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Vernola Marketplace Apartment Community (MA 21046)

AIR TOXIC AND CRITERIA POLLUTANT HEALTH RISK ASSESSMENT

CITY OF JURUPA VALLEY

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LIST OF ABBREVIATED TERMS

(1)	Reference
AADT	Annual Average Daily Traffic Volumes
ARB	Air Resources Board
CAAQS	California Ambient Air Quality Standards
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
CO	Carbon Monoxide
CPF	Cancer Potency Factor
EPA	Environmental Protection Agency
HRA	Health Risk Assessment
LDA	Light Duty Auto
LDT	Light Duty Truck
LHD	Light Heavy Duty
MCY	Motorcycle
MDV	Medium Duty Vehicle
NO2	Nitrogen Dioxide
OBUS	Other Bus
PM10	Particulate Matter 10 microns in diameter or less
PM2.5	Particulate Matter 2.5 microns in diameter or less
PPM	Parts per Million
Project	Crestview Apartments
PVMRM	Plume Volume Molar Ratio Methods
REL	Reference Exposure Level
RME	Reasonable Maximum Exposure
SBUS	School Bus
SCAQMD	South Coast Air Quality Management District
TACs	Toxic Air Contaminants
UBUS	Urban Bus
URF	Unit Risk Factor
UTM	Universal Traverse Mercator

EXECUTIVE SUMMARY

In 2005, the California Air Resources Board (ARB) promulgated an advisory recommendation to avoid setting sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. The ARB indicates that due to traffic-generated pollutants, there is an estimated increased cancer risk incidence of 300 to 1,700 per million within this domain. At some point however, the increased cancer risk incidence due the effects of freeway/roadway corridor pollutants become indistinguishable from the ambient air quality condition. In this regard, the effects of freeway/roadway-source pollutants that may impact the Project site are already acknowledged and accounted for within the ambient air quality discussions presented within this Section. More specifically, the MATES-IV Study data for the Project site comprehensively reflects increased TAC-source cancer risks affecting the City and Project site, inclusive of increased cancer risks due to freeway sources.

The 2005 ARB guidance noted previously, information made available through the MATES-IV Study, and configuration and design of the Project would suggest that further assessment of freeway-source pollutant impacts is not warranted. Notwithstanding, this Off-Site Freeway-Source Air Toxic and Criteria Pollutant Health Risk Assessment has been prepared for the Project and is intended to:

- Comply with and support CEQA Section 15003 (i) policies addressing adequacy, completeness, and a good-faith effort at full disclosure;

- Disaggregate potential freeway-source air pollutant health effects from other background conditions identified in the MATES IV Study; and

- Identify means to reduce the specific effects of freeway-source pollutants at the Project site.

Findings and conclusions of this Assessment are summarized below.

SUMMARY OF FINDINGS

For carcinogenic exposures resulting from exposure to toxics from the freeway, the summation of risk for the maximum exposed residential receptor totaled 4.60 in one million and will not exceed the SCAQMD significance threshold of 10 in one million.

For chronic noncarcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than one. For acute exposures, the hazard indices for the identified averaging times did not exceed unity. Therefore, noncarcinogenic hazards are calculated to be within acceptable limits and a less than significant impact would occur.

For the maximum exposed residential receptor, results of the analysis predicted freeway emissions will produce PM10 concentrations of 0.82 μg/m3 and 0.49 μg/m3 for the 24-hour and annual averaging times. These values will not exceed the SCAQMD significance thresholds of 2.5 μg/m3 and 1.0 μg/m3, respectively.

For PM2.5, a maximum 24-hour average concentration of 0.33 μg/m3 was predicted. This value also will not exceed the identified significance threshold of 2.5 μg/m3.

The maximum modeled 1-hour average concentration for CO of 0.11 parts per million (ppm), when added to an existing background concentration of 2.2 ppm, would equal a total Project concentration of 2.31 ppm. This would not cause an exceedance of the California Ambient Air Quality Standards (CAAQS) of 20 ppm. For the 8-hour averaging time, the maximum predicted concentration of 0.09 ppm, when added to an existing background level of 2.0 ppm, would equal a total Project concentration of 2.09 ppm. This would not cause an exceedance of the CAAQS of 9 ppm.

For NO2, a maximum one-hour concentration of 0.011 ppm was predicted. This concentration, when added to a background concentration of 0.066 ppm, would equal a total Project concentration of 0.078 ppm. This would not cause an exceedance of the CAAQS of 0.18 ppm.

As noted, short duration (i.e., 1 and 8-hour) exposures associated with both toxic and criteria pollutants are within acceptable limits. As such, less than significant impacts are anticipated to residents who would access and utilize outdoor amenities.

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1   INTRODUCTION

In 2005, the California Air Resources Board (ARB) promulgated an advisory recommendation to avoid setting sensitive land uses within 500 feet of a freeway, urban roads with 100,000 vehicles per day or rural roads with 50,000 vehicles per day. According to the ARB, the increased cancer risk is 300 to 1,700 per million within this domain. The strongest association of traffic related emissions with adverse health outcomes was seen within 300 feet of roadways with high truck densities. Notwithstanding, the ARB notes that a site-specific analysis would be required to determine the actual risk near a particular land use and should consider factors such as prevailing wind direction, local topography and climate.

In consideration of the above referenced requirement, the assessment and dispersion modeling methodologies used in the preparation of this report were composed of all relevant and appropriate procedures presented by the U.S. Environmental Protection Agency, California Environmental Protection Agency and South Coast Air Quality Management District (SCAQMD). The methodologies and assumptions offered under this regulatory guidance were used to ensure that the assessment effectively quantified residential exposures associated with the generation of contaminant emissions from adjacent mobile source activity.

This report summarizes the protocol used to evaluate contaminant exposures and presents the results of the health risk assessment (HRA) prepared by Urban Crossroads, Inc., for the proposed Vernola Marketplace Apartment Community development (referred to as "Project).

1.1   SITE LOCATION

The proposed project is located east of the I-15 freeway between Limonite Avenue and 68th Street, west of Pats Ranch Road in the City of Jurupa Valley as shown on Exhibit 1-A. The nearest existing residential land uses are located east of the Project site across Pats Ranch Road and west of the Project site across the I-15 Freeway. The initial Phase A Vernola Marketplace Apartment Community project is located to the south.

1.2   PROJECT DESCRIPTION

The project includes a 3-story multifamily housing community with 210 units. The proposed project site is currently zoned as light industrial land use. The project proposes to change the land use in the General Plan to highest density residential (HHDR). Exhibit 1-B illustrates a preliminary site plan for the Project. As required by the California Building Energy Efficiency Standards (Title 24, Part 6 of California Code of Regulations (CCR)), the Project will install air filtration systems with efficiencies equal to or exceeding a Minimum Efficiency Reporting Value (MERV) 13 as defined by the American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Standard 52.2. (1)[1].

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1   The use of MERV filtration systems to reduce DPM and particulates has been successfully implemented by several lead agencies, including, but not limited to: City of Los Angeles, City of Claremont, City of Irvine, City of Glendale, City of Berkley, City of Oakland, and the Los Angeles Unified School District (LAUSD). The average particle size efficiency (PSE) removal for MERV 13 as defined by the 2019 Title 24 standards is approximately 50% for 0.3 to 1.0 μg/m³ (DPM), 85% for 1.0 to 3.0 μg/m³ (PM2.5), and 90% for 3.0 to 10.0 μg/m³ (PM10) (2).

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EXHIBIT 1-A: LOCATION MAP

EXHIBIT 1-B: SITE PLAN

LEGEND:

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☐ Site Boundary

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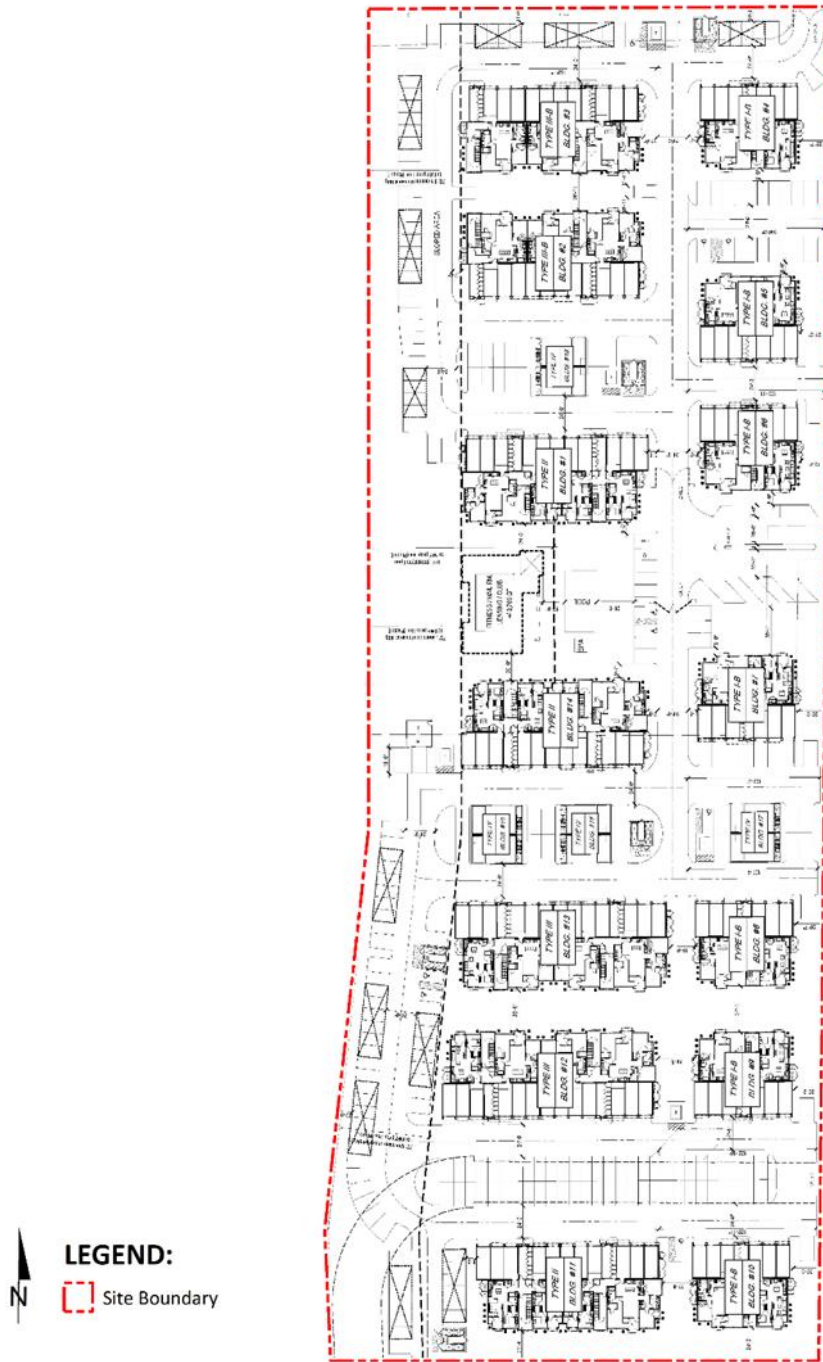
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2   SOURCE IDENTIFICATION

The California Department of Transportation (Caltrans), Traffic and Vehicle Data Systems Unit collects and maintains traffic volume counts for vehicles traversing the California state highway system. Table 2-1 presents the annual average daily traffic volumes (AADT) for the freeway segment considered in the assessment. The AADT volumes for I-15 are based on existing volumes obtained from the Caltrans Traffic Data Brand Annual Average Daily Truck Traffic on the California Highway System data.

TABLE 2-1 FREEWAY TRAFFIC VOLUMES

Roadway Segment	AADT	Vehicles Per Hour (ALL)	Vehicles Per Hour (gas)	Vehicles Per Hour (diesel)
I-15 Freeway	152,000	6,333	6,085	248

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3   SOURCE CHARACTERIZATION

In urban communities, vehicle emissions contribute significantly to localized concentrations of air contaminants. Typically, emissions generated from these sources are characterized by vehicle mix, the rate pollutants are generated during the course of travel and the number of vehicles traversing the roadway network.

Currently, emission factors are generated from a series of computer based programs to produce a composite emission rate for vehicles traveling at various speeds within a defined geographical area or along a discrete roadway segment. To account for the emission standards imposed on the California fleet, the ARB has developed the EMFAC2017 emission factor model. EMFAC2017 was utilized to identify pollutant emission rates for total organic gases (TOG), diesel particulates, particulates (PM10 and PM2.5), carbon monoxide (CO) and nitrogen oxide (NOx) compounds (2). To produce a representative vehicle fleet distribution, the assessment utilized ARB's Riverside County vehicle population estimates for the 2023 calendar year, consistent with the Project's anticipated Opening Year for analytical purposes. This approach provides an estimate of vehicle mix associated with operational profiles at the link or intersection level. Table 3-1 lists the identified fleet mix considered in the assessment.

Based upon the freeway traffic volumes and vehicle population profiles noted above, discrete traffic counts were identified for each roadway segment. Diesel vehicles account for 3.92 percent of the total on-road mobile fleet. For chronic (long term) and acute (e.g., 1-hour) exposures, AADT values were averaged to produce representative hourly traffic volumes.

TABLE 3-1: VEHICLE FLEET MIX PROFILE

Vehicle class	Riverside County		
	Fuel	Population	Percent
LDA	Diesel	772,785.87	51.76%
LDA	Gas	7,300.59	0.49%
LDA	Electric	12,758.75	0.85%
LDT1	Diesel	39.18	0.00%
LDT1	Gas	82,772.07	5.54%
LDT1	Electric	485.08	0.03%
LDT2	Diesel	1,463.53	0.10%
LDT2	Gas	252,998.01	16.95%
LDT2	Electric	2,319.02	0.16%
LHD1	Diesel	20,161.77	1.35%
LHD1	Gas	20,620.88	1.38%
LHD2	Diesel	7,795.76	0.52%
LHD2	Gas	3,286.38	0.22%
MCY	Gas	36,240.66	2.43%
MDV	Diesel	4,324.74	0.29%
MDV	Gas	208,995.21	14.00%
MDV	Electric	1,262.69	0.08%
MHDT	Diesel	2,591.61	0.17%
MHDT	Gas	6,006.90	0.40%
HHDT	Diesel	15,610.04	1.05%
HHDT	Gas	2,027.16	0.14%
HHDT	Natural Gas	27,819.82	1.86%
OBUS	Diesel	7.26	0.00%
OBUS	Gas	316.99	0.02%
SBUS	Diesel	351.64	0.02%
SBUS	Gas	588.34	0.04%
UBUS	Diesel	1,154.01	0.08%
UBUS	Gas	490.88	0.03%
UBUS	Electric	1.11	0.00%
UBUS	Natural Gas	164.46	0.01%

Note: Vehicle category descriptions can be found on the California Air Resources Board website at http://www.arb.ca.gov/msei/modeling.htm.

Average observed route speeds were assumed for vehicles traversing the main highway link (I-15).

For particulates (PM10 and PM2.5), emissions were quantified through the reentrainment of paved roadway dust. The predictive emission equation developed by the U.S. Environmental Protection Agency (AP-42, Section 13.2.1) was utilized to generate particulate source strength (3). To account for the mass rate of emissions entrained from the roadway surface, the contribution from exhaust, break and tire wear were added to the AP-42 emission factor equation.

A list of compounds associated with mobile source emissions is presented in Table 3-3. Appendix 3.1 presents the on-road emission rate calculation worksheets for the freeway segments considered in the assessment.

TABLE 3-3: COMPOUNDS EMITTED FROM ON ROAD MOBILE SOURCE ACTIVITY

Source	Pollutant
Freeway	Benzene
	Formaldehyde
	1,3-Butadiene
	Acetaldehyde
	Acrolein
	Diesel Particulates
	Reentrained Particulates (PM10, PM2.5)
	Carbon Monoxide
	Nitrogen Dioxide

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4   EXPOSURE QUANTIFICATION

In order to assess the impact of emitted compounds on individuals who reside at the proposed apartment complex, air quality modeling utilizing the AMS/EPA Regulatory Model AERMOD was performed to assess the downwind extent of mobile source emissions located within a 1,000 feet of the project site. AERMOD's air dispersion algorithms are based upon a planetary boundary layer turbulence structure and scaling concepts, including the treatment of surface and elevated sources in simple and complex terrain.

The model offers additional flexibility by allowing the user to assign initial vertical and lateral dispersion parameters for sources representative of a localized mobile fleet. For this assessment, the volume source algorithm was utilized to model the emissions generated from on-road mobile source activity.

The modeling conservatively utilizes the full conversion protocol to perform the NOx to NO2 conversion.

Air dispersion models require additional input parameters including pollutant emission data and local meteorology. Due to the their sensitivity to individual meteorological parameters such as wind speed and direction, the U.S. Environmental Protection Agency recommends that meteorological data used as input into dispersion models be selected on the basis of relative spatial and temporal conditions that exist in the area of concern. In response to this recommendation, the nearest meteorological data available from the SCAQMD Riverside Airport Meteorological Data Station (Source Receptor Area 23), was used to represent local weather conditions and prevailing winds. Five years (2012-2016) of available AERMOD meteorological data was utilized in the modeling, which is the latest available information from SCAQMD.

The modeling analysis also considered the spatial distribution of mobile source activity traversing the freeway in relation to the proposed site. To accommodate a Cartesian grid format, direction dependent calculations were obtained by identifying the universal transverse mercator (UTM) coordinates for each volume source location. On-site receptors were placed to provide coverage across the identified residential portion of the site. A ground level receptor height was assumed as a conservative measure. A graphical representation of the source-receptor grid network is presented in Exhibit 4-A. A complete listing of model input/output files are provided in electronic format in Appendix 4.1.

EXHIBIT 4-A: SOURCE RECEPTOR GRID NETWORK

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. . . . .
. . . . .   = Modeled Sensitive Receptors
. . . . .
. . . .

= Modeled Emissions Source

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5   RISK CHARACTERIZATION

5.1   CARCINOGENIC CHEMICAL RISK

The SCAQMD CEQA Air Quality Handbook (1993) states that emissions of toxic air contaminants (TACs) are considered significant if a HRA shows an increased risk of greater than ten in one million. Based on guidance from the SCAQMD in the document Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis (4), for purposes of this analysis, ten (10) in one million is used as the cancer risk threshold for the proposed Project.

Excess cancer risks are estimated as the upper-bound incremental probability that an individual will develop cancer over a lifetime as a direct result of exposure to potential carcinogens over a specified exposure duration. The estimated risk is expressed as a unitless probability. The cancer risk attributed to a chemical is calculated by multiplying the chemical intake or dose at the human exchange boundaries (e.g., lungs) by the chemical-specific cancer potency factor (CPF). A risk level of 1 in a million implies a likelihood that up to one person, out of one million equally exposed people would contract cancer if exposed continuously (24 hours per day) to the levels of toxic air contaminants over a specified duration of time. This risk would be an excess cancer risk that is in addition to any cancer risk borne by a person not exposed to these air toxics.

Health risks associated with exposure to carcinogenic compounds can be defined in terms of the probability of developing cancer as a result of exposure to a chemical at a given concentration. Under a deterministic approach (i.e., point estimate methodology), the cancer risk probability is determined by multiplying the chemical's annual concentration by its unit risk factor (URF). The URF is a measure of the carcinogenic potential of a chemical when a dose is received through the inhalation pathway. It represents an upper bound estimate of the probability of contracting cancer as a result of continuous exposure to an ambient concentration of one microgram per cubic meter ($\mu g/m^3$) over a 70-year lifetime. The URFs utilized in the assessment and corresponding cancer potency factors were obtained from the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values*.

Notwithstanding, it is the intent of the HRA to provide cumulative risk estimates from near-field on-road sources that are reflective of anticipated exposures experienced at a given residential occupancy. As such, a review of relevant guidance was conducted to determine applicability of the use of early life exposure adjustments to identified carcinogens. For risk assessments conducted under the auspices of The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly, Statutes of 1987; Health and Safety Code Section 44300 et seq.) a weighting factor is applied to all carcinogens regardless of purported mechanism of action. However, for this assessment, the HRA relied upon U.S. Environmental Protection Agency guidance relating to the use of early life exposure adjustment factors (Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens, EPA/630/R-003F) whereby adjustment factors are only considered when carcinogens act "through the mutagenic mode of action." A mutagen is a physical or chemical agent that changes genetic material, such as DNA, increasing

the frequency of mutations to produce carcinogenic effects. The U.S. Environmental Protection Agency has identified 19 compounds that elicit a mutagenic mode of action for carcinogenesis. None of the gaseous compounds considered in the HRA elicit a mutagenic mode of action and, therefore, early life exposure adjustments were not considered. For diesel particulates, polycyclic aromatic hydrocarbons (PAHs) and their derivatives, which are known to exhibit a mutagenic mode of action, comprise < 1% of the exhaust particulate mass. To date, the U.S. Environmental Agency reports that whole diesel engine exhaust has not been shown to elicit a mutagenic mode of action.

Accordingly, the health risks to children were not underestimated in the Health Risks Assessment. As discussed, the use of age-weighted factors is not required because none of the gaseous compounds considered in the HRA elicit a primary mutagenic mode of action and none of the pollutants considered are listed by the EPA as having a primary mutagenic mode of action. Therefore, early life exposure adjustments were not considered in accordance with U.S. EPA guidance relating to the use of early life exposure adjustment factors. This analysis appropriately accounts for potential health risk to future residents at the project site.

