 4860621.03)	DC
255.	1.60433	(98022814)	(604987.25, 4860621.03)	DC	295.	1.38670	(00091008)	(604987.25, 4860621.03)	DC
256.	1.60419	(98011216)	(604987.25, 4860621.03)	DC	296.	1.38587	(98041308)	(604987.25, 4860621.03)	DC
257.	1.59935	(99040308)	(604972.97, 4860647.92)	DC	297.	1.37987	(99010309)	(604987.25, 4860621.03)	DC
258.	1.59397	(96011617)	(604987.25, 4860621.03)	DC	298.	1.37489	(99020115)	(604987.25, 4860621.03)	DC
259.	1.59388	(00011009)	(604987.25, 4860621.03)	DC	299.	1.36919	(99013114)	(604987.25, 4860621.03)	DC
260.	1.57805	(97020212)	(604972.97, 4860647.92)	DC	300.	1.36266	(00111610)	(604987.25, 4860621.03)	DC
261.	1.57721	(00040209)	(604972.97, 4860647.92)	DC	301.	1.36257	(96122317)	(604987.25, 4860621.03)	DC
262.	1.56424	(98101717)	(604972.97, 4860647.92)	DC	302.	1.35886	(96011608)	(604972.97, 4860647.92)	DC
263.	1.56097	(97010215)	(604972.97, 4860647.92)	DC	303.	1.35847	(98012910)	(604987.25, 4860621.03)	DC
264.	1.55928	(99012310)	(604987.25, 4860621.03)	DC	304.	1.35174	(00111610)	(604972.97, 4860647.92)	DC
265.	1.55395	(98012316)	(604972.97, 4860647.92)	DC	305.	1.34890	(98101617)	(604987.25, 4860621.03)	DC
266.	1.54915	(97032110)	(604987.25, 4860621.03)	DC	306.	1.34455	(00102609)	(604972.97, 4860647.92)	DC
267.	1.54200	(00013011)	(604972.97, 4860647.92)	DC	307.	1.34224	(99012315)	(604972.97, 4860647.92)	DC
268.	1.54005	(99012315)	(604987.25, 4860621.03)	DC	308.	1.34032	(98020916)	(604972.97, 4860647.92)	DC
269.	1.52481	(98012911)	(604972.97, 4860647.92)	DC	309.	1.32872	(98021015)	(604972.97, 4860647.92)	DC
270.	1.51506	(98030608)	(604972.97, 4860647.92)	DC	310.	1.32617	(99013113)	(604987.25, 4860621.03)	DC