To effectively quantify dose, the procedure requires the incorporation of several discrete exposure variates. Once determined, contaminant dose is multiplied by the cancer potency factor (CPF) in units of inverse dose expressed in milligrams per kilogram per day $(mg/kg/day)^{-1}$ to derive the cancer risk estimate. Therefore, to assess exposures associated with the proposed residential population, the following dose algorithm was utilized.

$$CDI = (C_{air} \times EF \times ED \times IR) / (BW \times AT)$$

Where:

CDI	=	chronic daily intake (mg/kg/day)
C_{air}	=	concentration of contaminant in air (mg/m^3)
EF	=	exposure frequency (days/year)
ED	=	exposure duration (years)
IR	=	inhalation rate (m^3/day)
BW	=	body weight (kg)
AT	=	averaging time (days)

To represent residential exposures, the assessment employed the U.S. Environmental Protection Agency's guidance to develop viable dose estimates based on reasonable maximum exposures (RME). Specifically, activity patterns for population mobility recommended by the U.S. Environmental Protection Agency and presented in the *Exposure Factors Handbook* were utilized. As a result, lifetime risk values for residents were adjusted to account for an exposure duration of 350 days per year for 30 years (i.e., 95th percentile). These values are consistent with the California Environmental Quality Act which considers the evaluation of environmental effects of

proposed projects in a manner that reflects both reasonable and feasible assumptions. For body weight and inhalation, the assessment employed average adult values of 70 kilograms and 20 cubic meters per day, respectively.

For carcinogenic exposures resulting from exposure to toxics from the freeway, the summation of risk for the maximum exposed residential receptor totaled 4.60 in one million and will not exceed the SCAQMD significance threshold of 10 in one million.

Discrete variants for daily breathing rates, exposure frequency, and exposure duration were obtained from relevant distribution profiles presented in the OEHHA guidance document entitled Air Toxic Hot Spots Program Risk Assessment Guidelines, Part IV: Technical Support Document for Exposure Assessment and Stochastic Analysis (5) and guidance from SCAQMD.

Table 5-1 summarizes the Exposure Parameters for Residents. Appendix 5.1 includes the detailed emissions and risk calculation outputs. (6)

TABLE 5-1: EXPOSURE ASSUMPTIONS FOR INDIVIDUAL CANCER RISK

Exposure Parameter	Units	Residential
Exposure Frequency	days/year	350
Exposure Duration	years	70
Inhalation Rate [a]	L/kg-day	302
Exposure Duration	Years	30
Exposure Time	hours/day	24

[a] The residential breathing rate of 302 L/kg-day represents the 80th percentile breathing rate per ARB and consistent with SCAQMD Risk Assessment Procedures for Rules 1401 and 212, the worker breathing rate of 149 L/kg-day is also consistent with SCAQMD Risk Assessment Procedures for Rules 1401 and 212, the school child breathing rate of 581 L/kg-day represents the high end 95th percentile breathing rate.

5.2   NON-CARCINOGENIC EXPOSURES

An evaluation of the potential noncancerous effects of contaminant exposures was also conducted. Under the point estimate approach, adverse health effects are evaluated by comparing the concentration of each compound with the appropriate Reference Exposure Level (REL). Available REL's presented in the *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values were considered in the assessment.*

To quantify noncarcinogenic impacts, the hazard index approach was used. The hazard index assumes that subthreshold exposures adversely affect a specific organ or organ system (i.e., toxicological endpoint). For each discrete pollutant exposure, target organs presented in regulatory guidance were utilized.

To calculate the hazard index, the pollutant concentration or dose is divided by the appropriate toxicity value. For compounds affecting the same toxicological endpoint, this ratio is summed. Where the total equals or exceeds one (i.e., unity), a health hazard is presumed to exist. For chronic exposures, REL's were converted to units expressed in mg/kg/day to accommodate the above referenced intake algorithm. To assess acute noncancer impacts, the maximum pollutant

concentration is divided by the REL for the corresponding averaging time (e.g., 1-hour). No exposure adjustments are considered for short duration exposures.

Appendix 5.1, summarizes the REL's and corresponding reference dose values used in the evaluation of chronic noncarcinogenic and acute exposures. The noncancer hazard quotient for identified compounds generated from each source and a summation for each toxicological endpoint are presented on this table.

For chronic noncarcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than the threshold of 1.0 for all exposure scenarios. For acute exposures, the hazard indices for the identified averaging times did not exceed the threshold of 1.0. Therefore, acute and chronic non-carcinogenic hazards were predicted to be within acceptable limits and are less than significant.

5.3   POTENTIAL CANCER AND NON-CANCER RISKS[2]

For carcinogenic exposures the summation of risk for the maximum exposed residential receptor totaled 3.45 in one million, which does not exceed the threshold of 10 in one million. At this same location, non-cancer risks were estimated to be less than 1.0 for all toxicological endpoints.

5.4   CRITERIA POLLUTANT EXPOSURES

The State of California has promulgated strict ambient air quality standards for various pollutants. These standards were established to safeguard the public's health and welfare with specific emphasis on protecting those individuals susceptible to respiratory distress, such as asthmatics, the young, the elderly and those with existing conditions which may be affected by increased pollutant concentrations. However, recent research has shown that unhealthful respiratory responses occur with exposures to pollutants at levels that only marginally exceed clean air standards. Table 5-1 presents the CAAQS for the criteria pollutants considered in the assessment.

Pollutant emissions are considered to have a significant effect on the environment if they result in concentrations that create either a violation of an ambient air quality standard, contribute to an existing air quality violation or expose sensitive receptors to substantive pollutant concentrations. Should ambient air quality already exceed existing standards, the SCAQMD has established significance criteria for selected compounds to account for the continued degradation of local air quality. Background concentrations are based upon the highest observed value for the most recent three-year period.

For PM_{10} emissions, background concentrations representative of the project area exceed the CAAQS for the 24-hour and annual averaging times. As a result, a significant impact is achieved when pollutant concentrations produce a measurable change over existing background levels.

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2 SCAQMD guidance does not require assessment of the potential health risk to on-site workers. Excerpts from the document OEHHA Air Toxics Hot Spots Program Risk Assessment Guidelines—The Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments (OEHHA 2003), also indicate that it is not necessary to examine the health effects to on-site workers unless required by RCRA (Resource Conservation and Recovery Act) / CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act) or the worker resides on-site.

Although background concentrations exceed the CAAQS annual averaging time for fine particulates, no measurable change criteria currently exists. As a result, the SCAQMD significance threshold of 2.5 $\mu g/m^3$ for the 24-hour averaging time is used to assess $PM_{2.5}$ impacts.

For the CO 1 and 8-hour averaging times and NO_2 1-hour averaging time, background concentrations are below the current air quality standards. As such, significance is achieved when pollutant concentrations add to existing levels and create an exceedance of the CAAQS. Table 5-2 shows the pollutant concentrations collected at the nearest available monitoring site to the Project for the last three years of available data. Table 5-3 outlines the relevant significance thresholds considered to affect local air quality.

TABLE 5-1: CALIFORNIA AMBIENT AIR QUALITY STANDARDS

Pollutant	Standard	Health Effects
Particulates (PM10)	>50 µg/m3 (24 hr avg.) >20 µg/m3 (Annual)	1) Excess deaths from short-term exposures and the exacerbation of symptoms in sensitive individuals with respiratory disease. 2) Excess seasonal declines in pulmonary function especially in children.
Particulates (PM2.5)	>12 µg/m3 (Annual)	1) Excess deaths and illness from long-term exposures and the exacerbation of symptoms in sensitive individuals with respiratory and cardio pulmonary disease.
Carbon Monoxide (CO)	>9.0 ppm (8 hr avg.) >20.0 ppm (1 hr avg.)	1) Aggravation of angina pectoris and other aspects of coronary heart disease. 2) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease. 3) Impairment of central nervous system functions. 4) Possible increased risk to fetuses.
Nitrogen Dioxide (NO2)	>0.18 ppm (1 hr avg.)	1) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups. 2) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes.

Abbreviations: ppm: parts per million; µg/m3: micrograms per cubic meter.
Source: California Code of Regulations, Title 17, Section 70200.

TABLE 5-2: PROJECT AREA AIR QUALITY MONITORING SUMMARY 2012-2014[3]

Pollutant/ Averaging Time	Year			
	2018	**2019**	**2020**	**Maximum**
Particulates (PM$_{10}$) 24-Hour	126	99	104	126
Particulates (PM$_{2.5}$) 24-Hour	50.70	46.7	41	50.70
Carbon Monoxide (CO) 1-Hour 8-Hour	2.2 2.0	1.5 1.2	1.9 1.4	2.2 2.0
Nitrogen Dioxide (NO$_2$) 1-Hour	0.055	0.056	0.066	0.066

Note: PM$_{10}$ concentrations are expressed in micrograms per cubic meter (μg/m^3). All others are expressed in parts per million (ppm).
Source: U.S. Environmental Protection Agency http://www.epa.gov/airdata/ad_rep_mon.html

TABLE 5-3: SCAQMD AIR QUALITY SIGNIFICANCE THRESHOLDS

Pollutant	Averaging Time	Pollutant Concentration
Particulates (PM10) Particulates (PM2.5)	24-Hours	2.5 μg/m3 (operation)
Particulates (PM10)	Annual	1.0 μg/m3
Carbon Monoxide (CO)	1/8-Hours	SCAQMD is in attainment; impacts are significant if they cause or contribute to an exceedance of the following attainment standards 20 ppm (1-hour) and 9 ppm (8-hour).
Nitrogen Dioxide (NO2)	1-Hour	SCAQMD is in attainment; impacts are significant if they cause or contribute to an exceedance of the following attainment standard 0.18 ppm.

Abbreviations: ppm: parts per million; μg/m3: micrograms per cubic meter
Source: South Coast Air Quality Management District.

For the maximum exposed residential receptor, results of the analysis predicted freeway emissions will produce PM10 concentrations of 0.82 μg/m3 and 0.49 μg/m3 for the 24-hour and annual averaging times. These values will not exceed the SCAQMD significance thresholds of 2.5 μg/m3 and 1.0 μg/m3, respectively.

For PM2.5, a maximum 24-hour average concentration of 0.33 μg/m3 was predicted. This value also will not exceed the identified significance threshold of 2.5 μg/m3.

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[3] PM10, PM2.5, CO, and NO2 data obtained from the SRA23 monitoring station.

The maximum modeled 1-hour average concentration for CO of 0.11 parts per million (ppm), when added to an existing background concentration of 2.2 ppm, would equal a total Project concentration of 2.31 ppm. This would not cause an exceedance of the California Ambient Air Quality Standards (CAAQS) of 20 ppm. For the 8-hour averaging time, the maximum predicted concentration of 0.09 ppm, when added to an existing background level of 2.0 ppm, would equal a total Project concentration of 2.09 ppm. This would not cause an exceedance of the CAAQS of 9 ppm.

For NO2, a maximum one-hour concentration of 0.011 ppm was predicted. This concentration, when added to a background concentration of 0.066 ppm, would equal a total Project concentration of 0.078 ppm. This would not cause an exceedance of the CAAQS of 0.18 ppm.

As noted, short duration (i.e., 1 and 8-hour) exposures associated with both toxic and criteria pollutants are within acceptable limits. As such, less than significant impacts are anticipated to residents who would access and utilize outdoor amenities.

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6   FINDINGS & CONCLUSIONS

For carcinogenic exposures resulting from exposure to toxics from the freeway, the summation of risk for the maximum exposed residential receptor totaled 4.60 in one million and will not exceed the SCAQMD significance threshold of 10 in one million.

For chronic noncarcinogenic effects, the hazard index identified for each toxicological endpoint totaled less than one. For acute exposures, the hazard indices for the identified averaging times did not exceed unity. Therefore, noncarcinogenic hazards are calculated to be within acceptable limits and a less than significant impact would occur.

For the maximum exposed residential receptor, results of the analysis predicted freeway emissions will produce PM10 concentrations of 0.82 μg/m3 and 0.49 μg/m3 for the 24-hour and annual averaging times. These values will not exceed the SCAQMD significance thresholds of 2.5 μg/m3 and 1.0 μg/m3, respectively.

For PM2.5, a maximum 24-hour average concentration of 0.33 μg/m3 was predicted. This value also will not exceed the identified significance threshold of 2.5 μg/m3.

The maximum modeled 1-hour average concentration for CO of 0.11 parts per million (ppm), when added to an existing background concentration of 2.2 ppm, would equal a total Project concentration of 2.31 ppm. This would not cause an exceedance of the California Ambient Air Quality Standards (CAAQS) of 20 ppm. For the 8-hour averaging time, the maximum predicted concentration of 0.09 ppm, when added to an existing background level of 2.0 ppm, would equal a total Project concentration of 2.09 ppm. This would not cause an exceedance of the CAAQS of 9 ppm.

For NO2, a maximum one-hour concentration of 0.011 ppm was predicted. This concentration, when added to a background concentration of 0.066 ppm, would equal a total Project concentration of 0.078 ppm. This would not cause an exceedance of the CAAQS of 0.18 ppm.

As noted, short duration (i.e., 1 and 8-hour) exposures associated with both toxic and criteria pollutants are within acceptable limits. As such, less than significant impacts are anticipated to residents who would access and utilize outdoor amenities.

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7   REFERENCES

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2. **California Department of Transportation.** EMFAC Software. [Online] http://www.dot.ca.gov/hq/env/air/pages/emfac.htm.

3. **U.S. Environmental Protection Agency.** 13.2.1 Paved Roads. [Online] http://www.epa.gov/ttnchie1/ap42/ch13/final/c13s0201.pdf.

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6. **South Coast Air Quality Management District.** *Final Localized Significance Threshold Methodology.* 2003.

7. **American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.** *Method of Testing General Ventilation Air Cleaning Devices for Removal by Particle Size.* 2017. ANSI/ASHRAE Standard 52.2.2017.

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8   CERTIFICATION

The contents of this air study report represent an accurate depiction of the environmental impacts associated with the proposed Vernola Marketplace Apartment Community Project. The information contained in this health risk assessment is based on the best available data at the time of preparation. If you have any questions, please contact me directly at (949) 660-1994.

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EDUCATION

Master of Science in Environmental Studies
California State University, Fullerton • May, 2010

Bachelor of Arts in Environmental Analysis and Design
University of California, Irvine • June, 2006

PROFESSIONAL AFFILIATIONS

AEP – Association of Environmental Planners
AWMA – Air and Waste Management Association
ASTM – American Society for Testing and Materials

PROFESSIONAL CERTIFICATIONS

Environmental Site Assessment – American Society for Testing and Materials • June, 2013
Planned Communities and Urban Infill – Urban Land Institute • June, 2011
Indoor Air Quality and Industrial Hygiene – EMSL Analytical • April, 2008
Principles of Ambient Air Monitoring – California Air Resources Board • August, 2007
AB2588 Regulatory Standards – Trinity Consultants • November, 2006
Air Dispersion Modeling – Lakes Environmental • June, 2006

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APPENDIX 1.1:

MERV FILTER EFFICIENCY

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ASHRAE Standard 52.2 Explained

ASHRAE Efficiency Ratings Provide New Method Of Measuring Filter Performance

The new ASHRAE Standard 52.2 provides the first industry accepted procedure for measuring filter efficiency by particle size.

The need for a more precise measurement of a filter's ability to remove specific particle sizes has become more critical as concern over indoor air quality, respirable particles, as well as protection of products and processes, has continued to grow.

Standard 52.2 Supplements Standard 52.1

Standard 52.2 is not intended to be a replacement for standard 52.1. Both will continue to be relied upon as the industry accepted measures of filter performance. The arrestance and dust holding capacity data provided by Standard 52.1 will remain as valuable performance characteristics. However, it is anticipated that as the fractional efficiency test (52.2) becomes more widely understood and accepted, the atomspheric dust spot efficiency test (52.1) will no longer be utilized.

Particle Size Ranges

The 52.2 procedure calls for efficiency measurements to be taken on twelve (12) particle size ranges. (See example to right.)

For reporting and rating purposes, these twelve (12) ranges are grouped into three (3) wider ranges:

E_1 - 0.3 - 1.0 Microns

E_2 - 1.0 - 3.0 Microns

E_3 - 3.0 - 10.0 Microns

Standard 52.2 Test Procedure

Efficiency measurements are taken on each of the twelve (12) particle size ranges at six (6) different points during the test:

Clean (after (4) increments of dust loading).

After the final resistance has been reached.

Standard synthetic ASHRAE dust, comprised of 72% SAE standard J726 test dust (fine), 23% powdered carbon, and 5% milled cotton linters is used to load the filter in five (5) equal increments.

The six (6) efficiency measurements for each of the twelve (12) particle size ranges (72 total efficiency measurements) are taken by challenging the filter with potassium chloride (KCl) particles. This test aerosol provides particles over the entire range of 0.3 to 10.0 microns required by the test procedure.

The lowest efficiency value (of the six (6) measurements taken throughout the test) for each of the twelve (12) particle size ranges is recorded. (Note: The six (6) readings for each particle size range are not averaged. The lowest efficiency value is used.)

The twelve (12) readings are grouped into the three (3) wider ranges (E_1,E_2,E_3).

These values are then averaged to provide an average Particle Size Efficiency (PSE) for each range. The PSE values are used to classify the filter into one of the sixteen (16) Minimum Efficiency Reporting Value (MERV) Ratings.

Standard Test Air Flow Rates

Standard 52.2 prescribes that the tests are to be run at one of seven (7) air flow rates:

118 FPM (.60 m/s)

246 FPM (1.25 m/s)

295 FPM (1.50 m/s)

374 FPM (1.90 m/s)

492 FPM (2.50 m/s)

630 FPM (3.20 m/s)

748 FPM (3.80 m/s)

Example: MERV-14 Rating (see back for MERV Rating Schedule.)

Particle Size Range (Microns)	Lowest Efficiency (%) (based on 6 readings over life of test)	Average Particle Size Efficiency (PSE)
.30 - .40 .40 - .55 .55 - .70 .70 - 1.0	74% 82% 87% 92%	84% (E_1)
1.0 - 1.3 1.3 - 1.6 1.6 - 2.2 2.2 - 3.0	96% 98% 99% 100%	98% (E_2)
3.0 - 4.0 4.0 - 5.5 5.5 - 7.0 7.0 - 10.0	100% 100% 100% 100%	100% (E_3)

To determine the MERV Rating, start with the PSE value for E_1, then E_2. then E_3 to arrive at the proper rating:

E_1 is 84%: Therefore the maximum rating would be MERV-14.

E_2 and E_3 both exceed 90%: therefore the filter receives an MERV-14 Rating.

AIRGUARD ®

Tech Tips
Sales and Marketing Information on Airguard Air Filtration Products

Minimum Efficiency Reporting Values (MERV)
ASHRAE Standard 52.2

Group Number	MERV Rating	E₁ Average Particle Size Efficiency (PSE) 0.3 - 1.0 Microns	E₂ Average Particle Size Efficiency (PSE) 1.0 - 3.0 Microns	E₃ Average Particle Size Efficiency (PSE) 3.0 - 10.0 Microns	Average Arrestance (ASHRAE 52.1)	Minimum Final Resistance (In. W.G.)
1	MERV 1	-	-	Less than 20%	Less than 65%	0.3"
	MERV 2	-	-	Less than 20%	65 - 69.9%	0.3"
	MERV 3	-	-	Less than 20%	70 - 74.9%	0.3"
	MERV 4	-	-	Less than 20%	75% or greater	0.3"
2	MERV 5	-	-	20 - 34.9%	-	0.6"
	MERV 6	-	-	35 - 49.9%	-	0.6"
	MERV 7	-	-	50 - 69.9%	-	0.6"
	MERV 8	-	-	70 - 84.9%	-	0.6"
3	MERV 9	-	Less than 50%	85% or greater	-	1.0"
	MERV 10	-	50% - 64.9%	85% or greater	-	1.0"
	MERV 11	-	65% - 79.9%	85% or greater	-	1.0"
	MERV 12	-	80% - 89.9%	90% or greater	-	1.0"
4	MERV 13	Less than 75%	90% or greater	90% or greater	-	1.4"
	MERV 14	75% - 84.9%	90% or greater	90% or greater	-	1.4"
	MERV 15	85% - 94.9%	90% or greater	90% or greater	-	1.4"
	MERV 16	95% or Greater	95% or greater	95% or greater	-	1.4"

Notes:

1. ASHRAE Standard 52.2 tests are to be conducted at one of seven (7) air flow rates:

    118 FPM (.60 m/s)   492 FPM (2.50 m/s)

    246 FPM (1.25 m/s)   630 FPM (3.20 m/s)

    295 FPM (1.50 m/s)   748 FPM (3.80 m/s)

    374 FPM (1.90 m/s)

2. The air flow rate at which the filter was tested is included in the MERV rating (MERV-10 @2.5 m/s).

3. Filters with an E₃ efficiency of less than 20% (MERV-1 through MERV-4) must also be tested for arrestance per ASHRAE Standard 52.1.

4. Final resistance must be at least twice the initial resistance at the test air flow rate, or the values shown in the table above, whichever is greater.

A-TT52.2-308

Distributed by:

APPENDIX 3.1:

EMISSION RATE CALCULATION WORKSHEETS

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Running Rate Emission Summary

Criteria	65 mph
CO	1.191
NOx	0.221
PM10	0.0036
PM2.5	0.0034
TOG GAS	0.090
TOG DSL	0.058
DSL Particulate	0.036

TW/BW Emission Summary

	Total
PM10	0.047
PM2.5	0.019

EMFAC2017
Worksheet
(65 mph)

EMFAC2017 Emission Rates
Region Type: County
Region: Riverside (SC)
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Pollutant Classification: Criteria

Region	CalYr	Season	Veh_Class	Fuel	MdlYr	Speed	Population	Wt Frac	CO_RUNEX	CO_RUNEX AVE	NOX_RUNEX	NOx_RUNEX AVE	PM10_RUNEX	PM10_RUNEX AVE	PM10_PMTW	PM10_PMTW_AVE	PM10_PMBW	PM10_PMBW_AVE	PM2_5_RUNEX	PM2_5_RUNEX AVE	PM2_5_PMTW	PM2_5_PMTW_AVE	PM2_5_PMBW	PM2_5_PMBW_AVE
Riverside	2023	Annual	LDA	GAS	Aggregated	65	772785.866	0.5176	0.4649689	0.24066205	0.0361251	0.01869792	0.0013095	0.00067780	0.0080	0.00414070	0.03675	0.019021336	0.0012041	0.000623218	0.0020	0.001035175	0.01575	0.008152001
Riverside	2023	Annual	LDA	DSL	Aggregated	65	7300.591	0.0049	0.1360851	0.00066542	0.0688731	0.00033677	0.0064704	0.00003164	0.0080	0.00003912	0.03675	0.000179697	0.0061904	0.000030269	0.0020	0.000009779	0.01575	0.000077013
Riverside	2023	Annual	LDA	ELEC	Aggregated	65	12758.747	0.0085	0.0000000	0.0000000	0.0000000	0.00000000	0.0000000	0.00000000	0.0080	0.00000000	0.03675	0.000000000	0.0000000	0.000000000	0.0000	0.000000000	0.01575	0.000134590
Riverside	2023	Annual	LDT1	DSL	Aggregated	65	39.180	0.0000	1.8027814	0.00004731	1.3202729	0.00003465	0.1753101	0.00000460	0.0080	0.00000021	0.03675	0.000000964	0.1677263	0.000004401	0.0020	0.000000052	0.01575	0.000000413
Riverside	2023	Annual	LDT1	GAS	Aggregated	65	82772.070	0.0554	1.1006140	0.06101595	0.1342932	0.00744496	0.0019634	0.00010885	0.0080	0.00044350	0.03675	0.002037350	0.0018054	0.000100087	0.0020	0.000110876	0.01575	0.000873150
Riverside	2023	Annual	LDT1	ELEC	Aggregated	65	485.075	0.0003	0.0000000	0.00000000	0.0000000	0.00000000	0.0000000	0.00000000	0.0080	0.00000000	0.03675	0.000000000	0.0000000	0.000000000	0.0000	0.000000000	0.01575	0.000005117
Riverside	2023	Annual	LDT2	DSL	Aggregated	65	1463.535	0.0010	0.0799661	0.00007839	0.0423331	0.00004150	0.0053842	0.00000528	0.0080	0.00000784	0.03675	0.000036023	0.0051513	0.000005049	0.0020	0.000001960	0.01575	0.000015439
Riverside	2023	Annual	LDT2	GAS	Aggregated	65	252998.013	0.1695	0.6766976	0.11466642	0.0811803	0.01375600	0.0013612	0.00023066	0.0080	0.00135560	0.03675	0.006227288	0.0012516	0.000212088	0.0020	0.000338900	0.01575	0.002668838
Riverside	2023	Annual	LDT2	ELEC	Aggregated	65	2319.020	0.0016	0.0000000	0.00000000	0.0000000	0.00000000	0.0000000	0.00000000	0.0080	0.00000000	0.03675	0.000000000	0.0000000	0.000000000	0.0000	0.000000000	0.01575	0.000024463
Riverside	2023	Annual	LHDT1	DSL	Aggregated	65	20161.772	0.0135	0.6861302	0.00926531	2.8971175	0.03912184	0.0206163	0.00027840	0.0120	0.00016204	0.07644	0.001032224	0.0197244	0.000266353	0.0030	0.000040511	0.03276	0.000442382
Riverside	2023	Annual	LHDT1	GAS	Aggregated	65	20620.883	0.0138	0.7856739	0.01085111	2.2186376	0.00301965	0.0010881	0.00001503	0.0080	0.00011049	0.07644	0.001055729	0.0010004	0.000013817	0.0020	0.000027622	0.03276	0.000452455
Riverside	2023	Annual	LHDT2	DSL	Aggregated	65	7795.761	0.0052	0.5715204	0.00298411	2.3385863	0.01221058	0.0190892	0.00009967	0.0120	0.00006266	0.08918	0.000465640	0.0182634	0.000095360	0.0030	0.000015664	0.03822	0.000199560
Riverside	2023	Annual	LHDT2	GAS	Aggregated	65	3286.375	0.0022	0.4371330	0.00096218	1.1920720	0.00262377	0.0009319	0.00000205	0.0080	0.00001761	0.08918	0.000196295	0.0008569	0.000001886	0.0020	0.000004402	0.03822	0.000084126
Riverside	2023	Annual	MCY	GAS	Aggregated	65	36240.661	0.0243	23.8974258	0.58005843	1.2122672	0.02942517	0.0018504	0.00004491	0.0040	0.00009709	0.01176	0.000285449	0.0017308	0.000042011	0.0010	0.000024273	0.00504	0.000122335
Riverside	2023	Annual	MDV	DSL	Aggregated	65	4324.736	0.0029	0.1216901	0.00035248	0.0531049	0.00015382	0.0044330	0.00001284	0.0080	0.00002317	0.03675	0.000106449	0.0042413	0.000012285	0.0020	0.000005793	0.01575	0.000045621
Riverside	2023	Annual	MDV	GAS	Aggregated	65	208995.205	0.1400	0.8269442	0.11575427	0.1093094	0.01530095	0.0013801	0.00019319	0.0080	0.00111983	0.03675	0.005144204	0.0012691	0.000177652	0.0020	0.000279957	0.01575	0.002204659
Riverside	2023	Annual	MDV	ELEC	Aggregated	65	1262.694	0.0008	0.0000000	0.00000000	0.0000000	0.00000000	0.0000000	0.00000000	0.0080	0.00000000	0.03675	0.000000000	0.0000000	0.000000000	0.0000	0.000000000	0.01575	0.000013320
Riverside	2023	Annual	MH	DSL	Aggregated	65	2591.606	0.0017	0.3171465	0.00055049	4.2241078	0.00733210	0.1710975	0.00029699	0.0160	0.00002777	0.13034	0.000226241	0.1636959	0.000284139	0.0040	0.000006943	0.05586	0.000096960
Riverside	2023	Annual	MH	GAS	Aggregated	65	6006.899	0.0040	1.6784511	0.00675279	0.4191523	0.00168635	0.0012032	0.00000484	0.0120	0.00004828	0.13034	0.000524388	0.0011063	0.000004451	0.0030	0.000012070	0.05586	0.000224738
Riverside	2023	Annual	MHDT	DSL	Aggregated	65	15610.045	0.0105	0.1721541	0.00179989	2.7394489	0.02864124	0.0422517	0.00044175	0.0120	0.00012546	0.13034	0.001362719	0.0404239	0.000422636	0.0030	0.000031365	0.05586	0.000584023
Riverside	2023	Annual	MHDT	GAS	Aggregated	65	2027.159	0.0014	22.2375986	0.03019258	4.0150227	0.00545130	0.0010253	0.00000139	0.0120	0.00001629	0.13034	0.000176966	0.0009428	0.000001280	0.0030	0.000004473	0.05586	0.000075843
Riverside	2023	Annual	HHDT	DSL	Aggregated	65	27819.820	0.0186	0.2266584	0.00422329	1.7336669	0.03230312	0.0585680	0.00109129	0.0360	0.00067078	0.06174	0.001150391	0.0560344	0.001044079	0.0090	0.000167695	0.02646	0.000493025
Riverside	2023	Annual	HHDT	GAS	Aggregated	65	7.255	0.0000	1.3133427	0.00000638	0.4733274	0.00000230	0.0009568	0.00000000	0.0200	0.00000010	0.06174	0.000000300	0.0008797	0.000000004	0.0050	0.000000024	0.02646	0.000000129
Riverside	2023	Annual	HHDT	NG	Aggregated	65	316.985	0.0002	3.8379601	0.00081482	1.4151560	0.00030045	0.0043544	0.00000092	0.0200	0.00000425	0.06174	0.000013108	0.0041660	0.000000884	0.0050	0.000001062	0.02646	0.000005618
Riverside	2023	Annual	OBUS	DSL	Aggregated	65	351.644	0.0002	0.1813420	0.00035248	2.2159239	0.00052189	0.0420193	0.00000990	0.0120	0.00000283	0.13034	0.000306698	0.0402015	0.000009468	0.0030	0.000000707	0.05586	0.000013156
Riverside	2023	Annual	OBUS	GAS	Aggregated	65	588.343	0.0004	1.1275205	0.00044430	0.4305041	0.00016964	0.0007495	0.00000030	0.0120	0.00000473	0.13034	0.000051361	0.0006892	0.000000272	0.0030	0.000001182	0.05586	0.000022012
Riverside	2023	Annual	SBUS	DSL	Aggregated	65	1154.013	0.0008	5.6847891	0.00439389	6.3563008	0.00491292	0.0303655	0.00002347	0.0120	0.00000928	0.74480	0.000575671	0.0290519	0.000022455	0.0030	0.000002319	0.31920	0.000246716
Riverside	2023	Annual	SBUS	GAS	Aggregated	65	490.882	0.0003	0.6638093	0.00021825	0.2677076	0.00008802	0.0004085	0.00000013	0.0080	0.00000263	0.74480	0.000244873	0.0003756	0.000000123	0.0020	0.000000658	0.31920	0.000104946
Riverside	2023	Annual	UBUS	DSL	Aggregated	65	1.106	0.0000	0.0182046	0.00000001	0.0135842	0.00000001	0.0135842	0.00000001	0.0120	0.00000001	0.13035	0.000000097	0.0129966	0.000000010	0.0030	0.000000002	0.05587	0.000000041
Riverside	2023	Annual	UBUS	GAS	Aggregated	65	164.455	0.0001	0.0901314	0.00000993	0.0759323	0.00000836	0.0007943	0.00000009	0.0095	0.00000105	0.10510	0.000011577	0.0007303	0.000000080	0.0024	0.000000263	0.04504	0.000004961
Riverside	2023	Annual	UBUS	ELEC	Aggregated	65	5.058	0.0000	0.0000000	0.00000000	0.0000000	0.00000000	0.0000000	0.00000000	0.0095	0.00000000	0.00000	0.000000000	0.0000000	0.000000000	0.0000	0.000000000	0.00000	0.000000000
Riverside	2023	Annual	UBUS	NG	Aggregated	65	308.478	0.0002	21.3585672	0.00441287	0.1952836	0.00004035	0.0051217	0.00000106	0.0095	0.00000197	0.10510	0.000021715	0.0049001	0.000001012	0.0024	0.000000493	0.04504	0.000009306
							1493054	1.0		1.191		0.221		0.0036		0.008		0.040		0.0034		0.002		0.017

EMFAC2017
Worksheet
(65 mph)

EMFAC2017 Emission Rates
Region Type: County
Region: Riverside (SC)
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Pollutant Classification: TOG GAS

Region	CalYr	Season	Veh_Class	Fuel	MdlYr	Speed (miles/hr)	Population (vehicles)	Wt Frac	TOG_RUNEX (gms/mile)	TOG_RUNEX AVE (gms/mile)
Riverside	2023	Annual	LDA	GAS	Aggregated	65	772785.866	0.5572	0.0114327	0.0064
Riverside	2023	Annual	LDT1	GAS	Aggregated	65	82772.070	0.0597	0.0402512	0.0024
Riverside	2023	Annual	LDT2	GAS	Aggregated	65	252998.013	0.1824	0.0205177	0.0037
Riverside	2023	Annual	LHDT1	GAS	Aggregated	65	20620.883	0.0149	0.0414682	0.0006
Riverside	2023	Annual	LHDT2	GAS	Aggregated	65	3286.375	0.0024	0.0251380	0.0001
Riverside	2023	Annual	MCY	GAS	Aggregated	65	36240.661	0.0261	2.7713100	0.0724
Riverside	2023	Annual	MDV	GAS	Aggregated	65	208995.205	0.1507	0.0282720	0.0043
Riverside	2023	Annual	MH	GAS	Aggregated	65	6006.899	0.0043	0.0772430	0.0003
Riverside	2023	Annual	MHDT	GAS	Aggregated	65	2027.159	0.0015	0.0844137	0.0001
Riverside	2023	Annual	HHDT	GAS	Aggregated	65	7.255	0.0000	0.6228095	0.0000
Riverside	2023	Annual	OBUS	GAS	Aggregated	65	588.343	0.0004	0.0727389	0.0000
Riverside	2023	Annual	SBUS	GAS	Aggregated	65	490.882	0.0004	0.0000000	0.0000
Riverside	2023	Annual	UBUS	GAS	Aggregated	65	164.455	0.0001	0.0070590	0.0000
							1386984	1.0		0.090

EMFAC2017 Emission Rates
Region Type: County
Region: Riverside (SC)
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Pollutant Classification: TOG DSL

Region	CalYr	Season	Veh_Class	Fuel	MdlYr	Speed (miles/hr)	Population (vehicles)	Wt Frac	TOG_RUNEX (gms/mile)	TOG_RUNEX AVE (gms/mile)
Riverside	2023	Annual	LDA	DSL	Aggregated	65	7300.591	0.0824	0.0111967	0.0009
Riverside	2023	Annual	LDT1	DSL	Aggregated	65	39.180	0.0004	0.2570578	0.0001
Riverside	2023	Annual	LDT2	DSL	Aggregated	65	1463.535	0.0165	0.0113185	0.0002
Riverside	2023	Annual	LHDT1	DSL	Aggregated	65	20161.772	0.2275	0.0998925	0.0227
Riverside	2023	Annual	LHDT2	DSL	Aggregated	65	7795.761	0.0880	0.0841316	0.0074
Riverside	2023	Annual	MDV	DSL	Aggregated	65	4324.736	0.0488	0.0082200	0.0004
Riverside	2023	Annual	MH	DSL	Aggregated	65	2591.606	0.0292	0.0774660	0.0023
Riverside	2023	Annual	MHDT	DSL	Aggregated	65	15610.045	0.1762	0.0525548	0.0093
Riverside	2023	Annual	HHDT	DSL	Aggregated	65	27819.820	0.3139	0.0424097	0.0133
Riverside	2023	Annual	OBUS	DSL	Aggregated	65	351.644	0.0040	0.0563933	0.0002
Riverside	2023	Annual	SBUS	DSL	Aggregated	65	1154.013	0.0130	0.0566417	0.0007
Riverside	2023	Annual	UBUS	DSL	Aggregated	65	1.106	0.0000	0.0166242	0.0000
							88614	1.0		0.058

EMFAC2017 Emission Rates
Region Type: County
Region: Riverside (SC)
Calendar Year: 2023
Season: Annual
Vehicle Classification: EMFAC2007 Categories
Pollutant Classification: DSL Particulate

Region	CalYr	Season	Veh_Class	Fuel	MdlYr	Speed (miles/hr)	Population (vehicles)	Wt Frac	PM10_RUNEX (gms/mile)	PM10_RUNEX AVE (gms/mile)
Riverside	2023	Annual	LDA	DSL	Aggregated	65	7300.591	0.0824	0.0064704	0.0005
Riverside	2023	Annual	LDT1	DSL	Aggregated	65	39.180	0.0004	0.1753101	0.0001
Riverside	2023	Annual	LDT2	DSL	Aggregated	65	1463.535	0.0165	0.0053842	0.0001
Riverside	2023	Annual	LHDT1	DSL	Aggregated	65	20161.772	0.2275	0.0206163	0.0047
Riverside	2023	Annual	LHDT2	DSL	Aggregated	65	7795.761	0.0880	0.0190892	0.0017
Riverside	2023	Annual	MDV	DSL	Aggregated	65	4324.736	0.0488	0.0044330	0.0002
Riverside	2023	Annual	MH	DSL	Aggregated	65	2591.606	0.0292	0.1710975	0.0050
Riverside	2023	Annual	MHDT	DSL	Aggregated	65	15610.045	0.1762	0.0585680	0.0103
Riverside	2023	Annual	HHDT	DSL	Aggregated	65	27819.820	0.3139	0.0422517	0.0133
Riverside	2023	Annual	OBUS	DSL	Aggregated	65	351.644	0.0040	0.0420193	0.0002
Riverside	2023	Annual	SBUS	DSL	Aggregated	65	1154.013	0.0130	0.0303655	0.0004
Riverside	2023	Annual	UBUS	DSL	Aggregated	65	1.106	0.0000	0.0135842	0.0000
							88614	1.0		0.036

On-Road Mobile Sources
Emission Rate Computation

I-215/SR-60 Freeway

CO Emissions

Number of Sources	26
Link Length (meters)	1181
Volume/Baseline (VPH)	7792
Pollutant Mass Emission Rate (gr/mi)	1.191

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	1.89214
Pollutant Emission Rate (gr/sec/source)	7.28E-02

<div align="center">

On-Road Mobile Sources
Emission Rate Computation

</div>

I-215/SR-60 Freeway

NOx Emissions

Number of Sources	26
Link Length (meters)	1181
Volume/Baseline (VPH)	7792
Pollutant Mass Emission Rate (gr/mi)	0.221

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	0.35171
Pollutant Emission Rate (gr/sec/source)	1.35E-02

<div align="center">

On-Road Mobile Sources
Emission Rate Computation

</div>

I-215/SR-60 Freeway

PM10 Emissions

Number of Sources	26
Link Length (meters)	1181
Volume/Baseline (VPH)	7792
Particle Size Multiplier (g/mi)	1.0
Road Surface Silt Loading (g/m2)	0.02
Average Vehicle Weight (tons)	2.4
Emfac2017 Emissions Run (g/mi)	0.0055
Emfac2017 Emissions TW/BW (g/mi)	0.047
PM10 Reentrainment Mass Emission Rate (gr/mi)	0.122

For PM10 Reentrainment: Mass Emission Rate (gr/mile) = ((Particulate PM10 Base Emission Factor) x
(Road Surface Silt Loading)$^{0.91}$ x (Gross Vehicle Weight)$^{1.02}$) + (Emfac2014 Emissions)
Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

PM10 Reentrainment Emission Rate (gr/sec)	0.193726
PM10 Reentrainment Emission Rate (gr/sec/source)	7.45E-03

<div align="center">

On-Road Mobile Sources
Emission Rate Computation

</div>

I-215/SR-60 Freeway

PM2.5 Emissions

Number of Sources	26
Link Length (meters)	1181
Volume/Baseline (VPH)	6333
Particle Size Multiplier (g/mi)	0.25
Road Surface Silt Loading (g/m2)	0.02
Average Vehicle Weight (tons)	2.4
Emfac2017 Emissions Run (g/mi)	0.0052
Emfac2017 Emissions TW/BW (g/mi)	0.019
PM2.5 Reentrainment Mass Emission Rate (gr/mi)	0.042

For PM2.5 Reentrainment: Mass Emission Rate (gr/mile) = ((Particulate PM2.5 Base Emission Factor) x
(Road Surface Silt Loading)$^{0.91}$ x (Gross Vehicle Weight)$^{1.02}$) + (Emfac2014 Emissions)
Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

PM2.5 Reentrainment Emission Rate (gr/sec)	0.053663
PM2.5 Reentrainment Emission Rate (gr/sec/source)	2.06E-03

<div align="center">

On-Road Mobile Sources
Emission Rate Computation

</div>

I-215/SR-60 Freeway

TOG GAS Emissions

Number of Sources	26
Link Length (meters)	1181
Volume/Baseline (VPH)	6085
Pollutant Mass Emission Rate (gr/mi)	0.003863

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	0.00479
Pollutant Emission Rate (gr/sec/source)	1.84E-04

<div align="center">

On-Road Mobile Sources
Emission Rate Computation

</div>

I-215/SR-60 Freeway

TOG DSL Emissions

Number of Sources	26
Link Length (meters)	1181
Volume/Baseline (VPH)	248
Pollutant Mass Emission Rate (gr/mi)	0.014069

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	0.00071
Pollutant Emission Rate (gr/sec/source)	2.74E-05

<div align="center">

On-Road Mobile Sources
Emission Rate Computation

</div>

I-215/SR-60 Freeway

DSL Particulate Emissions

Number of Sources	26
Link Length (meters)	1181
Volume/Baseline (VPH)	248
Pollutant Mass Emission Rate (gr/mi)	0.036

Emission Rate (gr/sec) = ((Mass Emission Rate x Volume/Baseline)/(1609.3 m/mile) x (3600 sec/hr)) x (Link Length)

Pollutant Emission Rate (gr/sec)	0.00184
Pollutant Emission Rate (gr/sec/source)	7.09E-05

All	1492740
DSL	58533

Diesel Fleet Mix (weight fraction)   0.0392

Link Counts	AADT	VPH all	VPH gas	VPH diesel
I-15 Freeway	152000	6333	6085	248

APPENDIX 4.1:

AERMOD MODEL INPUT/OUTPUT FILE

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```
** Lakes Environmental AERMOD MPI
**
***************************************
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 10.0.1
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 11/11/2021
** FILE: C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ADI
**
***************************************
**
**
***************************************
** AERMOD CONTROL PATHWAY
***************************************
**
**
CO STARTING
   TITLEONE C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 2189641
   POLLUTID CO
   RUNORNOT RUN
   ERRORFIL CO.ERR
CO FINISHED
**
***************************************
** AERMOD SOURCE PATHWAY
***************************************
**
**
SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** ----------------------------------------------------------------------
** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC I-15 FREEWAY
** PREFIX
** LENGTH OF SIDE = 46.00
** CONFIGURATION = ADJACENT
** EMISSION RATE = 1.89214
** VERTICAL DIMENSION = 6.99
** SZINIT = 3.25
** NODES = 2
** 449288.372, 3758373.924, 188.51, 3.49, 21.40
** 449298.585, 3759554.578, 201.92, 3.49, 21.40
** ----------------------------------------------------------------------
```