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782     271.       1.50845 (00101617) AT ( 604972.97, 4860647.92)  DC      311.       1.32410
       (00102610) AT ( 604987.25, 4860621.03)  DC
783     272.       1.49720 (96122311) AT ( 604972.97, 4860647.92)  DC      312.       1.32281
       (97022812) AT ( 604987.25, 4860621.03)  DC
784     273.       1.47375 (99040310) AT ( 604987.25, 4860621.03)  DC      313.       1.32243
       (98040110) AT ( 604987.25, 4860621.03)  DC
785     274.       1.47101 (97020212) AT ( 604987.25, 4860621.03)  DC      314.       1.32230
       (99012310) AT ( 604972.97, 4860647.92)  DC
786     275.       1.46827 (00101617) AT ( 604987.25, 4860621.03)  DC      315.       1.32123
       (97030115) AT ( 604987.25, 4860621.03)  DC
787     276.       1.46627 (98021015) AT ( 604987.25, 4860621.03)  DC      316.       1.31861
       (96022009) AT ( 604972.97, 4860647.92)  DC
788     277.       1.45602 (00121516) AT ( 604972.97, 4860647.92)  DC      317.       1.31466
       (97013017) AT ( 604987.25, 4860621.03)  DC
789     278.       1.45045 (98021016) AT ( 604987.25, 4860621.03)  DC      318.       1.31269
       (96022016) AT ( 604972.97, 4860647.92)  DC
790     279.       1.44610 (98021016) AT ( 604972.97, 4860647.92)  DC      319.       1.31197
       (96022016) AT ( 604987.25, 4860621.03)  DC
791     280.       1.44540 (99052408) AT ( 604972.97, 4860647.92)  DC      320.       1.30676
       (97122411) AT ( 604987.25, 4860621.03)  DC
792   FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
      OU/S                                                ***        07/13/21
793     *** AERMET - VERSION  19191 ***
        ***                                                                  ***
        10:59:33
794
                                  PAGE  15
795     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*
796
797                               *** THE MAXIMUM  500   1-HR AVERAGE CONCENTRATION
                                  VALUES FOR SOURCE GROUP:  ALL      ***
798                                   INCLUDING SOURCE(S):     VOL1        , STCK1       ,
                                      STCK2       , STCK3       , STCK4       ,
799
800                                        ** CONC OF ODOUR    IN
                                           OU/M**3                                  **
801
802     RANK        CONC     (YYMMDDHH) AT      RECEPTOR (XR,YR) OF TYPE    RANK        CONC
       (YYMMDDHH) AT      RECEPTOR (XR,YR) OF TYPE
803     - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - -
804     321.       1.30665 (98121617) AT ( 604987.25, 4860621.03)  DC      361.       1.15629
       (98041308) AT ( 604972.97, 4860647.92)  DC
805     322.       1.30026 (98021516) AT ( 604987.25, 4860621.03)  DC      362.       1.15481
       (98102709) AT ( 604987.25, 4860621.03)  DC
806     323.       1.28791 (98111611) AT ( 604972.97, 4860647.92)  DC      363.       1.15416
       (00112615) AT ( 604987.25, 4860621.03)  DC
807     324.       1.28569 (97040512) AT ( 604987.25, 4860621.03)  DC      364.       1.15406
       (98101617) AT ( 604972.97, 4860647.92)  DC
808     325.       1.28451 (97120313) AT ( 604987.25, 4860621.03)  DC      365.       1.15214
       (98070408) AT ( 604972.97, 4860647.92)  DC
809     326.       1.28336 (98101210) AT ( 604987.25, 4860621.03)  DC      366.       1.15170
       (98101709) AT ( 604987.25, 4860621.03)  DC
810     327.       1.27402 (99013110) AT ( 604987.25, 4860621.03)  DC      367.       1.15112
       (98040110) AT ( 604972.97, 4860647.92)  DC
811     328.       1.26815 (98111612) AT ( 604987.25, 4860621.03)  DC      368.       1.14963
       (96012610) AT ( 604987.25, 4860621.03)  DC
812     329.       1.26633 (98011215) AT ( 604987.25, 4860621.03)  DC      369.       1.14717
       (00022910) AT ( 604972.97, 4860647.92)  DC
813     330.       1.26219 (96121712) AT ( 604987.25, 4860621.03)  DC      370.       1.14671
       (00013014) AT ( 604972.97, 4860647.92)  DC
814     331.       1.26106 (00102609) AT ( 604987.25, 4860621.03)  DC      371.       1.14634
       (98111908) AT ( 604972.97, 4860647.92)  DC
815     332.       1.26028 (96021910) AT ( 604972.97, 4860647.92)  DC      372.       1.14569
       (00091008) AT ( 604972.97, 4860647.92)  DC
816     333.       1.24339 (00102610) AT ( 604972.97, 4860647.92)  DC      373.       1.14534
       (96120110) AT ( 604987.25, 4860621.03)  DC
817     334.       1.24273 (99013111) AT ( 604987.25, 4860621.03)  DC      374.       1.13968