```
    LOCATION L0000001      VOLUME     449288.571 3758396.923 188.77
    LOCATION L0000002      VOLUME     449288.969 3758442.921 189.29
    LOCATION L0000003      VOLUME     449289.367 3758488.920 189.82
    LOCATION L0000004      VOLUME     449289.765 3758534.918 190.34
    LOCATION L0000005      VOLUME     449290.163 3758580.916 190.86
    LOCATION L0000006      VOLUME     449290.561 3758626.914 191.38
    LOCATION L0000007      VOLUME     449290.958 3758672.913 191.91
    LOCATION L0000008      VOLUME     449291.356 3758718.911 192.43
    LOCATION L0000009      VOLUME     449291.754 3758764.909 192.95
    LOCATION L0000010      VOLUME     449292.152 3758810.908 193.47
    LOCATION L0000011      VOLUME     449292.550 3758856.906 194.00
    LOCATION L0000012      VOLUME     449292.948 3758902.904 194.52
    LOCATION L0000013      VOLUME     449293.346 3758948.902 195.04
    LOCATION L0000014      VOLUME     449293.744 3758994.901 195.56
    LOCATION L0000015      VOLUME     449294.142 3759040.899 196.09
    LOCATION L0000016      VOLUME     449294.540 3759086.897 196.61
    LOCATION L0000017      VOLUME     449294.938 3759132.895 197.13
    LOCATION L0000018      VOLUME     449295.335 3759178.894 197.65
    LOCATION L0000019      VOLUME     449295.733 3759224.892 198.18
    LOCATION L0000020      VOLUME     449296.131 3759270.890 198.70
    LOCATION L0000021      VOLUME     449296.529 3759316.889 199.22
    LOCATION L0000022      VOLUME     449296.927 3759362.887 199.74
    LOCATION L0000023      VOLUME     449297.325 3759408.885 200.27
    LOCATION L0000024      VOLUME     449297.723 3759454.883 200.79
    LOCATION L0000025      VOLUME     449298.121 3759500.882 201.31
    LOCATION L0000026      VOLUME     449298.519 3759546.880 201.83
** END OF LINE VOLUME SOURCE ID = SLINE1
** SOURCE PARAMETERS **
** LINE VOLUME SOURCE ID = SLINE1
    SRCPARAM L0000001      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000002      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000003      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000004      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000005      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000006      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000007      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000008      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000009      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000010      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000011      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000012      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000013      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000014      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000015      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000016      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000017      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000018      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000019      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000020      0.0727746154      3.49      21.40      3.25
    SRCPARAM L0000021      0.0727746154      3.49      21.40      3.25
```

```
    SRCPARAM L0000022        0.0727746154     3.49    21.40     3.25
    SRCPARAM L0000023        0.0727746154     3.49    21.40     3.25
    SRCPARAM L0000024        0.0727746154     3.49    21.40     3.25
    SRCPARAM L0000025        0.0727746154     3.49    21.40     3.25
    SRCPARAM L0000026        0.0727746154     3.49    21.40     3.25
** ------------------------------------------------------------------
    URBANSRC ALL
    SRCGROUP ALL
SO FINISHED
**
*************************************
** AERMOD RECEPTOR PATHWAY
*************************************
**
**
RE STARTING
    INCLUDED CO.ROU
RE FINISHED
**
*************************************
** AERMOD METEOROLOGY PATHWAY
*************************************
**
**
ME STARTING
    SURFFILE ..\KRAL_V9_ADJU\KRAL_V9.SFC
    PROFFILE ..\KRAL_V9_ADJU\KRAL_V9.PFL
    SURFDATA 3171 2012
    UAIRDATA 3190 2012
    PROFBASE 245.0 METERS
ME FINISHED
**
*************************************
** AERMOD OUTPUT PATHWAY
*************************************
**
**
OU STARTING
    RECTABLE ALLAVE 1ST
    RECTABLE 1 1ST
    RECTABLE 8 1ST
** AUTO-GENERATED PLOTFILES
    PLOTFILE   1 ALL 1ST CO.AD\01H1GALL.PLT 31
    PLOTFILE   8 ALL 1ST CO.AD\08H1GALL.PLT 32
    SUMMFILE CO.SUM
OU FINISHED


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

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

  A Total of            0 Fatal Error Message(s)
  A Total of            2 Warning Message(s)
  A Total of            0 Informational Message(s)


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


     ********   WARNING MESSAGES   ********
  ME W186      130       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
       0.50
  ME W187      130       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


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

♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                          ***          11/11/21
  *** AERMET - VERSION  16216 ***   ***
                       ***          12:18:15


                               PAGE   1
  *** MODELOPTs:    RegDFAULT  CONC  ELEV   URBAN  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 URBAN Dispersion Algorithm for the SBL for    26 Source(s),
    for Total of    1 Urban Area(s):
    Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m

  **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.
                6. Urban Roughness Length of 1.0 Meter Assumed.

 **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 Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of: CO

 **Model Calculates 2 Short Term Average(s) of: 1-HR   8-HR

 **This Run Includes: 26 Source(s);   1 Source Group(s); and   441
Receptor(s)

                with: 0 POINT(s), including
                           0 POINTCAP(s) and   0 POINTHOR(s)
                and: 26 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: 16216

 **Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
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) =   245.00 ; Decay
Coef. =   0.000   ; Rot. Angle =   0.0
                 Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07

```
                    Output Units    = MICROGRAMS/M**3

  **Approximate Storage Requirements of Model =      3.6 MB of RAM.

  **Input Runstream File:          aermod.inp

  **Output Print File:             aermod.out


  **Detailed Error/Message File:   CO.ERR

  **File for Summary of Results:   CO.SUM
```

↑ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:18:15

                                  PAGE   2
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN   ADJ_U*

                                               *** VOLUME SOURCE DATA ***

SOURCE ID	NUMBER PART. CATS.	EMISSION RATE (GRAMS/SEC)	X (METERS)	Y (METERS)	BASE ELEV. (METERS)	RELEASE HEIGHT (METERS)	INIT. SY (METERS)	INIT. SZ (METERS)	URBAN SOURCE	EMISSION RATE SCALAR VARY BY
L0000001	0	0.72775E-01	449288.6	3758396.9	188.8	3.49	21.40	3.25	YES	
L0000002	0	0.72775E-01	449289.0	3758442.9	189.3	3.49	21.40	3.25	YES	
L0000003	0	0.72775E-01	449289.4	3758488.9	189.8	3.49	21.40	3.25	YES	
L0000004	0	0.72775E-01	449289.8	3758534.9	190.3	3.49	21.40	3.25	YES	
L0000005	0	0.72775E-01	449290.2	3758580.9	190.9	3.49	21.40	3.25	YES	
L0000006	0	0.72775E-01	449290.6	3758626.9	191.4	3.49	21.40	3.25	YES	
L0000007	0	0.72775E-01	449291.0	3758672.9	191.9	3.49	21.40	3.25	YES	
L0000008	0	0.72775E-01	449291.4	3758718.9	192.4	3.49	21.40	3.25	YES	
L0000009	0	0.72775E-01	449291.8	3758764.9	193.0	3.49	21.40			
```

```
 3.25      YES
  L0000010         0   0.72775E-01  449292.2 3758810.9   193.5    3.49    21.40
 3.25      YES
  L0000011         0   0.72775E-01  449292.5 3758856.9   194.0    3.49    21.40
 3.25      YES
  L0000012         0   0.72775E-01  449292.9 3758902.9   194.5    3.49    21.40
 3.25      YES
  L0000013         0   0.72775E-01  449293.3 3758948.9   195.0    3.49    21.40
 3.25      YES
  L0000014         0   0.72775E-01  449293.7 3758994.9   195.6    3.49    21.40
 3.25      YES
  L0000015         0   0.72775E-01  449294.1 3759040.9   196.1    3.49    21.40
 3.25      YES
  L0000016         0   0.72775E-01  449294.5 3759086.9   196.6    3.49    21.40
 3.25      YES
  L0000017         0   0.72775E-01  449294.9 3759132.9   197.1    3.49    21.40
 3.25      YES
  L0000018         0   0.72775E-01  449295.3 3759178.9   197.7    3.49    21.40
 3.25      YES
  L0000019         0   0.72775E-01  449295.7 3759224.9   198.2    3.49    21.40
 3.25      YES
  L0000020         0   0.72775E-01  449296.1 3759270.9   198.7    3.49    21.40
 3.25      YES
  L0000021         0   0.72775E-01  449296.5 3759316.9   199.2    3.49    21.40
 3.25      YES
  L0000022         0   0.72775E-01  449296.9 3759362.9   199.7    3.49    21.40
 3.25      YES
  L0000023         0   0.72775E-01  449297.3 3759408.9   200.3    3.49    21.40
 3.25      YES
  L0000024         0   0.72775E-01  449297.7 3759454.9   200.8    3.49    21.40
 3.25      YES
  L0000025         0   0.72775E-01  449298.1 3759500.9   201.3    3.49    21.40
 3.25      YES
  L0000026         0   0.72775E-01  449298.5 3759546.9   201.8    3.49    21.40
 3.25      YES
```

⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                       ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                       ***   12:18:15

                                 PAGE   3
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                 *** SOURCE IDs DEFINING SOURCE GROUPS
***

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

```
  ALL         L0000001    , L0000002    , L0000003    , L0000004    , L0000005    ,
L0000006    , L0000007    , L0000008    ,

             L0000009    , L0000010    , L0000011    , L0000012    , L0000013    ,
L0000014    , L0000015    , L0000016    ,

             L0000017    , L0000018    , L0000019    , L0000020    , L0000021    ,
L0000022    , L0000023    , L0000024    ,

             L0000025    , L0000026    ,
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                                ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                                ***   12:18:15

                                PAGE   4
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP   SOURCE IDs
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             2189641.  L0000001    , L0000002    , L0000003    , L0000004    ,
L0000005    , L0000006    , L0000007    ,
 L0000008    ,

             L0000009    , L0000010    , L0000011    , L0000012    , L0000013    ,
L0000014    , L0000015    , L0000016    ,

             L0000017    , L0000018    , L0000019    , L0000020    , L0000021    ,
L0000022    , L0000023    , L0000024    ,

             L0000025    , L0000026    ,
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                                ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                                ***   12:18:15

                                PAGE   5
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

```
    ( 449368.0, 3758763.5,     192.6,     195.0,       0.0);      ( 449371.9,
3758763.5,     192.2,     195.0,       0.0);
    ( 449375.8, 3758763.5,     191.8,     195.0,       0.0);      ( 449379.6,
3758763.5,     191.4,     195.0,       0.0);
    ( 449383.5, 3758763.5,     191.2,     195.0,       0.0);      ( 449387.4,
3758763.5,     190.9,     195.0,       0.0);
    ( 449391.2, 3758763.5,     190.6,     190.6,       0.0);      ( 449395.1,
3758763.5,     190.4,     190.4,       0.0);
    ( 449399.0, 3758763.5,     190.1,     190.1,       0.0);      ( 449402.8,
3758763.5,     189.9,     189.9,       0.0);
    ( 449406.7, 3758763.5,     189.6,     189.6,       0.0);      ( 449410.6,
3758763.5,     189.4,     189.4,       0.0);
    ( 449414.5, 3758763.5,     189.3,     189.3,       0.0);      ( 449418.3,
3758763.5,     189.1,     189.1,       0.0);
    ( 449422.2, 3758763.5,     189.0,     189.0,       0.0);      ( 449426.1,
3758763.5,     188.9,     188.9,       0.0);
    ( 449429.9, 3758763.5,     188.7,     188.7,       0.0);      ( 449433.8,
3758763.5,     188.6,     188.6,       0.0);
    ( 449437.7, 3758763.5,     188.5,     188.5,       0.0);      ( 449441.5,
3758763.5,     188.4,     188.4,       0.0);
    ( 449445.4, 3758763.5,     188.3,     188.3,       0.0);      ( 449368.0,
3758777.6,     192.5,     195.0,       0.0);
    ( 449371.9, 3758777.6,     192.0,     195.0,       0.0);      ( 449375.8,
3758777.6,     191.5,     195.0,       0.0);
    ( 449379.6, 3758777.6,     191.0,     195.0,       0.0);      ( 449383.5,
3758777.6,     190.8,     195.0,       0.0);
    ( 449387.4, 3758777.6,     190.5,     195.0,       0.0);      ( 449391.2,
3758777.6,     190.3,     195.0,       0.0);
    ( 449395.1, 3758777.6,     190.0,     195.0,       0.0);      ( 449399.0,
3758777.6,     189.7,     195.0,       0.0);
    ( 449402.8, 3758777.6,     189.5,     195.0,       0.0);      ( 449406.7,
3758777.6,     189.2,     195.0,       0.0);
    ( 449410.6, 3758777.6,     189.0,     189.0,       0.0);      ( 449414.5,
3758777.6,     188.9,     188.9,       0.0);
    ( 449418.3, 3758777.6,     188.8,     188.8,       0.0);      ( 449422.2,
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    ( 449426.1, 3758777.6,     188.5,     188.5,       0.0);      ( 449429.9,
3758777.6,     188.4,     188.4,       0.0);
    ( 449433.8, 3758777.6,     188.2,     188.2,       0.0);      ( 449437.7,
3758777.6,     188.1,     188.1,       0.0);
    ( 449441.5, 3758777.6,     188.0,     188.0,       0.0);      ( 449445.4,
3758777.6,     188.0,     188.0,       0.0);
    ( 449368.0, 3758791.6,     192.6,     192.6,       0.0);      ( 449371.9,
3758791.6,     192.3,     195.0,       0.0);
    ( 449375.8, 3758791.6,     191.9,     195.0,       0.0);      ( 449379.6,
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    ( 449383.5, 3758791.6,     191.2,     195.0,       0.0);      ( 449387.4,
3758791.6,     191.0,     191.0,       0.0);
    ( 449391.2, 3758791.6,     190.7,     190.7,       0.0);      ( 449395.1,
3758791.6,     190.5,     190.5,       0.0);
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      ( 449406.7, 3758791.6,     189.7,     189.7,       0.0);       ( 449410.6,
3758791.6,     189.5,     189.5,       0.0);
      ( 449414.5, 3758791.6,     189.3,     189.3,       0.0);       ( 449418.3,
3758791.6,     189.2,     189.2,       0.0);
      ( 449422.2, 3758791.6,     189.1,     189.1,       0.0);       ( 449426.1,
3758791.6,     189.0,     189.0,       0.0);
      ( 449429.9, 3758791.6,     188.8,     188.8,       0.0);       ( 449433.8,
3758791.6,     188.7,     188.7,       0.0);
      ( 449437.7, 3758791.6,     188.6,     188.6,       0.0);       ( 449441.5,
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      ( 449445.4, 3758791.6,     188.4,     188.4,       0.0);       ( 449368.0,
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      ( 449371.9, 3758805.6,     192.5,     192.5,       0.0);       ( 449375.8,
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      ( 449379.6, 3758805.6,     192.0,     192.0,       0.0);       ( 449383.5,
3758805.6,     191.7,     191.7,       0.0);
      ( 449387.4, 3758805.6,     191.5,     191.5,       0.0);       ( 449391.2,
3758805.6,     191.2,     191.2,       0.0);
      ( 449395.1, 3758805.6,     190.9,     190.9,       0.0);       ( 449399.0,
3758805.6,     190.7,     190.7,       0.0);
      ( 449402.8, 3758805.6,     190.4,     190.4,       0.0);       ( 449406.7,
3758805.6,     190.2,     190.2,       0.0);
      ( 449410.6, 3758805.6,     189.9,     189.9,       0.0);       ( 449414.5,
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      ( 449426.1, 3758805.6,     189.4,     189.4,       0.0);       ( 449429.9,
3758805.6,     189.3,     189.3,       0.0);
      ( 449433.8, 3758805.6,     189.2,     189.2,       0.0);       ( 449437.7,
3758805.6,     189.0,     189.0,       0.0);
      ( 449441.5, 3758805.6,     188.9,     188.9,       0.0);       ( 449445.4,
3758805.6,     188.8,     188.8,       0.0);
      ( 449368.0, 3758819.7,     192.8,     192.8,       0.0);       ( 449371.9,
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      ( 449375.8, 3758819.7,     192.2,     192.2,       0.0);       ( 449379.6,
3758819.7,     192.0,     192.0,       0.0);
      ( 449383.5, 3758819.7,     191.7,     191.7,       0.0);       ( 449387.4,
3758819.7,     191.5,     191.5,       0.0);
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⬧ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:18:15

                              PAGE   6
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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

```
     ( 449391.2, 3758819.7,      191.2,      191.2,       0.0);        ( 449395.1,
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     ( 449399.0, 3758819.7,      190.7,      190.7,       0.0);        ( 449402.8,
3758819.7,      190.4,      190.4,       0.0);
     ( 449406.7, 3758819.7,      190.2,      190.2,       0.0);        ( 449410.6,
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     ( 449414.5, 3758819.7,      189.8,      189.8,       0.0);        ( 449418.3,
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     ( 449422.2, 3758819.7,      189.6,      189.6,       0.0);        ( 449426.1,
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     ( 449429.9, 3758819.7,      189.3,      189.3,       0.0);        ( 449433.8,
3758819.7,      189.2,      189.2,       0.0);
     ( 449437.7, 3758819.7,      189.1,      189.1,       0.0);        ( 449441.5,
3758819.7,      188.9,      188.9,       0.0);
     ( 449445.4, 3758819.7,      188.8,      188.8,       0.0);        ( 449368.0,
3758833.7,      192.8,      192.8,       0.0);
     ( 449371.9, 3758833.7,      192.5,      192.5,       0.0);        ( 449375.8,
3758833.7,      192.2,      192.2,       0.0);
     ( 449379.6, 3758833.7,      192.0,      192.0,       0.0);        ( 449383.5,
3758833.7,      191.7,      191.7,       0.0);
     ( 449387.4, 3758833.7,      191.5,      191.5,       0.0);        ( 449391.2,
3758833.7,      191.2,      191.2,       0.0);
     ( 449395.1, 3758833.7,      191.0,      191.0,       0.0);        ( 449399.0,
3758833.7,      190.7,      190.7,       0.0);
     ( 449402.8, 3758833.7,      190.4,      190.4,       0.0);        ( 449406.7,
3758833.7,      190.2,      190.2,       0.0);
     ( 449410.6, 3758833.7,      190.0,      190.0,       0.0);        ( 449414.5,
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     ( 449418.3, 3758833.7,      189.7,      189.7,       0.0);        ( 449422.2,
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     ( 449426.1, 3758833.7,      189.5,      189.5,       0.0);        ( 449429.9,
3758833.7,      189.3,      189.3,       0.0);
     ( 449433.8, 3758833.7,      189.2,      189.2,       0.0);        ( 449437.7,
3758833.7,      189.1,      189.1,       0.0);
     ( 449441.5, 3758833.7,      188.9,      188.9,       0.0);        ( 449445.4,
3758833.7,      188.8,      188.8,       0.0);
     ( 449368.0, 3758847.8,      193.4,      193.4,       0.0);        ( 449371.9,
3758847.8,      193.2,      193.2,       0.0);
     ( 449375.8, 3758847.8,      193.0,      193.0,       0.0);        ( 449379.6,
3758847.8,      192.8,      192.8,       0.0);
     ( 449383.5, 3758847.8,      192.5,      192.5,       0.0);        ( 449387.4,
3758847.8,      192.2,      192.2,       0.0);
     ( 449391.2, 3758847.8,      192.0,      192.0,       0.0);        ( 449395.1,
3758847.8,      191.7,      191.7,       0.0);
     ( 449399.0, 3758847.8,      191.5,      191.5,       0.0);        ( 449402.8,
3758847.8,      191.2,      191.2,       0.0);
     ( 449406.7, 3758847.8,      191.0,      191.0,       0.0);        ( 449410.6,
3758847.8,      190.7,      190.7,       0.0);
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        ( 449414.5, 3758847.8,      190.5,      190.5,        0.0);          ( 449418.3,
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        ( 449422.2, 3758847.8,      190.2,      190.2,        0.0);          ( 449426.1,
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        ( 449429.9, 3758847.8,      189.8,      189.8,        0.0);          ( 449433.8,
3758847.8,       189.6,      189.6,        0.0);
        ( 449437.7, 3758847.8,      189.5,      189.5,        0.0);          ( 449441.5,
3758847.8,       189.3,      189.3,        0.0);
        ( 449445.4, 3758847.8,      189.2,      189.2,        0.0);          ( 449368.0,
3758861.8,       194.1,      194.1,        0.0);
        ( 449371.9, 3758861.8,      194.0,      194.0,        0.0);          ( 449375.8,
3758861.8,       193.8,      193.8,        0.0);
        ( 449379.6, 3758861.8,      193.7,      193.7,        0.0);          ( 449383.5,
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        ( 449387.4, 3758861.8,      193.2,      193.2,        0.0);          ( 449391.2,
3758861.8,       192.9,      192.9,        0.0);
        ( 449395.1, 3758861.8,      192.7,      192.7,        0.0);          ( 449399.0,
3758861.8,       192.4,      192.4,        0.0);
        ( 449402.8, 3758861.8,      192.1,      192.1,        0.0);          ( 449406.7,
3758861.8,       191.9,      191.9,        0.0);
        ( 449410.6, 3758861.8,      191.6,      191.6,        0.0);          ( 449414.5,
3758861.8,       191.4,      191.4,        0.0);
        ( 449418.3, 3758861.8,      191.2,      191.2,        0.0);          ( 449422.2,
3758861.8,       190.9,      190.9,        0.0);
        ( 449426.1, 3758861.8,      190.7,      190.7,        0.0);          ( 449429.9,
3758861.8,       190.4,      190.4,        0.0);
        ( 449433.8, 3758861.8,      190.2,      190.2,        0.0);          ( 449437.7,
3758861.8,       190.0,      190.0,        0.0);
        ( 449441.5, 3758861.8,      189.8,      189.8,        0.0);          ( 449445.4,
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3758875.8,       194.6,      194.6,        0.0);
        ( 449375.8, 3758875.8,      194.4,      194.4,        0.0);          ( 449379.6,
3758875.8,       194.3,      194.3,        0.0);
        ( 449383.5, 3758875.8,      194.1,      194.1,        0.0);          ( 449387.4,
3758875.8,       193.8,      193.8,        0.0);
        ( 449391.2, 3758875.8,      193.5,      193.5,        0.0);          ( 449395.1,
3758875.8,       193.3,      193.3,        0.0);
        ( 449399.0, 3758875.8,      193.0,      193.0,        0.0);          ( 449402.8,
3758875.8,       192.8,      192.8,        0.0);
        ( 449406.7, 3758875.8,      192.5,      192.5,        0.0);          ( 449410.6,
3758875.8,       192.2,      192.2,        0.0);
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↥ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                          ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   12:18:15