       (96110708) AT ( 604987.25, 4860621.03)  DC
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818     335.       1.24136 (99011714) AT ( 604972.97, 4860647.92)  DC      375.       1.13626
        (99022712) AT ( 604987.25, 4860621.03)  DC
819     336.       1.24097 (96021010) AT ( 604972.97, 4860647.92)  DC      376.       1.13613
        (97040512) AT ( 604972.97, 4860647.92)  DC
820     337.       1.23749 (00013011) AT ( 604987.25, 4860621.03)  DC      377.       1.13044
        (97010116) AT ( 604972.97, 4860647.92)  DC
821     338.       1.23718 (98020916) AT ( 604987.25, 4860621.03)  DC      378.       1.12489
        (96121712) AT ( 604972.97, 4860647.92)  DC
822     339.       1.23043 (99040309) AT ( 604972.97, 4860647.92)  DC      379.       1.12477
        (97032809) AT ( 604987.25, 4860621.03)  DC
823     340.       1.22797 (00020314) AT ( 604972.97, 4860647.92)  DC      380.       1.12336
        (98022814) AT ( 604972.97, 4860647.92)  DC
824     341.       1.22448 (00052317) AT ( 604987.25, 4860621.03)  DC      381.       1.12004
        (99022808) AT ( 604987.25, 4860621.03)  DC
825     342.       1.22386 (96021012) AT ( 604987.25, 4860621.03)  DC      382.       1.11789
        (98062608) AT ( 604987.25, 4860621.03)  DC
826     343.       1.22265 (96011617) AT ( 604972.97, 4860647.92)  DC      383.       1.11232
        (96091209) AT ( 604987.25, 4860621.03)  DC
827     344.       1.22257 (00011009) AT ( 604972.97, 4860647.92)  DC      384.       1.10977
        (98011213) AT ( 604972.97, 4860647.92)  DC
828     345.       1.21783 (99013110) AT ( 604972.97, 4860647.92)  DC      385.       1.10818
        (97010116) AT ( 604987.25, 4860621.03)  DC
829     346.       1.21736 (97022812) AT ( 604972.97, 4860647.92)  DC      386.       1.10647
        (98020115) AT ( 604987.25, 4860621.03)  DC
830     347.       1.21096 (00122110) AT ( 604987.25, 4860621.03)  DC      387.       1.10498
        (99101217) AT ( 604987.25, 4860621.03)  DC
831     348.       1.20989 (97012113) AT ( 604987.25, 4860621.03)  DC      388.       1.10306
        (96120111) AT ( 604987.25, 4860621.03)  DC
832     349.       1.20534 (96022011) AT ( 604987.25, 4860621.03)  DC      389.       1.10064
        (98112509) AT ( 604972.97, 4860647.92)  DC
833     350.       1.20479 (97032514) AT ( 604987.25, 4860621.03)  DC      390.       1.09478
        (99101211) AT ( 604987.25, 4860621.03)  DC
834     351.       1.20440 (00122111) AT ( 604987.25, 4860621.03)  DC      391.       1.09265
        (98121813) AT ( 604972.97, 4860647.92)  DC
835     352.       1.19875 (00122110) AT ( 604972.97, 4860647.92)  DC      392.       1.09216
        (97012115) AT ( 604987.25, 4860621.03)  DC
836     353.       1.19731 (99092708) AT ( 604987.25, 4860621.03)  DC      393.       1.09130
        (96110708) AT ( 604972.97, 4860647.92)  DC
837     354.       1.19562 (98121813) AT ( 604987.25, 4860621.03)  DC      394.       1.08952
        (96042009) AT ( 604987.25, 4860621.03)  DC
838     355.       1.19318 (00112615) AT ( 604972.97, 4860647.92)  DC      395.       1.08898
        (98010512) AT ( 604972.97, 4860647.92)  DC
839     356.       1.19136 (98021113) AT ( 604987.25, 4860621.03)  DC      396.       1.08870
        (96042009) AT ( 604972.97, 4860647.92)  DC
840     357.       1.17500 (98101210) AT ( 604972.97, 4860647.92)  DC      397.       1.08827
        (00020314) AT ( 604987.25, 4860621.03)  DC
841     358.       1.17257 (00122111) AT ( 604972.97, 4860647.92)  DC      398.       1.08278
        (98101709) AT ( 604972.97, 4860647.92)  DC
842     359.       1.16863 (98121815) AT ( 604987.25, 4860621.03)  DC      399.       1.08202
        (96042208) AT ( 604987.25, 4860621.03)  DC
843     360.       1.16343 (96011817) AT ( 604987.25, 4860621.03)  DC      400.       1.08134
        (98020115) AT ( 604972.97, 4860647.92)  DC
844   FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
      OU/S                                                  ***        07/13/21
845     *** AERMET - VERSION  19191 ***
        ***                                                                    ***
        10:59:33
846
                                  PAGE  16
847     *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*
848
849                               *** THE MAXIMUM  500   1-HR AVERAGE CONCENTRATION
                                  VALUES FOR SOURCE GROUP:  ALL      ***
850                                   INCLUDING SOURCE(S):     VOL1        , STCK1       ,
                                      STCK2       , STCK3       , STCK4       ,
851
852                                        ** CONC OF ODOUR    IN
                                           OU/M**3                                  **
853
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RANK        CONC    (YYMMDDHH) AT      RECEPTOR (XR,YR) OF TYPE    RANK        CONC    (YYMMDDHH) AT      RECEPTOR (XR,YR) OF TYPE
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 401.        1.07915 (98030615) AT ( 604987.25, 4860621.03)  DC       441.        0.98694 (97032809) AT ( 604972.97, 4860647.92)  DC
 402.        1.07693 (00011011) AT ( 604987.25, 4860621.03)  DC       442.        0.98432 (98091509) AT ( 604987.25, 4860621.03)  DC
 403.        1.07217 (97032110) AT ( 604972.97, 4860647.92)  DC       443.        0.98212 (97022013) AT ( 604987.25, 4860621.03)  DC
 404.        1.07066 (96120111) AT ( 604972.97, 4860647.92)  DC       444.        0.98066 (00110814) AT ( 604987.25, 4860621.03)  DC
 405.        1.06987 (99101210) AT ( 604987.25, 4860621.03)  DC       445.        0.97857 (99012312) AT ( 604987.25, 4860621.03)  DC
 406.        1.06542 (96113017) AT ( 604987.25, 4860621.03)  DC       446.        0.97728 (99022412) AT ( 604987.25, 4860621.03)  DC
 407.        1.06164 (00111317) AT ( 604987.25, 4860621.03)  DC       447.        0.97657 (99100317) AT ( 604987.25, 4860621.03)  DC
 408.        1.05976 (00032711) AT ( 604987.25, 4860621.03)  DC       448.        0.97560 (98111612) AT ( 604972.97, 4860647.92)  DC
 409.        1.05632 (00052316) AT ( 604987.25, 4860621.03)  DC       449.        0.97417 (99042217) AT ( 604987.25, 4860621.03)  DC
 410.        1.04588 (97122411) AT ( 604972.97, 4860647.92)  DC       450.        0.97388 (00020316) AT ( 604987.25, 4860621.03)  DC
 411.        1.04388 (99040117) AT ( 604987.25, 4860621.03)  DC       451.        0.97280 (96113008) AT ( 604987.25, 4860621.03)  DC
 412.        1.04038 (97060708) AT ( 604987.25, 4860621.03)  DC       452.        0.97204 (97012715) AT ( 604987.25, 4860621.03)  DC
 413.        1.03463 (00031516) AT ( 604987.25, 4860621.03)  DC       453.        0.96952 (99101217) AT ( 604972.97, 4860647.92)  DC
 414.        1.03271 (99042208) AT ( 604972.97, 4860647.92)  DC       454.        0.96809 (96032410) AT ( 604987.25, 4860621.03)  DC
 415.        1.03251 (98111408) AT ( 604972.97, 4860647.92)  DC       455.        0.96789 (99022715) AT ( 604987.25, 4860621.03)  DC
 416.        1.03083 (97120309) AT ( 604972.97, 4860647.92)  DC       456.        0.96531 (96112516) AT ( 604972.97, 4860647.92)  DC
 417.        1.03025 (00110813) AT ( 604987.25, 4860621.03)  DC       457.        0.96493 (98030912) AT ( 604987.25, 4860621.03)  DC
 418.        1.02782 (97010216) AT ( 604972.97, 4860647.92)  DC       458.        0.96485 (96010813) AT ( 604972.97, 4860647.92)  DC
 419.        1.02487 (99013112) AT ( 604987.25, 4860621.03)  DC       459.        0.96352 (99121910) AT ( 604987.25, 4860621.03)  DC
 420.        1.02291 (99022716) AT ( 604987.25, 4860621.03)  DC       460.        0.96268 (99011713) AT ( 604987.25, 4860621.03)  DC
 421.        1.02236 (99040310) AT ( 604972.97, 4860647.92)  DC       461.        0.95949 (96112516) AT ( 604987.25, 4860621.03)  DC
 422.        1.01953 (97082610) AT ( 604987.25, 4860621.03)  DC       462.        0.95885 (96061809) AT ( 604987.25, 4860621.03)  DC
 423.        1.01790 (00032711) AT ( 604972.97, 4860647.92)  DC       463.        0.95685 (98021516) AT ( 604972.97, 4860647.92)  DC
 424.        1.01340 (96101917) AT ( 604987.25, 4860621.03)  DC       464.        0.95656 (00022615) AT ( 604972.97, 4860647.92)  DC
 425.        1.01168 (97042709) AT ( 604972.97, 4860647.92)  DC       465.        0.95220 (99011713) AT ( 604972.97, 4860647.92)  DC
 426.        1.01127 (97040510) AT ( 604972.97, 4860647.92)  DC       466.        0.94874 (99112516) AT ( 604987.25, 4860621.03)  DC
 427.        1.01101 (99013113) AT ( 604972.97, 4860647.92)  DC       467.        0.94869 (98041413) AT ( 604987.25, 4860621.03)  DC
 428.        1.00539 (00022615) AT ( 604987.25, 4860621.03)  DC       468.        0.94835 (00102317) AT ( 604987.25, 4860621.03)  DC
 429.        1.00488 (00121611) AT ( 604987.25, 4860621.03)  DC       469.        0.94805 (99051508) AT ( 604987.25, 4860621.03)  DC
 430.        1.00386 (99022414) AT ( 604987.25, 4860621.03)  DC       470.        0.94797 (97120313) AT ( 604972.97, 4860647.92)  DC