PAGE   7
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

```
     ( 449414.5, 3758875.8,     192.0,     192.0,        0.0);        ( 449418.3,
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     ( 449422.2, 3758875.8,     191.5,     191.5,        0.0);        ( 449426.1,
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     ( 449429.9, 3758875.8,     191.0,     191.0,        0.0);        ( 449433.8,
3758875.8,      190.7,     190.7,        0.0);
     ( 449437.7, 3758875.8,     190.4,     190.4,        0.0);        ( 449441.5,
3758875.8,      190.2,     190.2,        0.0);
     ( 449445.4, 3758875.8,     190.1,     190.1,        0.0);        ( 449368.0,
3758889.9,      195.2,     195.2,        0.0);
     ( 449371.9, 3758889.9,     195.0,     195.0,        0.0);        ( 449375.8,
3758889.9,      194.9,     194.9,        0.0);
     ( 449379.6, 3758889.9,     194.8,     194.8,        0.0);        ( 449383.5,
3758889.9,      194.5,     194.5,        0.0);
     ( 449387.4, 3758889.9,     194.3,     194.3,        0.0);        ( 449391.2,
3758889.9,      194.0,     194.0,        0.0);
     ( 449395.1, 3758889.9,     193.7,     193.7,        0.0);        ( 449399.0,
3758889.9,      193.5,     193.5,        0.0);
     ( 449402.8, 3758889.9,     193.2,     193.2,        0.0);        ( 449406.7,
3758889.9,      193.0,     193.0,        0.0);
     ( 449410.6, 3758889.9,     192.7,     192.7,        0.0);        ( 449414.5,
3758889.9,      192.5,     192.5,        0.0);
     ( 449418.3, 3758889.9,     192.2,     192.2,        0.0);        ( 449422.2,
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     ( 449426.1, 3758889.9,     191.7,     191.7,        0.0);        ( 449429.9,
3758889.9,      191.4,     191.4,        0.0);
     ( 449433.8, 3758889.9,     191.2,     191.2,        0.0);        ( 449437.7,
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     ( 449441.5, 3758889.9,     190.7,     190.7,        0.0);        ( 449445.4,
3758889.9,      190.6,     190.6,        0.0);
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3758903.9,      195.7,     195.7,        0.0);
     ( 449375.8, 3758903.9,     195.6,     195.6,        0.0);        ( 449379.6,
3758903.9,      195.5,     195.5,        0.0);
     ( 449383.5, 3758903.9,     195.2,     195.2,        0.0);        ( 449387.4,
3758903.9,      195.0,     195.0,        0.0);
     ( 449391.2, 3758903.9,     194.7,     194.7,        0.0);        ( 449395.1,
3758903.9,      194.5,     194.5,        0.0);
     ( 449399.0, 3758903.9,     194.2,     194.2,        0.0);        ( 449402.8,
3758903.9,      194.0,     194.0,        0.0);
     ( 449406.7, 3758903.9,     193.7,     193.7,        0.0);        ( 449410.6,
3758903.9,      193.4,     193.4,        0.0);
     ( 449414.5, 3758903.9,     193.1,     193.1,        0.0);        ( 449418.3,
3758903.9,      192.8,     192.8,        0.0);
     ( 449422.2, 3758903.9,     192.6,     192.6,        0.0);        ( 449426.1,
3758903.9,      192.3,     192.3,        0.0);
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3758903.9,     191.7,     195.0,      0.0);
    ( 449437.7, 3758903.9,     191.4,     195.0,      0.0);      ( 449441.5,
3758903.9,     191.2,     191.2,      0.0);
    ( 449445.4, 3758903.9,     191.1,     191.1,      0.0);      ( 449368.0,
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    ( 449371.9, 3758918.0,     196.5,     196.5,      0.0);      ( 449375.8,
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    ( 449379.6, 3758918.0,     196.4,     196.4,      0.0);      ( 449383.5,
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    ( 449387.4, 3758918.0,     195.9,     195.9,      0.0);      ( 449391.2,
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    ( 449395.1, 3758918.0,     195.4,     195.4,      0.0);      ( 449399.0,
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    ( 449402.8, 3758918.0,     194.9,     194.9,      0.0);      ( 449406.7,
3758918.0,     194.6,     194.6,      0.0);
    ( 449410.6, 3758918.0,     194.3,     194.3,      0.0);      ( 449414.5,
3758918.0,     194.0,     195.0,      0.0);
    ( 449418.3, 3758918.0,     193.6,     195.0,      0.0);      ( 449422.2,
3758918.0,     193.3,     195.0,      0.0);
    ( 449426.1, 3758918.0,     192.9,     195.0,      0.0);      ( 449429.9,
3758918.0,     192.6,     195.0,      0.0);
    ( 449433.8, 3758918.0,     192.2,     195.0,      0.0);      ( 449437.7,
3758918.0,     191.9,     195.0,      0.0);
    ( 449441.5, 3758918.0,     191.7,     195.0,      0.0);      ( 449445.4,
3758918.0,     191.5,     191.5,      0.0);
    ( 449368.0, 3758932.0,     197.2,     197.2,      0.0);      ( 449371.9,
3758932.0,     197.2,     197.2,      0.0);
    ( 449375.8, 3758932.0,     197.2,     197.2,      0.0);      ( 449379.6,
3758932.0,     197.2,     197.2,      0.0);
    ( 449383.5, 3758932.0,     196.9,     196.9,      0.0);      ( 449387.4,
3758932.0,     196.7,     196.7,      0.0);
    ( 449391.2, 3758932.0,     196.4,     196.4,      0.0);      ( 449395.1,
3758932.0,     196.2,     196.2,      0.0);
    ( 449399.0, 3758932.0,     195.9,     195.9,      0.0);      ( 449402.8,
3758932.0,     195.6,     195.6,      0.0);
    ( 449406.7, 3758932.0,     195.4,     195.4,      0.0);      ( 449410.6,
3758932.0,     195.1,     195.1,      0.0);
    ( 449414.5, 3758932.0,     194.7,     194.7,      0.0);      ( 449418.3,
3758932.0,     194.3,     194.3,      0.0);
    ( 449422.2, 3758932.0,     193.9,     193.9,      0.0);      ( 449426.1,
3758932.0,     193.5,     193.5,      0.0);
    ( 449429.9, 3758932.0,     193.1,     193.1,      0.0);      ( 449433.8,
3758932.0,     192.8,     192.8,      0.0);
```

↟ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:18:15

                                   PAGE   8

```
     *** MODELOPTs:     RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

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


     ( 449437.7, 3758932.0,     192.4,     192.4,      0.0);        ( 449441.5,
3758932.0,     192.1,     192.1,       0.0);
     ( 449445.4, 3758932.0,     192.0,     192.0,      0.0);        ( 449368.0,
3758946.0,     197.7,     197.7,       0.0);
     ( 449371.9, 3758946.0,     197.7,     197.7,      0.0);        ( 449375.8,
3758946.0,     197.7,     197.7,       0.0);
     ( 449379.6, 3758946.0,     197.7,     197.7,      0.0);        ( 449383.5,
3758946.0,     197.4,     197.4,       0.0);
     ( 449387.4, 3758946.0,     197.1,     197.1,      0.0);        ( 449391.2,
3758946.0,     196.9,     196.9,       0.0);
     ( 449395.1, 3758946.0,     196.6,     196.6,      0.0);        ( 449399.0,
3758946.0,     196.4,     196.4,       0.0);
     ( 449402.8, 3758946.0,     196.1,     196.1,      0.0);        ( 449406.7,
3758946.0,     195.8,     195.8,       0.0);
     ( 449410.6, 3758946.0,     195.5,     195.5,      0.0);        ( 449414.5,
3758946.0,     195.2,     195.2,       0.0);
     ( 449418.3, 3758946.0,     194.8,     194.8,      0.0);        ( 449422.2,
3758946.0,     194.4,     194.4,       0.0);
     ( 449426.1, 3758946.0,     194.0,     196.0,      0.0);        ( 449429.9,
3758946.0,     193.6,     196.0,       0.0);
     ( 449433.8, 3758946.0,     193.2,     196.0,      0.0);        ( 449437.7,
3758946.0,     192.8,     196.0,       0.0);
     ( 449441.5, 3758946.0,     192.5,     196.0,      0.0);        ( 449445.4,
3758946.0,     192.3,     192.3,       0.0);
     ( 449368.0, 3758960.1,     198.0,     198.0,      0.0);        ( 449371.9,
3758960.1,     198.0,     198.0,       0.0);
     ( 449375.8, 3758960.1,     198.0,     198.0,      0.0);        ( 449379.6,
3758960.1,     198.0,     198.0,       0.0);
     ( 449383.5, 3758960.1,     197.8,     197.8,      0.0);        ( 449387.4,
3758960.1,     197.5,     197.5,       0.0);
     ( 449391.2, 3758960.1,     197.3,     197.3,      0.0);        ( 449395.1,
3758960.1,     197.0,     197.0,       0.0);
     ( 449399.0, 3758960.1,     196.8,     196.8,      0.0);        ( 449402.8,
3758960.1,     196.5,     196.5,       0.0);
     ( 449406.7, 3758960.1,     196.3,     196.3,      0.0);        ( 449410.6,
3758960.1,     196.0,     196.0,       0.0);
     ( 449414.5, 3758960.1,     195.6,     195.6,      0.0);        ( 449418.3,
3758960.1,     195.2,     195.2,       0.0);
     ( 449422.2, 3758960.1,     194.9,     194.9,      0.0);        ( 449426.1,
3758960.1,     194.5,     194.5,       0.0);
     ( 449429.9, 3758960.1,     194.1,     194.1,      0.0);        ( 449433.8,
3758960.1,     193.7,     193.7,       0.0);
     ( 449437.7, 3758960.1,     193.3,     193.3,      0.0);        ( 449441.5,
3758960.1,     193.0,     193.0,       0.0);
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    ( 449445.4, 3758960.1,      192.7,      192.7,        0.0);        ( 449368.0,
3758974.1,      198.0,      198.0,        0.0);
    ( 449371.9, 3758974.1,      198.0,      198.0,        0.0);        ( 449375.8,
3758974.1,      198.0,      198.0,        0.0);
    ( 449379.6, 3758974.1,      198.0,      198.0,        0.0);        ( 449383.5,
3758974.1,      197.8,      197.8,        0.0);
    ( 449387.4, 3758974.1,      197.6,      197.6,        0.0);        ( 449391.2,
3758974.1,      197.5,      197.5,        0.0);
    ( 449395.1, 3758974.1,      197.3,      197.3,        0.0);        ( 449399.0,
3758974.1,      197.1,      197.1,        0.0);
    ( 449402.8, 3758974.1,      196.9,      196.9,        0.0);        ( 449406.7,
3758974.1,      196.7,      196.7,        0.0);
    ( 449410.6, 3758974.1,      196.5,      196.5,        0.0);        ( 449414.5,
3758974.1,      196.1,      196.1,        0.0);
    ( 449418.3, 3758974.1,      195.7,      195.7,        0.0);        ( 449422.2,
3758974.1,      195.3,      195.3,        0.0);
    ( 449426.1, 3758974.1,      194.9,      197.0,        0.0);        ( 449429.9,
3758974.1,      194.5,      197.0,        0.0);
    ( 449433.8, 3758974.1,      194.2,      197.0,        0.0);        ( 449437.7,
3758974.1,      193.8,      197.0,        0.0);
    ( 449441.5, 3758974.1,      193.4,      197.0,        0.0);        ( 449445.4,
3758974.1,      193.1,      197.0,        0.0);
    ( 449368.0, 3758988.2,      198.1,      198.1,        0.0);        ( 449371.9,
3758988.2,      198.1,      198.1,        0.0);
    ( 449375.8, 3758988.2,      198.1,      198.1,        0.0);        ( 449379.6,
3758988.2,      198.1,      198.1,        0.0);
    ( 449383.5, 3758988.2,      197.9,      197.9,        0.0);        ( 449387.4,
3758988.2,      197.8,      197.8,        0.0);
    ( 449391.2, 3758988.2,      197.6,      197.6,        0.0);        ( 449395.1,
3758988.2,      197.5,      197.5,        0.0);
    ( 449399.0, 3758988.2,      197.4,      197.4,        0.0);        ( 449402.8,
3758988.2,      197.2,      197.2,        0.0);
    ( 449406.7, 3758988.2,      197.1,      197.1,        0.0);        ( 449410.6,
3758988.2,      196.9,      196.9,        0.0);
    ( 449414.5, 3758988.2,      196.5,      196.5,        0.0);        ( 449418.3,
3758988.2,      196.1,      196.1,        0.0);
    ( 449422.2, 3758988.2,      195.8,      195.8,        0.0);        ( 449426.1,
3758988.2,      195.4,      195.4,        0.0);
    ( 449429.9, 3758988.2,      195.0,      195.0,        0.0);        ( 449433.8,
3758988.2,      194.6,      194.6,        0.0);
    ( 449437.7, 3758988.2,      194.2,      194.2,        0.0);        ( 449441.5,
3758988.2,      193.9,      193.9,        0.0);
    ( 449445.4, 3758988.2,      193.5,      193.5,        0.0);        ( 449368.0,
3759002.2,      198.5,      198.5,        0.0);
    ( 449371.9, 3759002.2,      198.5,      198.5,        0.0);        ( 449375.8,
3759002.2,      198.5,      198.5,        0.0);
```
⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                         ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                     ***   12:18:15

*** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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

     (449379.6, 3759002.2,   198.5,   198.5,   0.0);   (449383.5,
3759002.2,   198.3,   198.3,   0.0);
     (449387.4, 3759002.2,   198.1,   198.1,   0.0);   (449391.2,
3759002.2,   197.9,   197.9,   0.0);
     (449395.1, 3759002.2,   197.7,   197.7,   0.0);   (449399.0,
3759002.2,   197.5,   197.5,   0.0);
     (449402.8, 3759002.2,   197.3,   197.3,   0.0);   (449406.7,
3759002.2,   197.1,   197.1,   0.0);
     (449410.6, 3759002.2,   196.9,   196.9,   0.0);   (449414.5,
3759002.2,   196.6,   196.6,   0.0);
     (449418.3, 3759002.2,   196.3,   196.3,   0.0);   (449422.2,
3759002.2,   196.0,   196.0,   0.0);
     (449426.1, 3759002.2,   195.6,   195.6,   0.0);   (449429.9,
3759002.2,   195.3,   195.3,   0.0);
     (449433.8, 3759002.2,   195.0,   195.0,   0.0);   (449437.7,
3759002.2,   194.7,   194.7,   0.0);
     (449441.5, 3759002.2,   194.3,   194.3,   0.0);   (449445.4,
3759002.2,   193.9,   193.9,   0.0);
     (449368.0, 3759016.2,   199.0,   199.0,   0.0);   (449371.9,
3759016.2,   199.0,   199.0,   0.0);
     (449375.8, 3759016.2,   199.0,   199.0,   0.0);   (449379.6,
3759016.2,   199.0,   199.0,   0.0);
     (449383.5, 3759016.2,   198.7,   198.7,   0.0);   (449387.4,
3759016.2,   198.5,   198.5,   0.0);
     (449391.2, 3759016.2,   198.2,   198.2,   0.0);   (449395.1,
3759016.2,   198.0,   198.0,   0.0);
     (449399.0, 3759016.2,   197.7,   197.7,   0.0);   (449402.8,
3759016.2,   197.4,   197.4,   0.0);
     (449406.7, 3759016.2,   197.2,   197.2,   0.0);   (449410.6,
3759016.2,   196.9,   196.9,   0.0);
     (449414.5, 3759016.2,   196.7,   196.7,   0.0);   (449418.3,
3759016.2,   196.4,   196.4,   0.0);
     (449422.2, 3759016.2,   196.2,   196.2,   0.0);   (449426.1,
3759016.2,   195.9,   195.9,   0.0);
     (449429.9, 3759016.2,   195.6,   195.6,   0.0);   (449433.8,
3759016.2,   195.4,   195.4,   0.0);
     (449437.7, 3759016.2,   195.1,   195.1,   0.0);   (449441.5,
3759016.2,   194.8,   195.0,   0.0);
     (449445.4, 3759016.2,   194.4,   195.0,   0.0);   (449368.0,
3759030.3,   198.5,   198.5,   0.0);
     (449371.9, 3759030.3,   198.5,   198.5,   0.0);   (449375.8,
3759030.3,   198.5,   198.5,   0.0);

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   ( 449379.6, 3759030.3,    198.5,    198.5,     0.0);      ( 449383.5,
3759030.3,    198.3,    198.3,     0.0);
   ( 449387.4, 3759030.3,    198.0,    198.0,     0.0);      ( 449391.2,
3759030.3,    197.8,    197.8,     0.0);
   ( 449395.1, 3759030.3,    197.5,    197.5,     0.0);      ( 449399.0,
3759030.3,    197.2,    197.2,     0.0);
   ( 449402.8, 3759030.3,    197.0,    197.0,     0.0);      ( 449406.7,
3759030.3,    196.7,    196.7,     0.0);
   ( 449410.6, 3759030.3,    196.5,    196.5,     0.0);      ( 449414.5,
3759030.3,    196.3,    196.3,     0.0);
   ( 449418.3, 3759030.3,    196.1,    196.1,     0.0);      ( 449422.2,
3759030.3,    195.9,    195.9,     0.0);
   ( 449426.1, 3759030.3,    195.7,    195.7,     0.0);      ( 449429.9,
3759030.3,    195.5,    195.5,     0.0);
   ( 449433.8, 3759030.3,    195.3,    195.3,     0.0);      ( 449437.7,
3759030.3,    195.1,    195.1,     0.0);
   ( 449441.5, 3759030.3,    194.8,    194.8,     0.0);      ( 449445.4,
3759030.3,    194.4,    194.4,     0.0);
   ( 449368.0, 3759044.3,    198.1,    198.1,     0.0);      ( 449371.9,
3759044.3,    198.1,    198.1,     0.0);
   ( 449375.8, 3759044.3,    198.1,    198.1,     0.0);      ( 449379.6,
3759044.3,    198.1,    198.1,     0.0);
   ( 449383.5, 3759044.3,    197.8,    197.8,     0.0);      ( 449387.4,
3759044.3,    197.5,    197.5,     0.0);
   ( 449391.2, 3759044.3,    197.3,    197.3,     0.0);      ( 449395.1,
3759044.3,    197.0,    197.0,     0.0);
   ( 449399.0, 3759044.3,    196.8,    196.8,     0.0);      ( 449402.8,
3759044.3,    196.5,    196.5,     0.0);
   ( 449406.7, 3759044.3,    196.2,    196.2,     0.0);      ( 449410.6,
3759044.3,    196.0,    196.0,     0.0);
   ( 449414.5, 3759044.3,    195.9,    195.9,     0.0);      ( 449418.3,
3759044.3,    195.8,    195.8,     0.0);
   ( 449422.2, 3759044.3,    195.6,    195.6,     0.0);      ( 449426.1,
3759044.3,    195.5,    195.5,     0.0);
   ( 449429.9, 3759044.3,    195.3,    195.3,     0.0);      ( 449433.8,
3759044.3,    195.2,    195.2,     0.0);
   ( 449437.7, 3759044.3,    195.1,    195.1,     0.0);      ( 449441.5,
3759044.3,    194.8,    194.8,     0.0);
   ( 449445.4, 3759044.3,    194.4,    194.4,     0.0);
```

⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                     ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                     ***   12:18:15

                       PAGE 10
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN 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

          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 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:18:15

                                    PAGE 11
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

   Surface file: ..\KRAL_V9_ADJU\KRAL_V9.SFC
               Met Version: 16216
   Profile file: ..\KRAL_V9_ADJU\KRAL_V9.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:   3171   Upper air station no.:   3190
               Name: UNKNOWN   Name: UNKNOWN

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
12	01	01	1	01	-25.6	0.266	-9.000	-9.000	-999.	330.	77.9	0.15	2.40	1.00	2.93	55.	10.1	288.1	2.0
12	01	01	1	02	-26.8	0.277	-9.000	-9.000	-999.	351.	84.7	0.15	2.40	1.00	3.05	55.	10.1	287.0	2.0
12	01	01	1	03	-21.5	0.221	-9.000	-9.000	-999.	250.	53.5	0.15	2.40	1.00	2.45	74.	10.1	284.2	2.0
12	01	01	1	04	-22.0	0.227	-9.000	-9.000	-999.	260.	56.8	0.15	2.40	1.00	2.52	77.	10.1	285.9	2.0
12	01	01	1	05	-20.0	0.206	-9.000	-9.000	-999.	225.	46.8	0.15	2.40	1.00	2.30	80.	10.1	285.4	2.0
12	01	01	1	06	-14.4	0.171	-9.000	-9.000	-999.	170.	32.1	0.15	2.40	1.00	1.93	79.	10.1	287.0	2.0
12	01	01	1	07	-14.9	0.174	-9.000	-9.000	-999.	174.	33.2	0.15	2.40	1.00	1.96	77.	10.1	284.2	2.0
12	01	01	1	08	-11.9	0.169	-9.000	-9.000	-999.	167.	36.1	0.15	2.40	0.53	1.89	77.	10.1	288.1	2.0
12	01	01	1	09	40.4	0.234	0.359	0.006	40.	272.	-28.1	0.15	2.40	0.31	2.10	81.	10.1	289.2	2.0
12	01	01	1	10	112.6	0.246	0.742	0.005	129.	293.	-11.8	0.15	2.40	0.24	1.99	101.	10.1	296.4	2.0
12	01	01	1	11	161.0	0.402	1.188	0.005	369.	611.	-35.6	0.15	2.40	0.21	3.68	78.	10.1	298.8	2.0
12	01	01	1	12	184.7	0.337	1.516	0.005	668.	473.	-18.4	0.15	2.40	0.20	2.89	68.	10.1	300.4	2.0
12	01	01	1	13	183.9	0.310	1.809	0.005	1139.	414.	-14.2	0.15	2.40	0.20	2.57	64.	10.1	302.5	2.0
12	01	01	1	14	156.6	0.374	1.852	0.005	1434.	549.	-29.5	0.15	2.40	0.22	3.37	63.	10.1	303.1	2.0
12	01	01	1	15	104.3	0.382	1.658	0.005	1546.	567.	-47.2	0.15	2.40	0.25	3.59	62.	10.1	302.5	2.0
12	01	01	1	16	31.8	0.374	1.123	0.005	1573.	550.	-145.8	0.15	2.40	0.34	3.76	69.	10.1	300.9	2.0
12	01	01	1	17	-23.3	0.276	-9.000	-9.000	-999.	354.	84.0	0.15	2.40	0.62	3.03	59.	10.1	297.5	2.0
12	01	01	1	18	-21.5	0.229	-9.000	-9.000	-999.	264.	57.8	0.15	2.40	1.00	2.54	54.	10.1	295.4	2.0
12	01	01	1	19	-19.3	0.204	-9.000	-9.000	-999.	221.	45.6	0.15	2.40	1.00	2.27	79.	10.1	292.0	2.0
12	01	01	1	20	-20.7	0.218	-9.000	-9.000	-999.	244.	52.2	0.15	2.40	1.00	2.42	79.	10.1	292.5	2.0
12	01	01	1	21	-19.7	0.206	-9.000	-9.000	-999.	225.	46.9	0.15	2.40	1.00	2.30	95.	10.1	290.9	2.0

```
 12 01 01   1 22  -17.6  0.190 -9.000 -9.000 -999.  199.    39.8  0.15  2.40
1.00   2.13  78.   10.1 290.4    2.0
 12 01 01   1 23  -20.3  0.211 -9.000 -9.000 -999.  233.    49.0  0.15  2.40
1.00   2.35  52.   10.1 289.2    2.0
 12 01 01   1 24  -16.4  0.183 -9.000 -9.000 -999.  189.    37.0  0.15  2.40
1.00   2.06  75.   10.1 288.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1   55.    2.93   288.2  99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
↟ *** AERMOD - VERSION  19191 ***    *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                      ***          11/11/21
 *** AERMET - VERSION  16216 ***    ***
                      ***          12:18:15


                              PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                          *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL     ***
                              INCLUDING SOURCE(S):    L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                  *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

     X-COORD (M)  Y-COORD (M)      CONC    (YYMMDDHH)            X-COORD (M)
Y-COORD (M)       CONC    (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
      449368.02   3758763.53      113.74211 (13112916)           449371.89
3758763.53      107.57085 (13062606)
      449375.76   3758763.53      103.18636 (13062606)           449379.63
3758763.53       99.13095 (13062606)
      449383.50   3758763.53       95.41590 (13062606)           449387.37
3758763.53       91.96557 (13062606)
      449391.24   3758763.53       88.74486 (13062606)           449395.11
3758763.53       85.73398 (13062606)
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     449398.98    3758763.53        82.91200  (13062606)                      449402.85
3758763.53        80.26130  (13062606)
     449406.72    3758763.53        77.76901  (13062606)                      449410.59
3758763.53        75.42720  (13062606)
     449414.46    3758763.53        73.23981  (13062606)                      449418.33
3758763.53        71.16881  (13062606)
     449422.20    3758763.53        69.20488  (13062606)                      449426.07
3758763.53        67.33964  (13062606)
     449429.94    3758763.53        65.56559  (13062606)                      449433.81
3758763.53        63.87593  (13062606)
     449437.68    3758763.53        62.26464  (13062606)                      449441.55
3758763.53        60.73690  (13062606)
     449445.42    3758763.53        59.28035  (13062606)                      449368.02
3758777.57       113.85977  (13112916)
     449371.89    3758777.57       107.84194  (13062606)                      449375.76
3758777.57       103.39916  (13062606)
     449379.63    3758777.57        99.29216  (13062606)                      449383.50
3758777.57        95.57230  (13062606)
     449387.37    3758777.57        92.11420  (13062606)                      449391.24
3758777.57        88.89413  (13062606)
     449395.11    3758777.57        85.88038  (13062606)                      449398.98
3758777.57        83.05627  (13062606)
     449402.85    3758777.57        80.40367  (13062606)                      449406.72
3758777.57        77.90693  (13062606)
     449410.59    3758777.57        75.56499  (13062606)                      449414.46
3758777.57        73.38291  (13062606)
     449418.33    3758777.57        71.31377  (13062606)                      449422.20
3758777.57        69.35138  (13062606)
     449426.07    3758777.57        67.48745  (13062606)                      449429.94
3758777.57        65.71449  (13062606)
     449433.81    3758777.57        64.02578  (13062606)                      449437.68
3758777.57        62.41526  (13062606)
     449441.55    3758777.57        60.89350  (13062606)                      449445.42
3758777.57        59.44908  (13062606)
     449368.02    3758791.61       114.32472  (13112916)                      449371.89
3758791.61       108.23141  (13062606)
     449375.76    3758791.61       103.82829  (13062606)                      449379.63
3758791.61        99.75586  (13062606)
     449383.50    3758791.61        96.02365  (13062606)                      449387.37
3758791.61        92.55403  (13062606)
     449391.24    3758791.61        89.31929  (13062606)                      449395.11
3758791.61        86.29886  (13062606)
     449398.98    3758791.61        83.46512  (13062606)                      449402.85
3758791.61        80.80347  (13062606)
     449406.72    3758791.61        78.29815  (13062606)                      449410.59
3758791.61        75.94754  (13062606)
     449414.46    3758791.61        73.75299  (13062606)                      449418.33
3758791.61        71.67516  (13062606)
     449422.20    3758791.61        69.70734  (13062606)                      449426.07
3758791.61        67.83567  (13062606)
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      449429.94   3758791.61       66.05540 (13062606)                449433.81
 3758791.61       64.35976 (13062606)
      449437.68   3758791.61       62.74264 (13062606)                449441.55
 3758791.61       61.20519 (13062606)
      449445.42   3758791.61       59.74376 (13062606)                449368.02
 3758805.65      114.63354 (13112916)
      449371.89   3758805.65      108.60477 (13062606)                449375.76
 3758805.65      104.23014 (13062606)
      449379.63   3758805.65      100.19029 (13062606)                449383.50
 3758805.65       96.44602 (13062606)
      449387.37   3758805.65       92.96554 (13062606)                449391.24
 3758805.65       89.72049 (13062606)
      449395.11   3758805.65       86.68713 (13062606)                449398.98
 3758805.65       83.84756 (13062606)
      449402.85   3758805.65       81.17748 (13062606)                449406.72
 3758805.65       78.66414 (13062606)
      449410.59   3758805.65       76.30536 (13062606)                449414.46
 3758805.65       74.10185 (13062606)
      449418.33   3758805.65       72.01562 (13062606)                449422.20
 3758805.65       70.03728 (13062606)
      449426.07   3758805.65       68.15836 (13062606)                449429.94
 3758805.65       66.37363 (13062606)
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⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                         ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   12:18:15

                                 PAGE 13
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                          *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL   ***
                               INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                     L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                     L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                     L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
 ***

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

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
 Y-COORD (M)   CONC   (YYMMDDHH)
     -

- -
          449433.81   3758805.65   64.67141 (13062606)   449437.68
3758805.65   63.04808 (13062606)
          449441.55   3758805.65   61.49810 (13062606)   449445.42
3758805.65   60.01645 (13062606)
          449368.02   3758819.69   114.79449 (13112916)   449371.89
3758819.69   108.87533 (13062606)
          449375.76   3758819.69   104.49299 (13062606)   449379.63
3758819.69   100.44306 (13062606)
          449383.50   3758819.69   96.69021 (13062606)   449387.37
3758819.69   93.20200 (13062606)
          449391.24   3758819.69   89.95018 (13062606)   449395.11
3758819.69   86.91399 (13062606)
          449398.98   3758819.69   84.06575 (13062606)   449402.85
3758819.69   81.39066 (13062606)
          449406.72   3758819.69   78.87277 (13062606)   449410.59
3758819.69   76.51010 (13062606)
          449414.46   3758819.69   74.30361 (13062606)   449418.33
3758819.69   72.21457 (13062606)
          449422.20   3758819.69   70.23353 (13062606)   449426.07
3758819.69   68.35454 (13062606)
          449429.94   3758819.69   66.56487 (13062606)   449433.81
3758819.69   64.86028 (13062606)
          449437.68   3758819.69   63.23465 (13062606)   449441.55
3758819.69   61.68245 (13062606)
          449445.42   3758819.69   60.19864 (13062606)   449368.02
3758833.73   114.99311 (13112916)
          449371.89   3758833.73   109.11714 (13062606)   449375.76
3758833.73   104.72517 (13062606)
          449379.63   3758833.73   100.66636 (13062606)   449383.50
3758833.73   96.90562 (13062606)
          449387.37   3758833.73   93.41039 (13062606)   449391.24
3758833.73   90.15229 (13062606)
          449395.11   3758833.73   87.11060 (13062606)   449398.98
3758833.73   84.25729 (13062606)
          449402.85   3758833.73   81.57762 (13062606)   449406.72
3758833.73   79.05557 (13062606)
          449410.59   3758833.73   76.68943 (13062606)   449414.46
3758833.73   74.48044 (13062606)
          449418.33   3758833.73   72.38901 (13062606)   449422.20
3758833.73   70.40571 (13062606)
          449426.07   3758833.73   68.52461 (13062606)   449429.94
3758833.73   66.73286 (13062606)
          449433.81   3758833.73   65.02626 (13062606)   449437.68
3758833.73   63.39869 (13062606)
          449441.55   3758833.73   61.84461 (13062606)   449445.42
3758833.73   60.35897 (13062606)
          449368.02   3758847.77   116.05456 (13112916)   449371.89
3758847.77   109.70515 (13112916)
          449375.76   3758847.77   105.19405 (13062606)   449379.63

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3758847.77       101.13763  (13062606)
        449383.50   3758847.77       97.36540  (13062606)              449387.37
3758847.77        93.86141  (13062606)
        449391.24   3758847.77       90.59220  (13062606)              449395.11
3758847.77        87.53616  (13062606)
        449398.98   3758847.77       84.67262  (13062606)              449402.85
3758847.77        81.98308  (13062606)
        449406.72   3758847.77       79.45449  (13062606)              449410.59
3758847.77        77.07253  (13062606)
        449414.46   3758847.77       74.83811  (13062606)              449418.33
3758847.77        72.72580  (13062606)
        449422.20   3758847.77       70.72051  (13062606)              449426.07
3758847.77        68.81634  (13062606)
        449429.94   3758847.77       67.00557  (13062606)              449433.81
3758847.77        65.28112  (13062606)
        449437.68   3758847.77       63.63684  (13062606)              449441.55
3758847.77        62.07352  (13062606)
        449445.42   3758847.77       60.58331  (13062606)              449368.02
3758861.81       117.35083  (13112916)
        449371.89   3758861.81      111.06559  (13112916)              449375.76
3758861.81       105.62882  (13062606)
        449379.63   3758861.81      101.58206  (13062606)              449383.50
3758861.81        97.81016  (13062606)
        449387.37   3758861.81       94.29774  (13062606)              449391.24
3758861.81        91.02311  (13062606)
        449395.11   3758861.81       87.96207  (13062606)              449398.98
3758861.81        85.09141  (13062606)
        449402.85   3758861.81       82.39401  (13062606)              449406.72
3758861.81        79.85505  (13062606)
        449410.59   3758861.81       77.46220  (13062606)              449414.46
3758861.81        75.20360  (13062606)
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⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                          ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   12:18:15

                              PAGE 14
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                          *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

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

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
        449418.33   3758861.81   73.06543 (13062606)   449422.20
3758861.81   71.03825 (13062606)
        449426.07   3758861.81   69.11536 (13062606)   449429.94
3758861.81   67.28458 (13062606)
        449433.81   3758861.81   65.54111 (13062606)   449437.68
3758861.81   63.87865 (13062606)
        449441.55   3758861.81   62.30391 (13062606)   449445.42
3758861.81   60.80871 (13062606)
        449368.02   3758875.85   117.84384 (13112916)   449371.89
3758875.85   111.68446 (13112916)
        449375.76   3758875.85   106.01495 (13112916)   449379.63
3758875.85   101.87683 (13062606)
        449383.50   3758875.85   98.11235 (13062606)   449387.37
3758875.85   94.60086 (13062606)
        449391.24   3758875.85   91.32650 (13062606)   449395.11
3758875.85   88.25996 (13062606)
        449398.98   3758875.85   85.38714 (13062606)   449402.85
3758875.85   82.68528 (13062606)
        449406.72   3758875.85   80.14146 (13062606)   449410.59
3758875.85   77.74140 (13062606)
        449414.46   3758875.85   75.47318 (13062606)   449418.33
3758875.85   73.32774 (13062606)
        449422.20   3758875.85   71.29135 (13062606)   449426.07
3758875.85   69.35729 (13062606)
        449429.94   3758875.85   67.51786 (13062606)   449433.81
3758875.85   65.76599 (13062606)
        449437.68   3758875.85   64.09742 (13062606)   449441.55
3758875.85   62.51618 (13062606)
        449445.42   3758875.85   61.01625 (13062606)   449368.02
3758889.89   118.00060 (13112916)
        449371.89   3758889.89   111.81341 (13112916)   449375.76
3758889.89   106.17857 (13112916)
        449379.63   3758889.89   102.11768 (13062606)   449383.50
3758889.89   98.35452 (13062606)
        449387.37   3758889.89   94.84451 (13062606)   449391.24
3758889.89   91.56909 (13062606)
        449395.11   3758889.89   88.50057 (13062606)   449398.98
3758889.89   85.62322 (13062606)
        449402.85   3758889.89   82.91886 (13062606)   449406.72
3758889.89   80.37137 (13062606)

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        449410.59   3758889.89        77.96701  (13062606)                    449414.46
3758889.89       75.69486  (13062606)
        449418.33   3758889.89        73.54318  (13062606)                    449422.20
3758889.89       71.50488  (13062606)
        449426.07   3758889.89        69.56691  (13062606)                    449429.94
3758889.89       67.72378  (13062606)
        449433.81   3758889.89        65.96825  (13062606)                    449437.68
3758889.89       64.29418  (13062606)
        449441.55   3758889.89        62.71072  (13062606)                    449445.42
3758889.89       61.20633  (13062606)
        449368.02   3758903.93       117.68449  (13112916)                    449371.89
3758903.93      111.56994  (13112916)
        449375.76   3758903.93       106.37655  (13062606)                    449379.63
3758903.93      102.32171  (13062606)
        449383.50   3758903.93        98.56786  (13062606)                    449387.37
3758903.93       95.06975  (13062606)
        449391.24   3758903.93        91.80247  (13062606)                    449395.11
3758903.93       88.74176  (13062606)
        449398.98   3758903.93        85.86896  (13062606)                    449402.85
3758903.93       83.16587  (13062606)
        449406.72   3758903.93        80.61834  (13062606)                    449410.59
3758903.93       78.21173  (13062606)
        449414.46   3758903.93        75.93185  (13062606)                    449418.33
3758903.93       73.77259  (13062606)
        449422.20   3758903.93        71.72387  (13062606)                    449426.07
3758903.93       69.77745  (13062606)
        449429.94   3758903.93        67.92567  (13062606)                    449433.81
3758903.93       66.16149  (13062606)
        449437.68   3758903.93        64.47885  (13062606)                    449441.55
3758903.93       62.88609  (13062606)
        449445.42   3758903.93        61.37926  (13062606)                    449368.02
3758917.97      117.36335  (13112916)
        449371.89   3758917.97       111.21219  (13112916)                    449375.76
3758917.97      106.50657  (13062606)
        449379.63   3758917.97       102.45042  (13062606)                    449383.50
3758917.97       98.71411  (13062606)
        449387.37   3758917.97        95.22830  (13062606)                    449391.24
3758917.97       91.97855  (13062606)
        449395.11   3758917.97        88.93049  (13062606)                    449398.98
3758917.97       86.07255  (13062606)
```
⬥ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                         ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   12:18:15

                          PAGE 15
 *** MODELOPTs: RegDFAULT CONC   ELEV   URBAN   ADJ_U*

                          *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***

```
                              INCLUDING SOURCE(S):     L0000001    , L0000002
, L0000003    , L0000004    , L0000005     ,
                   L0000006    , L0000007    , L0000008   , L0000009   , L0000010
, L0000011    , L0000012    , L0000013     ,
                   L0000014    , L0000015    , L0000016   , L0000017   , L0000018
, L0000019    , L0000020    , L0000021     ,
                   L0000022    , L0000023    , L0000024   , L0000025   , L0000026
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

     X-COORD (M)  Y-COORD (M)     CONC    (YYMMDDHH)          X-COORD (M)
 Y-COORD (M)      CONC   (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - -
       449402.85   3758917.97       83.37890  (13062606)          449406.72
 3758917.97      80.84215  (13062606)
       449410.59   3758917.97       78.43914  (13062606)          449414.46
 3758917.97      76.15965  (13062606)
       449418.33   3758917.97       73.99486  (13062606)          449422.20
 3758917.97      71.93773  (13062606)
       449426.07   3758917.97       69.98140  (13062606)          449429.94
 3758917.97      68.11664  (13062606)
       449433.81   3758917.97       66.34059  (13062606)          449437.68
 3758917.97      64.64561  (13062606)
       449441.55   3758917.97       63.04617  (13062606)          449445.42
 3758917.97      61.53368  (13062606)
       449368.02   3758932.01      117.24972  (13112916)          449371.89
 3758932.01     111.05936  (13112916)
       449375.76   3758932.01      106.60948  (13062606)          449379.63
 3758932.01     102.54649  (13062606)
       449383.50   3758932.01       98.81176  (13062606)          449387.37
 3758932.01      95.34265  (13062606)
       449391.24   3758932.01       92.09478  (13062606)          449395.11
 3758932.01      89.05935  (13062606)
       449398.98   3758932.01       86.20470  (13062606)          449402.85
 3758932.01      83.52340  (13062606)
       449406.72   3758932.01       80.99020  (13062606)          449410.59
 3758932.01      78.59909  (13062606)
       449414.46   3758932.01       76.32470  (13062606)          449418.33
 3758932.01      74.16127  (13062606)
       449422.20   3758932.01       72.10451  (13062606)          449426.07
 3758932.01      70.14656  (13062606)
       449429.94   3758932.01       68.27792  (13062606)          449433.81
 3758932.01      66.49535  (13062606)
       449437.68   3758932.01       64.79460  (13062606)          449441.55
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3758932.01   63.18771 (13062606)
        449445.42   3758932.01   61.66703 (13062606)   449368.02
3758946.05   116.79359 (13112916)
        449371.89   3758946.05   111.12846 (13062606)   449375.76
3758946.05   106.71678 (13062606)
        449379.63   3758946.05   102.66927 (13020301)   449383.50
3758946.05   98.92518 (13062606)
        449387.37   3758946.05   95.44744 (13062606)   449391.24
3758946.05   92.20730 (13062606)
        449395.11   3758946.05   89.16686 (13062606)   449398.98
3758946.05   86.31719 (13062606)
        449402.85   3758946.05   83.63287 (13062606)   449406.72
3758946.05   81.10420 (13062606)
        449410.59   3758946.05   78.71227 (13062606)   449414.46
3758946.05   76.44357 (13062606)
        449418.33   3758946.05   74.28573 (13062606)   449422.20
3758946.05   72.23009 (13062606)
        449426.07   3758946.05   70.27410 (13062606)   449429.94
3758946.05   68.40698 (13062606)
        449433.81   3758946.05   66.62432 (13062606)   449437.68
3758946.05   64.92156 (13062606)
        449441.55   3758946.05   63.30822 (13062606)   449445.42
3758946.05   61.77723 (13062606)
        449368.02   3758960.09   117.44271 (13020301)   449371.89
3758960.09   114.00794 (13020301)
        449375.76   3758960.09   110.73061 (13020301)   449379.63
3758960.09   107.54168 (13020301)
        449383.50   3758960.09   99.23220 (13020301)   449387.37
3758960.09   95.59521 (13020301)
        449391.24   3758960.09   92.29933 (13062606)   449395.11
3758960.09   89.25618 (13062606)
        449398.98   3758960.09   86.40708 (13062606)   449402.85
3758960.09   83.72151 (13062606)
        449406.72   3758960.09   81.19432 (13062606)   449410.59
3758960.09   78.80366 (13062606)
        449414.46   3758960.09   76.54037 (13062606)   449418.33
3758960.09   74.38741 (13062606)
        449422.20   3758960.09   72.33528 (13062606)   449426.07
3758960.09   70.38095 (13062606)
        449429.94   3758960.09   68.51665 (13062606)   449433.81
3758960.09   66.73559 (13062606)
        449437.68   3758960.09   65.03285 (13062606)   449441.55
3758960.09   63.41410 (13062606)
        449445.42   3758960.09   61.87106 (13062606)   449368.02
3758974.13   117.45738 (13112916)
        449371.89   3758974.13   112.62569 (13020301)   449375.76
3758974.13   109.44718 (13020301)
        449379.63   3758974.13   106.36255 (13020301)   449383.50
3758974.13   99.15525 (13062606)

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                                  ***         11/11/21
   *** AERMET - VERSION  16216 ***   ***
                                  ***         12:18:15