 431.        1.00295 (98021514) AT ( 604987.25, 4860621.03)  DC       471.        0.94778 (99042214) AT ( 604987.25, 4860621.03)  DC
 432.        1.00293 (98040108) AT ( 604987.25, 4860621.03)  DC       472.        0.94735 (00110817) AT ( 604987.25, 4860621.03)  DC
 433.        0.99506 (99013111) AT ( 604972.97, 4860647.92)  DC       473.        0.94707
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      (99012312) AT ( 604972.97, 4860647.92)  DC
889    434.       0.99404 (00110810) AT ( 604987.25, 4860621.03)  DC      474.       0.94563
      (98102709) AT ( 604972.97, 4860647.92)  DC
890    435.       0.99299 (00052317) AT ( 604972.97, 4860647.92)  DC      475.       0.94225
      (97083117) AT ( 604987.25, 4860621.03)  DC
891    436.       0.99111 (97012113) AT ( 604972.97, 4860647.92)  DC      476.       0.94165
      (99021608) AT ( 604987.25, 4860621.03)  DC
892    437.       0.99091 (97010216) AT ( 604987.25, 4860621.03)  DC      477.       0.93501
      (96120108) AT ( 604987.25, 4860621.03)  DC
893    438.       0.99060 (99101508) AT ( 604972.97, 4860647.92)  DC      478.       0.93479
      (96032410) AT ( 604972.97, 4860647.92)  DC
894    439.       0.98859 (96031317) AT ( 604987.25, 4860621.03)  DC      479.       0.93416
      (96120512) AT ( 604987.25, 4860621.03)  DC
895    440.       0.98734 (00022612) AT ( 604987.25, 4860621.03)  DC      480.       0.93353
      (98091509) AT ( 604972.97, 4860647.92)  DC
896 FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
    OU/S                                                  ***        07/13/21
897    *** AERMET - VERSION  19191 ***
       ***                                                                 ***
       10:59:33
898
                                PAGE  17
899    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*
900
901                               *** THE MAXIMUM  500   1-HR AVERAGE CONCENTRATION
                                  VALUES FOR SOURCE GROUP:  ALL      ***
902                                   INCLUDING SOURCE(S):     VOL1        , STCK1       ,
                                      STCK2       , STCK3       , STCK4       ,
903
904                                        ** CONC OF ODOUR    IN
                                           OU/M**3                                **
905
906    RANK        CONC     (YYMMDDHH) AT      RECEPTOR (XR,YR) OF TYPE    RANK        CONC
       (YYMMDDHH) AT      RECEPTOR (XR,YR) OF TYPE
907    - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
       - - - - - - - - - - - - - - - - - - - - - -
908     481.       0.93304 (97012115) AT ( 604972.97, 4860647.92)  DC      491.       0.91571
       (99022715) AT ( 604972.97, 4860647.92)  DC
909     482.       0.93161 (99080410) AT ( 604987.25, 4860621.03)  DC      492.       0.91534
       (00051708) AT ( 604987.25, 4860621.03)  DC
910     483.       0.93024 (97030115) AT ( 604972.97, 4860647.92)  DC      493.       0.91494
       (00110817) AT ( 604972.97, 4860647.92)  DC
911     484.       0.92844 (99022712) AT ( 604972.97, 4860647.92)  DC      494.       0.91253
       (98030615) AT ( 604972.97, 4860647.92)  DC
912     485.       0.92536 (00073110) AT ( 604987.25, 4860621.03)  DC      495.       0.91151
       (99040211) AT ( 604987.25, 4860621.03)  DC
913     486.       0.92225 (99041517) AT ( 604987.25, 4860621.03)  DC      496.       0.91124
       (99013114) AT ( 604972.97, 4860647.92)  DC
914     487.       0.92128 (97052909) AT ( 604987.25, 4860621.03)  DC      497.       0.91021
       (96120109) AT ( 604987.25, 4860621.03)  DC
915     488.       0.92039 (99100317) AT ( 604972.97, 4860647.92)  DC      498.       0.90952
       (96012909) AT ( 604987.25, 4860621.03)  DC
916     489.       0.92014 (96122313) AT ( 604987.25, 4860621.03)  DC      499.       0.90853
       (96012908) AT ( 604987.25, 4860621.03)  DC
917     490.       0.91615 (98040108) AT ( 604972.97, 4860647.92)  DC      500.       0.90711
       (00052316) AT ( 604972.97, 4860647.92)  DC
918
919     *** RECEPTOR TYPES:  GC = GRIDCART
920                          GP = GRIDPOLR
921                          DC = DISCCART
922                          DP = DISCPOLR
923 FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour
    OU/S                                                  ***        07/13/21
924    *** AERMET - VERSION  19191 ***
       ***                                                                 ***
       10:59:33
925
                                PAGE  18
926    *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*
```