                                       PAGE  16
   *** MODELOPTs:     RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
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                                  *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP:  ALL      ***
                                       INCLUDING SOURCE(S):     L0000001    , L0000002
 , L0000003    , L0000004    , L0000005     ,
                         L0000006    , L0000007    , L0000008    , L0000009    , L0000010
 , L0000011    , L0000012    , L0000013     ,
                         L0000014    , L0000015    , L0000016    , L0000017    , L0000018
 , L0000019    , L0000020    , L0000021     ,
                         L0000022    , L0000023    , L0000024    , L0000025    , L0000026
 ,


                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
 ***


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


      X-COORD (M)  Y-COORD (M)      CONC      (YYMMDDHH)              X-COORD (M)
 Y-COORD (M)       CONC     (YYMMDDHH)
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - - -
        449387.37   3758974.13      95.65635 (13062606)              449391.24
 3758974.13      92.39608 (16092620)
        449395.11   3758974.13      89.34781 (13062606)              449398.98
 3758974.13      86.48550 (13062606)
        449402.85   3758974.13      83.80013 (13062606)              449406.72
 3758974.13      81.26558 (13062606)
        449410.59   3758974.13      78.87453 (13062606)              449414.46
 3758974.13      76.61633 (13062606)
        449418.33   3758974.13      74.46799 (13062606)              449422.20
 3758974.13      72.42194 (13062606)
        449426.07   3758974.13      70.46919 (13062606)              449429.94
 3758974.13      68.60673 (13062606)
        449433.81   3758974.13      66.82791 (13062606)              449437.68
 3758974.13      65.12684 (13062606)
        449441.55   3758974.13      63.50241 (13062606)              449445.42
 3758974.13      61.95145 (13062606)
        449368.02   3758988.17     117.65419 (13112916)              449371.89
 3758988.17     111.58469 (13062606)
        449375.76   3758988.17     108.43866 (13020301)              449379.63
 3758988.17     105.48363 (13020301)
        449383.50   3758988.17      99.26961 (13062606)              449387.37
 3758988.17      95.75654 (13062606)
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     449391.24    3758988.17        92.48121  (13062606)                        449395.11
3758988.17        89.60431  (16092620)
     449398.98    3758988.17        86.55550  (13062606)                        449402.85
3758988.17        83.85907  (13062606)
     449406.72    3758988.17        81.31999  (13062606)                        449410.59
3758988.17        78.93210  (13062606)
     449414.46    3758988.17        76.67147  (13062606)                        449418.33
3758988.17        74.52749  (13062606)
     449422.20    3758988.17        72.48490  (13062606)                        449426.07
3758988.17        70.53553  (13062606)
     449429.94    3758988.17        68.67692  (13062606)                        449433.81
3758988.17        66.90010  (13062606)
     449437.68    3758988.17        65.20116  (13062606)                        449441.55
3758988.17        63.57466  (13062606)
     449445.42    3758988.17        62.01697  (13062606)                        449368.02
3759002.21       120.77056  (13020301)
     449371.89    3759002.21       117.33596  (13020301)                        449375.76
3759002.21       114.05695  (13020301)
     449379.63    3759002.21       110.86206  (13020301)                        449383.50
3759002.21       102.61896  (13020301)
     449387.37    3759002.21        99.18416  (13020301)                        449391.24
3759002.21        92.54492  (13062606)
     449395.11    3759002.21        89.48356  (13062606)                        449398.98
3759002.21        86.88958  (16092620)
     449402.85    3759002.21        83.92070  (13062606)                        449406.72
3759002.21        81.37950  (13062606)
     449410.59    3759002.21        78.98564  (13062606)                        449414.46
3759002.21        76.71828  (13062606)
     449418.33    3759002.21        74.56885  (13062606)                        449422.20
3759002.21        72.52290  (13062606)
     449426.07    3759002.21        70.57734  (13062606)                        449429.94
3759002.21        68.72119  (13062606)
     449433.81    3759002.21        66.94869  (13062606)                        449437.68
3759002.21        65.25686  (13062606)
     449441.55    3759002.21        63.63329  (13062606)                        449445.42
3759002.21        62.07649  (13062606)
     449368.02    3759016.25       121.36092  (13020301)                        449371.89
3759016.25       118.02034  (13020301)
     449375.76    3759016.25       114.83069  (13020301)                        449379.63
3759016.25       111.72550  (13020301)
     449383.50    3759016.25       107.60847  (13020301)                        449387.37
3759016.25        99.46990  (13020301)
     449391.24    3759016.25        95.96957  (13020301)                        449395.11
3759016.25        89.53426  (13062606)
     449398.98    3759016.25        86.68919  (16092620)                        449402.85
3759016.25        84.12836  (16092620)
     449406.72    3759016.25        81.42395  (13062606)                        449410.59
3759016.25        79.02029  (13062606)
     449414.46    3759016.25        76.75027  (13062606)                        449418.33
3759016.25        74.59382  (13062606)
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      449422.20   3759016.25      72.54967  (13062606)                  449426.07
3759016.25      70.60167  (13062606)
      449429.94   3759016.25      68.74931  (13062606)                  449433.81
3759016.25      66.98016  (13062606)
      449437.68   3759016.25      65.29407  (13062606)                  449441.55
3759016.25      63.67537  (13062606)
      449445.42   3759016.25      62.11875  (13062606)                  449368.02
3759030.29     118.37477  (13112916)
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                         ***   11/11/21
  *** AERMET - VERSION 16216 ***   ***
                         ***   12:18:15

                                PAGE 17
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

```
                         *** THE  1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                              INCLUDING SOURCE(S):    L0000001    , L0000002
 , L0000003    , L0000004    , L0000005    ,
                   L0000006    , L0000007    , L0000008    , L0000009    , L0000010
 , L0000011    , L0000012    , L0000013    ,
                   L0000014    , L0000015    , L0000016    , L0000017    , L0000018
 , L0000019    , L0000020    , L0000021    ,
                   L0000022    , L0000023    , L0000024    , L0000025    , L0000026
 ,


                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***


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


     X-COORD (M)  Y-COORD (M)      CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)      CONC    (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - - - -
      449371.89   3759030.29     114.29448  (13020301)                  449375.76
3759030.29     111.20308  (13020301)
      449379.63   3759030.29     108.20856  (13020301)                  449383.50
3759030.29     100.08868  (13020301)
      449387.37   3759030.29      96.98070  (16092620)                  449391.24
3759030.29      92.70075  (13062606)
      449395.11   3759030.29      89.62094  (13062606)                  449398.98
3759030.29      86.73712  (13062606)
      449402.85   3759030.29      84.01990  (13062606)                  449406.72
3759030.29      81.46301  (13062606)
      449410.59   3759030.29      79.04445  (13062606)                  449414.46
3759030.29      76.76100  (13062606)
      449418.33   3759030.29      74.59642  (13062606)                  449422.20
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 3759030.29        72.54092  (13062606)
       449426.07   3759030.29       70.59103  (13062606)              449429.94
 3759030.29        68.73478  (13062606)
       449433.81   3759030.29       66.96665  (13062606)              449437.68
 3759030.29        65.27937  (13062606)
       449441.55   3759030.29       63.65952  (13062606)              449445.42
 3759030.29        62.09944  (13062606)
       449368.02   3759044.33      119.33141  (13112916)              449371.89
 3759044.33       113.09461  (13112916)
       449375.76   3759044.33      107.59390  (13062606)              449379.63
 3759044.33       103.44447  (13062606)
       449383.50   3759044.33       99.63416  (13062606)              449387.37
 3759044.33        96.08224  (13062606)
       449391.24   3759044.33       92.77377  (13062606)              449395.11
 3759044.33        89.67361  (13062606)
       449398.98   3759044.33       86.76849  (13062606)              449402.85
 3759044.33        84.03317  (13062606)
       449406.72   3759044.33       81.45757  (13062606)              449410.59
 3759044.33        79.02541  (13062606)
       449414.46   3759044.33       76.73263  (13062606)              449418.33
 3759044.33        74.56459  (13062606)
       449422.20   3759044.33       72.50831  (13062606)              449426.07
 3759044.33        70.55552  (13062606)
       449429.94   3759044.33       68.70112  (13062606)              449433.81
 3759044.33        66.93364  (13062606)
       449437.68   3759044.33       65.24900  (13062606)              449441.55
 3759044.33        63.62873  (13062606)
       449445.42   3759044.33       62.06537  (13062606)
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:18:15

                          PAGE 18
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                           *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
 ***

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

       X-COORD (M)  Y-COORD (M)       CONC      (YYMMDDHH)              X-COORD (M)
 Y-COORD (M)       CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - - - -
        449368.02   3758763.53      95.58116c (12121708)              449371.89
 3758763.53       91.54317c (12121708)
        449375.76   3758763.53      87.81040c (12121708)              449379.63
 3758763.53       84.35686c (12121708)
        449383.50   3758763.53      81.19557c (12121708)              449387.37
 3758763.53       78.25942c (12121708)
        449391.24   3758763.53      75.51813c (12121708)              449395.11
 3758763.53       72.95520c (12121708)
        449398.98   3758763.53      70.55285c (12121708)              449402.85
 3758763.53       68.29614c (12121708)
        449406.72   3758763.53      66.17435c (12121708)              449410.59
 3758763.53       64.18110c (12121708)
        449414.46   3758763.53      62.32082c (12121708)              449418.33
 3758763.53       60.55940c (12121708)
        449422.20   3758763.53      58.88894c (12121708)              449426.07
 3758763.53       57.30233c (12121708)
        449429.94   3758763.53      55.79321c (12121708)              449433.81
 3758763.53       54.35580c (12121708)
        449437.68   3758763.53      52.98500c (12121708)              449441.55
 3758763.53       51.68591c (12121708)
        449445.42   3758763.53      50.44754c (12121708)              449368.02
 3758777.57       95.85747c (12121708)
        449371.89   3758777.57      91.76629c (12121708)              449375.76
 3758777.57       87.98086c (12121708)
        449379.63   3758777.57      84.48085c (12121708)              449383.50
 3758777.57       81.31583c (12121708)
        449387.37   3758777.57      78.37319c (12121708)              449391.24
 3758777.57       75.63306c (12121708)
        449395.11   3758777.57      73.06804c (12121708)              449398.98
 3758777.57       70.66425c (12121708)
        449402.85   3758777.57      68.40627c (12121708)              449406.72
 3758777.57       66.28084c (12121708)
        449410.59   3758777.57      64.28788c (12121708)              449414.46
 3758777.57       62.43278c (12121708)
        449418.33   3758777.57      60.67337c (12121708)              449422.20
 3758777.57       59.00462c (12121708)
        449426.07   3758777.57      57.41949c (12121708)              449429.94
 3758777.57       55.91164c (12121708)
        449433.81   3758777.57      54.47537c (12121708)              449437.68
 3758777.57       53.10553c (12121708)
        449441.55   3758777.57      51.81213c (12121708)              449445.42
 3758777.57       50.58508c (12121708)
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      449368.02   3758791.61      96.16354c (12121708)          449371.89
3758791.61      92.09940c (12121708)
      449375.76   3758791.61      88.35109c (12121708)          449379.63
3758791.61      84.88337c (12121708)
      449383.50   3758791.61      81.70765c (12121708)          449387.37
3758791.61      78.75500c (12121708)
      449391.24   3758791.61      76.00194c (12121708)          449395.11
3758791.61      73.43126c (12121708)
      449398.98   3758791.61      71.01907c (12121708)          449402.85
3758791.61      68.75319c (12121708)
      449406.72   3758791.61      66.62027c (12121708)          449410.59
3758791.61      64.61971c (12121708)
      449414.46   3758791.61      62.75355c (12121708)          449418.33
3758791.61      60.98652c (12121708)
      449422.20   3758791.61      59.31310c (12121708)          449426.07
3758791.61      57.72118c (12121708)
      449429.94   3758791.61      56.20693c (12121708)          449433.81
3758791.61      54.76457c (12121708)
      449437.68   3758791.61      53.38894c (12121708)          449441.55
3758791.61      52.08144c (12121708)
      449445.42   3758791.61      50.83908c (12121708)          449368.02
3758805.65      96.46345c (12121708)
      449371.89   3758805.65      92.41872c (12121708)          449375.76
3758805.65      88.69746c (12121708)
      449379.63   3758805.65      85.26041c (12121708)          449383.50
3758805.65      82.07429c (12121708)
      449387.37   3758805.65      79.11228c (12121708)          449391.24
3758805.65      76.35029c (12121708)
      449395.11   3758805.65      73.76823c (12121708)          449398.98
3758805.65      71.35111c (12121708)
      449402.85   3758805.65      69.07790c (12121708)          449406.72
3758805.65      66.93798c (12121708)
      449410.59   3758805.65      64.93028c (12121708)          449414.46
3758805.65      63.05625c (12121708)
      449418.33   3758805.65      61.28185c (12121708)          449422.20
3758805.65      59.59910c (12121708)
      449426.07   3758805.65      58.00082c (12121708)          449429.94
3758805.65      56.48274c (12121708)
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⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                            ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                            ***   12:18:15

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                            *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                            INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,

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                    L0000006    , L0000007    , L0000008    , L0000009    , L0000010
     , L0000011    , L0000012    , L0000013    ,
                    L0000014    , L0000015    , L0000016    , L0000017    , L0000018
     , L0000019    , L0000020    , L0000021    ,
                    L0000022    , L0000023    , L0000024    , L0000025    , L0000026
     ,
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                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
 -
```
        449433.81   3758805.65       55.03461c (12121708)           449437.68
 3758805.65       53.65353c (12121708)
        449441.55   3758805.65       52.33481c (12121708)           449445.42
 3758805.65       51.07416c (12121708)
        449368.02   3758819.69       96.69904c (12121708)           449371.89
 3758819.69       92.64547c (12121708)
        449375.76   3758819.69       88.91793c (12121708)           449379.63
 3758819.69       85.47233c (12121708)
        449383.50   3758819.69       82.27899c (12121708)           449387.37
 3758819.69       79.31048c (12121708)
        449391.24   3758819.69       76.54282c (12121708)           449395.11
 3758819.69       73.95865c (12121708)
        449398.98   3758819.69       71.53402c (12121708)           449402.85
 3758819.69       69.25664c (12121708)
        449406.72   3758819.69       67.11293c (12121708)           449410.59
 3758819.69       65.10202c (12121708)
        449414.46   3758819.69       63.22558c (12121708)           449418.33
 3758819.69       61.44889c (12121708)
        449422.20   3758819.69       59.76395c (12121708)           449426.07
 3758819.69       58.16587c (12121708)
        449429.94   3758819.69       56.64352c (12121708)           449433.81
 3758819.69       55.19346c (12121708)
        449437.68   3758819.69       53.81051c (12121708)           449441.55
 3758819.69       52.48996c (12121708)
        449445.42   3758819.69       51.22754c (12121708)           449368.02
 3758833.73       96.91030c (12121708)
        449371.89   3758833.73       92.84727c (12121708)           449375.76
 3758833.73       89.11160c (12121708)
        449379.63   3758833.73       85.65853c (12121708)           449383.50
 3758833.73       82.45859c (12121708)
        449387.37   3758833.73       79.48420c (12121708)           449391.24
 3758833.73       76.71131c (12121708)
        449395.11   3758833.73       74.12257c (12121708)           449398.98
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3758833.73      71.69375c (12121708)
     449402.85   3758833.73      69.41257c (12121708)           449406.72
3758833.73      67.26543c (12121708)
     449410.59   3758833.73      65.25168c (12121708)           449414.46
3758833.73      63.37325c (12121708)
     449418.33   3758833.73      61.59467c (12121708)           449422.20
3758833.73      59.90792c (12121708)
     449426.07   3758833.73      58.30817c (12121708)           449429.94
3758833.73      56.78415c (12121708)
     449433.81   3758833.73      55.33248c (12121708)           449437.68
3758833.73      53.94797c (12121708)
     449441.55   3758833.73      52.62591c (12121708)           449445.42
3758833.73      51.36202c (12121708)
     449368.02   3758847.77      97.31768c (12121708)           449371.89
3758847.77      93.25697c (12121708)
     449375.76   3758847.77      89.52322c (12121708)           449379.63
3758847.77      86.07310c (12121708)
     449383.50   3758847.77      82.86325c (12121708)           449387.37
3758847.77      79.88139c (12121708)
     449391.24   3758847.77      77.09878c (12121708)           449395.11
3758847.77      74.49733c (12121708)
     449398.98   3758847.77      72.05951c (12121708)           449402.85
3758847.77      69.76962c (12121708)
     449406.72   3758847.77      67.61680c (12121708)           449410.59
3758847.77      65.58887c (12121708)
     449414.46   3758847.77      63.68747c (12121708)           449418.33
3758847.77      61.89006c (12121708)
     449422.20   3758847.77      60.18345c (12121708)           449426.07
3758847.77      58.56284c (12121708)
     449429.94   3758847.77      57.02164c (12121708)           449433.81
3758847.77      55.55386c (12121708)
     449437.68   3758847.77      54.15427c (12121708)           449441.55
3758847.77      52.82396c (12121708)
     449445.42   3758847.77      51.55607c (12121708)           449368.02
3758861.81      97.67891c (12121708)
     449371.89   3758861.81      93.63370c (12121708)           449375.76
3758861.81      89.90454c (12121708)
     449379.63   3758861.81      86.46451c (12121708)           449383.50
3758861.81      83.25561c (12121708)
     449387.37   3758861.81      80.26655c (12121708)           449391.24
3758861.81      77.47947c (12121708)
     449395.11   3758861.81      74.87384c (12121708)           449398.98
3758861.81      72.42987c (12121708)
     449402.85   3758861.81      70.13311c (12121708)           449406.72
3758861.81      67.97109c (12121708)
     449410.59   3758861.81      65.93345c (12121708)           449414.46
3758861.81      64.01016c (12121708)
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⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                              ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***

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 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                          *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                              INCLUDING SOURCE(S):    L0000001    , L0000002
 , L0000003    , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
 , L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
 , L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
 ,


                                         *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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


     X-COORD (M)  Y-COORD (M)        CONC    (YYMMDDHH)            X-COORD (M)
Y-COORD (M)       CONC    (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
        449418.33   3758861.81      62.18930c (12121708)            449422.20
 3758861.81      60.46287c (12121708)
        449426.07   3758861.81      58.82532c (12121708)            449429.94
 3758861.81      57.26601c (12121708)
        449433.81   3758861.81      55.78101c (12121708)            449437.68
 3758861.81      54.36496c (12121708)
        449441.55   3758861.81      53.02438c (12121708)            449445.42
 3758861.81      51.75211c (12121708)
        449368.02   3758875.85      97.92947c (12121708)            449371.89
 3758875.85      93.88592c (12121708)
        449375.76   3758875.85      90.16096c (12121708)            449379.63
 3758875.85      86.71874c (12121708)
        449383.50   3758875.85      83.51784c (12121708)            449387.37
 3758875.85      80.53021c (12121708)
        449391.24   3758875.85      77.74429c (12121708)            449395.11
 3758875.85      75.13407c (12121708)
        449398.98   3758875.85      72.68852c (12121708)            449402.85
 3758875.85      70.38803c (12121708)
        449406.72   3758875.85      68.22188c (12121708)            449410.59
 3758875.85      66.17791c (12121708)
        449414.46   3758875.85      64.24608c (12121708)            449418.33
 3758875.85      62.41881c (12121708)
        449422.20   3758875.85      60.68417c (12121708)            449426.07
 3758875.85      59.03661c (12121708)
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      449429.94    3758875.85        57.46957c (12121708)                    449433.81
3758875.85        55.97706c (12121708)
      449437.68    3758875.85        54.55558c (12121708)                    449441.55
3758875.85        53.20923c (12121708)
      449445.42    3758875.85        51.93281c (12121708)                    449368.02
3758889.89        98.14781c (12121708)
      449371.89    3758889.89        94.09799c (12121708)                    449375.76
3758889.89        90.36759c (12121708)
      449379.63    3758889.89        86.92533c (12121708)                    449383.50
3758889.89        83.72579c (12121708)
      449387.37    3758889.89        80.74065c (12121708)                    449391.24
3758889.89        77.95389c (12121708)
      449395.11    3758889.89        75.34272c (12121708)                    449398.98
3758889.89        72.89344c (12121708)
      449402.85    3758889.89        70.59104c (12121708)                    449406.72
3758889.89        68.42185c (12121708)
      449410.59    3758889.89        66.37426c (12121708)                    449414.46
3758889.89        64.43909c (12121708)
      449418.33    3758889.89        62.60636c (12121708)                    449422.20
3758889.89        60.87020c (12121708)
      449426.07    3758889.89        59.21927c (12121708)                    449429.94
3758889.89        57.64905c (12121708)
      449433.81    3758889.89        56.15337c (12121708)                    449437.68
3758889.89        54.72704c (12121708)
      449441.55    3758889.89        53.37882c (12121708)                    449445.42
3758889.89        52.09849c (12121708)
      449368.02    3758903.93        98.33005c (12121708)                    449371.89
3758903.93        94.27358c (12121708)
      449375.76    3758903.93        90.54305c (12121708)                    449379.63
3758903.93        87.09740c (12121708)
      449383.50    3758903.93        83.90806c (12121708)                    449387.37
3758903.93        80.93401c (12121708)
      449391.24    3758903.93        78.15595c (12121708)                    449395.11
3758903.93        75.55209c (12121708)
      449398.98    3758903.93        73.10791c (12121708)                    449402.85
3758903.93        70.80709c (12121708)
      449406.72    3758903.93        68.63858c (12121708)                    449410.59
3758903.93        66.58922c (12121708)
      449414.46    3758903.93        64.64724c (12121708)                    449418.33
3758903.93        62.80778c (12121708)
      449422.20    3758903.93        61.06229c (12121708)                    449426.07
3758903.93        59.40381c (12121708)
      449429.94    3758903.93        57.82584c (12121708)                    449433.81
3758903.93        56.32240c (12121708)
      449437.68    3758903.93        54.88839c (12121708)                    449441.55
3758903.93        53.53181c (12121708)
      449445.42    3758903.93        52.24940c (12121708)                    449368.02
3758917.97        98.43821c (12121708)
      449371.89    3758917.97        94.37966c (12121708)                    449375.76
3758917.97        90.64549c (12121708)
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        449379.63   3758917.97        87.19968c (12121708)                    449383.50
3758917.97      84.02815c (12121708)
        449387.37   3758917.97        81.06609c (12121708)                    449391.24
3758917.97      78.30525c (12121708)
        449395.11   3758917.97        75.71361c (12121708)                    449398.98
3758917.97      73.28390c (12121708)
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⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                              ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                              ***   12:18:15