```
                                                     *** THE SUMMARY OF HIGHEST  1-HR RESULTS ***


                                         ** CONC OF ODOUR    IN OU/M**3                                   **

                                                                                          DATE
                                                                                                                  NETWORK
GROUP ID                                  AVERAGE CONC      (YYMMDDHH)              RECEPTOR  (XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      17.55249  ON 97120816: AT (  604987.25, 4860621.03,   250.14,   250.14,    1.50)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
FF *** AERMOD - VERSION  19191 ***   *** Nobleton Odour OU/S                                     ***        07/13/21
 *** AERMET - VERSION  19191 ***                                                                                        ***         10:59:33
                                                                                                                        PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

 *** Message Summary : AERMOD Model Execution ***

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

 A Total of             0 Fatal Error Message(s)
 A Total of            16 Warning Message(s)
 A Total of           949 Informational Message(s)

 A Total of         43848 Hours Were Processed

 A Total of             0 Calm Hours Identified

 A Total of           949 Missing Hours Identified (  2.16 Percent)


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


    ********   WARNING MESSAGES   ********
 SO W320      36        PPARM: Input Parameter May Be Out-of-Range for Parameter        QS
 SO W320      37        PPARM: Input Parameter May Be Out-of-Range for Parameter        QS
 SO W320      38        PPARM: Input Parameter May Be Out-of-Range for Parameter        QS
 SO W320      39        PPARM: Input Parameter May Be Out-of-Range for Parameter        QS
 ME W187     213       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET
 MX W441   19928        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT= 98041008
 MX W441   19929        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT= 98041009
 MX W441   19930        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
```

```
      98041010
977   MX W441   19931        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
      98041011
978   MX W441   19932        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
      98041012
979   MX W441   19933        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
      98041013
980   MX W441   19934        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
      98041014
981   MX W441   19935        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
      98041015
982   MX W441   19936        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
      98041016
983   MX W441   19937        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
      98041017
984   MX W441   19938        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
      98041018
985
986      ************************************
987      *** AERMOD Finishes Successfully ***
988      ************************************
989
990
```

```
  *** AERMOD - VERSION  19191 ***   *** Nobleton Odour OU/S
                         ***        07/13/21
 *** AERMET - VERSION  19191 ***   ***
                       ***        10:59:33

                                  PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

                                             ***     MODEL SETUP OPTIONS SUMMARY
 ***
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

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

   --  DEPOSITION LOGIC  --
 **NO GAS DEPOSITION Data Provided.
 **NO PARTICLE DEPOSITION Data Provided.
 **Model Uses NO DRY DEPLETION.  DRYDPLT  =  F
 **Model Uses NO WET DEPLETION.  WETDPLT  =  F

 **Model Uses RURAL Dispersion Only.

 **Model Uses Regulatory DEFAULT Options:
        1. Stack-tip Downwash.
        2. Model Accounts for ELEVated Terrain Effects.
        3. Use Calms Processing Routine.
        4. Use Missing Data Processing Routine.
        5. No Exponential Decay.

 **Other Options Specified:
        ADJ_U*   - Use ADJ_U* option for SBL in AERMET
        CCVR_Sub - Meteorological data includes CCVR substitutions
        TEMP_Sub - Meteorological data includes TEMP substitutions

 **Model Accepts FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of:  ODOUR

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

 **This Run Includes:      5 Source(s);       1 Source Group(s); and       2
Receptor(s)

                with:      4 POINT(s), including
                           0 POINTCAP(s) and      1 POINTHOR(s)
                 and:      1 VOLUME source(s)
                 and:      0 AREA type source(s)
                 and:      0 LINE source(s)
                 and:      0 RLINE/RLINEXT source(s)
```

```
                and:      0 OPENPIT source(s)
                and:      0 BUOYANT LINE source(s) with      0 line(s)


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

 **The AERMET Input Meteorological Data Version Date:  19191

 **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
Keyword)
          Model Outputs Tables of Overall Maximum Short Term Values (MAXTABLE
Keyword)
          Model Outputs External File(s) of Threshold Violations (MAXIFILE Keyword)
          Model Outputs External File(s) of High Values for Plotting (PLOTFILE
Keyword)
          Model Outputs Separate Summary File of High Ranked Values (SUMMFILE
Keyword)

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

 **Misc. Inputs:  Base Elev. for Pot. Temp. Profile (m MSL) =   173.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                 Emission Units = OU/S                                     ;
Emission Rate Unit Factor =    1.0000
                 Output Units   = OU/M**3

 **Approximate Storage Requirements of Model =      3.5 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   Nobltn_OU.err

 **File for Summary of Results:   Nobltn_OU.sum

  *** AERMOD - VERSION  19191 ***   *** Nobleton Odour OU/S
                         ***        07/13/21
 *** AERMET - VERSION  19191 ***   ***
                       ***        10:59:33

                                  PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

                                          *** METEOROLOGICAL DAYS SELECTED FOR
```

PROCESSING ***
(1=YES; 0=NO)

```
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1   1 1 1
1 1 1 1 1 1 1   1 1 1 1 1 1 1 1 1 1
          1 1 1 1 1 1 1 1 1 1   1 1 1 1 1 1
```

NOTE: METEOROLOGICAL DATA ACTUALLY PROCESSED WILL ALSO DEPEND ON WHAT IS INCLUDED IN THE DATA FILE.

*** UPPER BOUND OF FIRST THROUGH FIFTH WIND SPEED CATEGORIES ***
(METERS/SEC)

1.54, 3.09, 5.14, 8.23, 10.80,

*** MODELOPTs: RegDFAULT CONC ELEV FLGPOL RURAL ADJ_U*

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

Surface file: Toronto_crops_19191.SFC
Met Version: 19191
Profile file: Toronto_crops_19191.PFL

Surface format: FREE

Profile format: FREE

Surface station no.: 61587 Upper air station no.: 725280

Name: TORONTO Name: BUFFALO

Year: 1996 Year: 1996

First 24 hours of scalar data

YR	MO	DY	JDY	HR	H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS	WD	HT	REF TA	HT
96	01	01	1	01	-21.5	0.212	-9.000	-9.000	-999.	234.	49.3	0.10	0.50	1.00	2.60	41.	10.0	273.1	2.0
96	01	01	1	02	-21.5	0.212	-9.000	-9.000	-999.	234.	49.3	0.10	0.50	1.00	2.60	38.	10.0	273.1	2.0
96	01	01	1	03	-34.6	0.341	-9.000	-9.000	-999.	477.	127.6	0.10	0.50	1.00	4.10	44.	10.0	273.1	2.0
96	01	01	1	04	-34.6	0.341	-9.000	-9.000	-999.	477.	127.6	0.10	0.50	1.00	4.10	73.	10.0	273.1	2.0
96	01	01	1	05	-43.6	0.427	-9.000	-9.000	-999.	671.	201.0	0.10	0.50	1.00	5.10	63.	10.0	272.5	2.0
96	01	01	1	06	-39.2	0.384	-9.000	-9.000	-999.	572.	162.1	0.10	0.50	1.00	4.60	82.	10.0	272.0	2.0
96	01	01	1	07	-43.6	0.427	-9.000	-9.000	-999.	670.	201.0	0.10	0.50	1.00	5.10	75.	10.0	272.0	2.0
96	01	01	1	08	-39.3	0.384	-9.000	-9.000	-999.	572.	162.1	0.10	0.50	1.00	4.60	83.	10.0	271.4	2.0
96	01	01	1	09	-33.7	0.341	-9.000	-9.000	-999.	479.	127.7	0.10	0.50	0.82	4.10	67.	10.0	270.4	2.0
96	01	01	1	10	-25.9	0.343	-9.000	-9.000	-999.	481.	137.3	0.10	0.50	0.69	4.10	61.	10.0	269.9	2.0
96	01	01	1	11	-18.7	0.435	-9.000	-9.000	-999.	689.	390.6	0.10	0.50	0.64	5.10	54.	10.0	269.9	2.0
96	01	01	1	12	-6.0	0.353	-9.000	-9.000	-999.	507.	650.3	0.10	0.50	0.62	4.10	66.	10.0	269.2	2.0
96	01	01	1	13	-3.1	0.355	-9.000	-9.000	-999.	508.	1282.7	0.10	0.50	0.62	4.10	73.	10.0	269.2	2.0
96	01	01	1	14	-8.0	0.351	-9.000	-9.000	-999.	499.	478.4	0.10	0.50	0.63	4.10	59.	10.0	269.2	2.0
96	01	01	1	15	-20.4	0.389	-9.000	-9.000	-999.	583.	256.7	0.10	0.50	0.65	4.60	62.	10.0	268.8	2.0
96	01	01	1	16	-32.4	0.385	-9.000	-9.000	-999.	574.	163.4	0.10	0.50	0.72	4.60	34.	10.0	268.8	2.0
96	01	01	1	17	-22.1	0.211	-9.000	-9.000	-999.	257.	49.2	0.10	0.50	0.89	2.60	31.	10.0	265.9	2.0
96	01	01	1	18	-39.9	0.384	-9.000	-9.000	-999.	570.	162.0	0.10	0.50	1.00	4.60	7.	10.0	267.0	2.0
96	01	01	1	19	-35.4	0.340	-9.000	-9.000	-999.	478.	127.5	0.10	0.50	1.00	4.10	14.	10.0	267.0	2.0
96	01	01	1	20	-35.5	0.340	-9.000	-9.000	-999.	477.	127.4	0.10	0.50	1.00	4.10	7.	10.0	266.4	2.0
96	01	01	1	21	-44.5	0.427	-9.000	-9.000	-999.	670.	200.8	0.10	0.50						

```
1.00     5.10   10.   10.0  266.4    2.0
 96 01 01   1 22  -44.6  0.427 -9.000 -9.000 -999.  670.    200.8  0.10   0.50
1.00    5.10   32.   10.0  265.9    2.0
 96 01 01   1 23  -31.1  0.297 -9.000 -9.000 -999.  401.     97.2  0.10   0.50
1.00    3.60   30.   10.0  265.9    2.0
 96 01 01   1 24  -35.5  0.340 -9.000 -9.000 -999.  476.    127.4  0.10   0.50
1.00    4.10   30.    10.0  265.9    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 96 01 01 01   10.0 1   41.    2.60   273.2   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
  *** AERMOD - VERSION  19191 ***   *** Nobleton Odour OU/S
                          ***       07/13/21
 *** AERMET - VERSION  19191 ***   ***
                        ***       10:59:33

                                  PAGE   4
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

                                                *** THE SUMMARY OF HIGHEST  1-HR
RESULTS ***


                                    ** CONC OF ODOUR    IN OU/M**3
               **

                                                          DATE
                                             NETWORK
GROUP ID                          AVERAGE CONC     (YYMMDDHH)            RECEPTOR
(XR, YR, ZELEV, ZHILL, ZFLAG)    OF TYPE  GRID-ID
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -

ALL      HIGH   1ST HIGH VALUE IS      17.55249  ON 97120816: AT (  604987.25,
4860621.03,   250.14,   250.14,    1.50)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
  *** AERMOD - VERSION  19191 ***   *** Nobleton Odour OU/S
                          ***       07/13/21
 *** AERMET - VERSION  19191 ***   ***
                        ***       10:59:33

                                  PAGE   5
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```
*** MODELOPTs:    RegDFAULT  CONC  ELEV  FLGPOL  RURAL  ADJ_U*

*** Message Summary : AERMOD Model Execution ***

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

A Total of            0 Fatal Error Message(s)
A Total of           16 Warning Message(s)
A Total of          949 Informational Message(s)

A Total of        43848 Hours Were Processed

A Total of            0 Calm Hours Identified

A Total of          949 Missing Hours Identified (  2.16 Percent)


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


   ********   WARNING MESSAGES   ********
SO W320      36        PPARM: Input Parameter May Be Out-of-Range for Parameter
      QS
SO W320      37        PPARM: Input Parameter May Be Out-of-Range for Parameter
      QS
SO W320      38        PPARM: Input Parameter May Be Out-of-Range for Parameter
      QS
SO W320      39        PPARM: Input Parameter May Be Out-of-Range for Parameter
      QS
ME W187     213       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET

MX W441   19928        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041008
MX W441   19929        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041009
MX W441   19930        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041010
MX W441   19931        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041011
MX W441   19932        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041012
MX W441   19933        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041013
MX W441   19934        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041014
MX W441   19935        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041015
MX W441   19936        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041016
```

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MX W441   19937        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041017
MX W441   19938        METQA: Vert Pot Temp Grad abv ZI set to min .005, KURDAT=
98041018
```