                                 PAGE 21

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                            *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
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 -
```
        449402.85   3758917.97        70.99222c (12121708)                    449406.72
3758917.97      68.83423c (12121708)
        449410.59   3758917.97        66.78856c (12121708)                    449414.46
3758917.97      64.84766c (12121708)
        449418.33   3758917.97        63.00370c (12121708)                    449422.20
3758917.97      61.25071c (12121708)
        449426.07   3758917.97        59.58332c (12121708)                    449429.94
3758917.97      57.99360c (12121708)
        449433.81   3758917.97        56.47945c (12121708)                    449437.68
3758917.97      55.03425c (12121708)
        449441.55   3758917.97        53.67171c (12121708)                    449445.42
3758917.97      52.38428c (12121708)
        449368.02   3758932.01        98.52517c (12121708)                    449371.89
3758932.01      94.45806c (12121708)
        449375.76   3758932.01        90.71764c (12121708)                    449379.63
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3758932.01          87.26598c (12121708)
      449383.50    3758932.01          84.09886c (12121708)                     449387.37
3758932.01          81.15701c (12121708)
      449391.24    3758932.01          78.39931c (12121708)                     449395.11
3758932.01          75.82127c (12121708)
      449398.98    3758932.01          73.39438c (12121708)                     449402.85
3758932.01          71.11548c (12121708)
      449406.72    3758932.01          68.96064c (12121708)                     449410.59
3758932.01          66.92699c (12121708)
      449414.46    3758932.01          64.99124c (12121708)                     449418.33
3758932.01          63.14853c (12121708)
      449422.20    3758932.01          61.39652c (12121708)                     449426.07
3758932.01          59.72815c (12121708)
      449429.94    3758932.01          58.13507c (12121708)                     449433.81
3758932.01          56.61509c (12121708)
      449437.68    3758932.01          55.16475c (12121708)                     449441.55
3758932.01          53.79553c (12121708)
      449445.42    3758932.01          52.50073c (12121708)                     449368.02
3758946.05          98.61582c (12121708)
      449371.89    3758946.05          94.54018c (12121708)                     449375.76
3758946.05          90.79317c (12121708)
      449379.63    3758946.05          87.33651c (12121708)                     449383.50
3758946.05          84.18648c (12121708)
      449387.37    3758946.05          81.23696c (12121708)                     449391.24
3758946.05          78.49044c (12121708)
      449395.11    3758946.05          75.90871c (12121708)                     449398.98
3758946.05          73.48955c (12121708)
      449402.85    3758946.05          71.20736c (12121708)                     449406.72
3758946.05          69.05796c (12121708)
      449410.59    3758946.05          67.02324c (12121708)                     449414.46
3758946.05          65.09318c (12121708)
      449418.33    3758946.05          63.25639c (12121708)                     449422.20
3758946.05          61.50531c (12121708)
      449426.07    3758946.05          59.83905c (12121708)                     449429.94
3758946.05          58.24786c (12121708)
      449433.81    3758946.05          56.72796c (12121708)                     449437.68
3758946.05          55.27595c (12121708)
      449441.55    3758946.05          53.90095c (12121708)                     449445.42
3758946.05          52.59684c (12121708)
      449368.02    3758960.09          98.69783c (12121708)                     449371.89
3758960.09          94.61703c (12121708)
      449375.76    3758960.09          90.86486c (12121708)                     449379.63
3758960.09          87.40354c (12121708)
      449383.50    3758960.09          84.25562c (12121708)                     449387.37
3758960.09          81.30594c (12121708)
      449391.24    3758960.09          78.56035c (12121708)                     449395.11
3758960.09          75.97819c (12121708)
      449398.98    3758960.09          73.56123c (12121708)                     449402.85
3758960.09          71.27993c (12121708)
      449406.72    3758960.09          69.13339c (12121708)                     449410.59
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3758960.09       67.10022c (12121708)
     449414.46   3758960.09      65.17564c (12121708)                449418.33
3758960.09       63.34376c (12121708)
     449422.20   3758960.09      61.59621c (12121708)                449426.07
3758960.09       59.93179c (12121708)
     449429.94   3758960.09      58.34346c (12121708)                449433.81
3758960.09       56.82551c (12121708)
     449437.68   3758960.09      55.37368c (12121708)                449441.55
3758960.09       53.99386c (12121708)
     449445.42   3758960.09      52.67880c (12121708)                449368.02
3758974.13       98.87288c (12121708)
     449371.89   3758974.13      94.77951c (12121708)                449375.76
3758974.13       91.01576c (12121708)
     449379.63   3758974.13      87.54378c (12121708)                449383.50
3758974.13       84.37171c (12121708)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                          ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   12:18:15

                          PAGE 22
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                         *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                       *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
      449387.37   3758974.13   81.40379c (12121708)   449391.24
3758974.13   78.63465c (12121708)
     449395.11   3758974.13   76.05291c (12121708)   449398.98
3758974.13   73.62280c (12121708)
     449402.85   3758974.13   71.34409c (12121708)   449406.72
3758974.13   69.19023c (12121708)
```

```
     449410.59   3758974.13        67.15860c (12121708)                      449414.46
3758974.13        65.23972c (12121708)
     449418.33   3758974.13        63.41254c (12121708)                      449422.20
3758974.13        61.67139c (12121708)
     449426.07   3758974.13        60.00828c (12121708)                      449429.94
3758974.13        58.42194c (12121708)
     449433.81   3758974.13        56.90629c (12121708)                      449437.68
3758974.13        55.45641c (12121708)
     449441.55   3758974.13        54.07152c (12121708)                      449445.42
3758974.13        52.74933c (12121708)
     449368.02   3758988.17        99.03099c (12121708)                      449371.89
3758988.17        94.92113c (12121708)
     449375.76   3758988.17        91.14400c (12121708)                      449379.63
3758988.17        87.65898c (12121708)
     449383.50   3758988.17        84.46895c (12121708)                      449387.37
3758988.17        81.48748c (12121708)
     449391.24   3758988.17        78.70746c (12121708)                      449395.11
3758988.17        76.10696c (12121708)
     449398.98   3758988.17        73.67859c (12121708)                      449402.85
3758988.17        71.38811c (12121708)
     449406.72   3758988.17        69.23095c (12121708)                      449410.59
3758988.17        67.20467c (12121708)
     449414.46   3758988.17        65.28481c (12121708)                      449418.33
3758988.17        63.46275c (12121708)
     449422.20   3758988.17        61.72518c (12121708)                      449426.07
3758988.17        60.06546c (12121708)
     449429.94   3758988.17        58.48297c (12121708)                      449433.81
3758988.17        56.96942c (12121708)
     449437.68   3758988.17        55.52173c (12121708)                      449441.55
3758988.17        54.13511c (12121708)
     449445.42   3758988.17        52.80707c (12121708)                      449368.02
3759002.21        99.04692c (12121708)
     449371.89   3759002.21        94.93289c (12121708)                      449375.76
3759002.21        91.15196c (12121708)
     449379.63   3759002.21        87.66559c (12121708)                      449383.50
3759002.21        84.49264c (12121708)
     449387.37   3759002.21        81.51795c (12121708)                      449391.24
3759002.21        78.75630c (12121708)
     449395.11   3759002.21        76.15910c (12121708)                      449398.98
3759002.21        73.72349c (12121708)
     449402.85   3759002.21        71.44010c (12121708)                      449406.72
3759002.21        69.28213c (12121708)
     449410.59   3759002.21        67.25081c (12121708)                      449414.46
3759002.21        65.32450c (12121708)
     449418.33   3759002.21        63.49802c (12121708)                      449422.20
3759002.21        61.75694c (12121708)
     449426.07   3759002.21        60.10149c (12121708)                      449429.94
3759002.21        58.52144c (12121708)
     449433.81   3759002.21        57.01172c (12121708)                      449437.68
3759002.21        55.57080c (12121708)
```

```
          449441.55   3759002.21       54.18704c (12121708)                    449445.42
3759002.21       52.86002c (12121708)
          449368.02   3759016.25       99.05938c (12121708)                    449371.89
3759016.25       94.94406c (12121708)
          449375.76   3759016.25       91.16089c (12121708)                    449379.63
3759016.25       87.67203c (12121708)
          449383.50   3759016.25       84.64303  (14121224)                    449387.37
3759016.25       81.54864c (12121708)
          449391.24   3759016.25       78.78004c (12121708)                    449395.11
3759016.25       76.19899c (12121708)
          449398.98   3759016.25       73.76355c (12121708)                    449402.85
3759016.25       71.47366c (12121708)
          449406.72   3759016.25       69.32038c (12121708)                    449410.59
3759016.25       67.27954c (12121708)
          449414.46   3759016.25       65.35152c (12121708)                    449418.33
3759016.25       63.51843c (12121708)
          449422.20   3759016.25       61.77992c (12121708)                    449426.07
3759016.25       60.12186c (12121708)
          449429.94   3759016.25       58.54558c (12121708)                    449433.81
3759016.25       57.03914c (12121708)
          449437.68   3759016.25       55.60373c (12121708)                    449441.55
3759016.25       54.22492c (12121708)
          449445.42   3759016.25       52.89796c (12121708)                    449368.02
3759030.29       99.32046c (12121708)
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                          ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   12:18:15

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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                          *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                          INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                          L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                          L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                          L0000022   , L0000023   , L0000024   , L0000025   , L0000026
,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)

```
Y-COORD (M)         CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
      449371.89   3759030.29     95.17799c (12121708)          449375.76
3759030.29      91.37208c (12121708)
      449379.63   3759030.29     87.86342c (12121708)          449383.50
3759030.29      84.66891c (12121708)
      449387.37   3759030.29     81.68066c (12121708)          449391.24
3759030.29      78.89807c (12121708)
      449395.11   3759030.29     76.28570c (12121708)          449398.98
3759030.29      73.83930c (12121708)
      449402.85   3759030.29     71.53207c (12121708)          449406.72
3759030.29      69.36040c (12121708)
      449410.59   3759030.29     67.30437c (12121708)          449414.46
3759030.29      65.36274c (12121708)
      449418.33   3759030.29     63.52083c (12121708)          449422.20
3759030.29      61.77133c (12121708)
      449426.07   3759030.29     60.11216c (12121708)          449429.94
3759030.29      58.53194c (12121708)
      449433.81   3759030.29     57.02693c (12121708)          449437.68
3759030.29      55.59019c (12121708)
      449441.55   3759030.29     54.21045c (12121708)          449445.42
3759030.29      52.88044c (12121708)
      449368.02   3759044.33     99.53746c (12121708)          449371.89
3759044.33      95.37184c (12121708)
      449375.76   3759044.33     91.54627c (12121708)          449379.63
3759044.33      88.02143c (12121708)
      449383.50   3759044.33     84.79259c (12121708)          449387.37
3759044.33      81.77922c (12121708)
      449391.24   3759044.33     78.97244c (12121708)          449395.11
3759044.33      76.33992c (12121708)
      449398.98   3759044.33     73.87255c (12121708)          449402.85
3759044.33      71.54737c (12121708)
      449406.72   3759044.33     69.35728c (12121708)          449410.59
3759044.33      67.28762c (12121708)
      449414.46   3759044.33     65.33664c (12121708)          449418.33
3759044.33      63.49219c (12121708)
      449422.20   3759044.33     61.74215c (12121708)          449426.07
3759044.33      60.08000c (12121708)
      449429.94   3759044.33     58.50198c (12121708)          449433.81
3759044.33      56.99736c (12121708)
      449437.68   3759044.33     55.56319c (12121708)          449441.55
3759044.33      54.18317c (12121708)
      449445.42   3759044.33     52.85028c (12121708)
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

                                         ** CONC OF CO   IN MICROGRAMS/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   121.36092 ON 13020301: AT (449368.02,
3759016.25,   199.00,   199.00,   0.00) DC

  *** RECEPTOR TYPES: GC = GRIDCART
                       GP = GRIDPOLR
                       DC = DISCCART
                       DP = DISCPOLR
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                       ***   11/11/21
  *** AERMET - VERSION 16216 ***   ***
                       ***   12:18:15

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

                                         ** CONC OF CO   IN MICROGRAMS/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   99.53746c ON 12121708: AT (449368.02,
3759044.33,   198.07,   198.07,   0.00) DC

```
  *** RECEPTOR TYPES:  GC = GRIDCART
                       GP = GRIDPOLR
                       DC = DISCCART
                       DP = DISCPOLR
♠ *** AERMOD - VERSION  19191 ***    *** C:\LAKES\AERMOD VIEW\14172 HRA\CO\CO.ISC
                          ***           11/11/21
  *** AERMET - VERSION  16216 ***    ***
                       ***           12:18:15


                                  PAGE  26
  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

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

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

  A Total of            0 Fatal Error Message(s)
  A Total of            2 Warning Message(s)
  A Total of         1638 Informational Message(s)

  A Total of        43848 Hours Were Processed

  A Total of         1039 Calm Hours Identified

  A Total of          599 Missing Hours Identified (  1.37 Percent)


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



      ********   WARNING MESSAGES   ********
  ME W186     130        MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
        0.50
  ME W187     130        MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


      **********************************
      *** AERMOD Finishes Successfully ***
      **********************************

  ** Lakes Environmental AERMOD MPI
  **
  ************************************
  **
  ** AERMOD INPUT PRODUCED BY:
  ** AERMOD VIEW VER. 10.0.1
  ** LAKES ENVIRONMENTAL SOFTWARE INC.
  ** DATE: 11/11/2021
```

```
** FILE: C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ADI
**
***********************************
**
**
***********************************
** AERMOD CONTROL PATHWAY
***********************************
**
**
CO STARTING
   TITLEONE C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
   MODELOPT DFAULT CONC
   AVERTIME ANNUAL
   URBANOPT 2189641
   POLLUTID DPM
   RUNORNOT RUN
   ERRORFIL DPM.ERR
CO FINISHED
**
***********************************
** AERMOD SOURCE PATHWAY
***********************************
**
**
SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** ------------------------------------------------------------------------
** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC I-15 FREEWAY
** PREFIX
** LENGTH OF SIDE = 46.00
** CONFIGURATION = ADJACENT
** EMISSION RATE = 0.00184
** VERTICAL DIMENSION = 6.99
** SZINIT = 3.25
** NODES = 2
** 449288.372, 3758373.924, 188.51, 3.49, 21.40
** 449298.585, 3759554.578, 201.92, 3.49, 21.40
** ------------------------------------------------------------------------
   LOCATION L0000131      VOLUME      449288.571 3758396.923 189.03
   LOCATION L0000132      VOLUME      449288.969 3758442.921 189.02
   LOCATION L0000133      VOLUME      449289.367 3758488.920 189.85
   LOCATION L0000134      VOLUME      449289.765 3758534.918 191.94
   LOCATION L0000135      VOLUME      449290.163 3758580.916 193.48
   LOCATION L0000136      VOLUME      449290.561 3758626.914 194.96
   LOCATION L0000137      VOLUME      449290.958 3758672.913 195.00
   LOCATION L0000138      VOLUME      449291.356 3758718.911 195.99
```

```
   LOCATION L0000139     VOLUME    449291.754 3758764.909 195.92
   LOCATION L0000140     VOLUME    449292.152 3758810.908 194.99
   LOCATION L0000141     VOLUME    449292.550 3758856.906 195.58
   LOCATION L0000142     VOLUME    449292.948 3758902.904 197.22
   LOCATION L0000143     VOLUME    449293.346 3758948.902 198.00
   LOCATION L0000144     VOLUME    449293.744 3758994.901 198.00
   LOCATION L0000145     VOLUME    449294.142 3759040.899 198.00
   LOCATION L0000146     VOLUME    449294.540 3759086.897 197.29
   LOCATION L0000147     VOLUME    449294.938 3759132.895 197.98
   LOCATION L0000148     VOLUME    449295.335 3759178.894 198.42
   LOCATION L0000149     VOLUME    449295.733 3759224.892 199.00
   LOCATION L0000150     VOLUME    449296.131 3759270.890 200.89
   LOCATION L0000151     VOLUME    449296.529 3759316.889 201.76
   LOCATION L0000152     VOLUME    449296.927 3759362.887 201.20
   LOCATION L0000153     VOLUME    449297.325 3759408.885 201.00
   LOCATION L0000154     VOLUME    449297.723 3759454.883 201.00
   LOCATION L0000155     VOLUME    449298.121 3759500.882 201.00
   LOCATION L0000156     VOLUME    449298.519 3759546.880 201.69
** END OF LINE VOLUME SOURCE ID = SLINE1
** SOURCE PARAMETERS **
** LINE VOLUME SOURCE ID = SLINE1
   SRCPARAM L0000131     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000132     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000133     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000134     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000135     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000136     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000137     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000138     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000139     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000140     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000141     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000142     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000143     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000144     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000145     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000146     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000147     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000148     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000149     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000150     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000151     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000152     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000153     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000154     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000155     0.0000707692     3.49     21.40     3.25
   SRCPARAM L0000156     0.0000707692     3.49     21.40     3.25
** ----------------------------------------------------------------
   URBANSRC ALL
   SRCGROUP ALL
```

```
SO FINISHED
**
*************************************
** AERMOD RECEPTOR PATHWAY
*************************************
**
**
RE STARTING
   INCLUDED DPM.ROU
RE FINISHED
**
*************************************
** AERMOD METEOROLOGY PATHWAY
*************************************
**
**
ME STARTING
   SURFFILE ..\KRAL_V9_ADJU\KRAL_V9.SFC
   PROFFILE ..\KRAL_V9_ADJU\KRAL_V9.PFL
   SURFDATA 3171 2012
   UAIRDATA 3190 2012
   PROFBASE 245.0 METERS
ME FINISHED
**
*************************************
** AERMOD OUTPUT PATHWAY
*************************************
**
**
OU STARTING
** AUTO-GENERATED PLOTFILES
   PLOTFILE   ANNUAL ALL DPM.AD\AN00GALL.PLT 31
   SUMMFILE DPM.SUM
OU FINISHED


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

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

 A Total of           0 Fatal Error Message(s)
 A Total of           2 Warning Message(s)
 A Total of           0 Informational Message(s)


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


     ********   WARNING MESSAGES   ********
```

```
ME W186      130          MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
ME W187      130          MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


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


 ♠ *** AERMOD - VERSION  19191 ***    *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                         ***          11/11/21
  *** AERMET - VERSION  16216 ***    ***
                         ***          10:36:53


                                     PAGE   1
  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  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 URBAN Dispersion Algorithm for the SBL for    26 Source(s),
    for Total of    1 Urban Area(s):
    Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m

  **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.
          6. Urban Roughness Length of 1.0 Meter Assumed.

  **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 Assumes No FLAGPOLE Receptor Heights.

  **The User Specified a Pollutant Type of:  DPM
```

```
   **Model Calculates ANNUAL Averages Only

  **This Run Includes:      26 Source(s);       1 Source Group(s); and      441
Receptor(s)

                    with:      0 POINT(s), including
                               0 POINTCAP(s) and      0 POINTHOR(s)
                    and:      26 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:  16216

  **Output Options Selected:
          Model Outputs Tables of ANNUAL Averages by Receptor
          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) =   245.00 ;  Decay
Coef. =    0.000     ;  Rot. Angle =     0.0
                  Emission Units = GRAMS/SEC                             ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

  **Approximate Storage Requirements of Model =      3.6 MB of RAM.

  **Input Runstream File:          aermod.inp

  **Output Print File:             aermod.out


  **Detailed Error/Message File:   DPM.ERR

  **File for Summary of Results:   DPM.SUM
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                              ***   11/11/21
  *** AERMET - VERSION 16216 ***   ***
                              ***   10:36:53

                                      PAGE   2
  *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

                                            *** VOLUME SOURCE DATA ***

                 NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE
    SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY
SZ   SOURCE SCALAR VARY
     ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
 -
- - - - - - - - - - - - - - - - - - -

 L0000131   0   0.70769E-04 449288.6 3758396.9   189.0   3.49   21.40
3.25   YES
 L0000132   0   0.70769E-04 449289.0 3758442.9   189.0   3.49   21.40
3.25   YES
 L0000133   0   0.70769E-04 449289.4 3758488.9   189.9   3.49   21.40
3.25   YES
 L0000134   0   0.70769E-04 449289.8 3758534.9   191.9   3.49   21.40
3.25   YES
 L0000135   0   0.70769E-04 449290.2 3758580.9   193.5   3.49   21.40
3.25   YES
 L0000136   0   0.70769E-04 449290.6 3758626.9   195.0   3.49   21.40
3.25   YES
 L0000137   0   0.70769E-04 449291.0 3758672.9   195.0   3.49   21.40
3.25   YES
 L0000138   0   0.70769E-04 449291.4 3758718.9   196.0   3.49   21.40
3.25   YES
 L0000139   0   0.70769E-04 449291.8 3758764.9   195.9   3.49   21.40
3.25   YES
 L0000140   0   0.70769E-04 449292.2 3758810.9   195.0   3.49   21.40
3.25   YES
 L0000141   0   0.70769E-04 449292.5 3758856.9   195.6   3.49   21.40
3.25   YES
 L0000142   0   0.70769E-04 449292.9 3758902.9   197.2   3.49   21.40
3.25   YES
 L0000143   0   0.70769E-04 449293.3 3758948.9   198.0   3.49   21.40
3.25   YES
 L0000144   0   0.70769E-04 449293.7 3758994.9   198.0   3.49   21.40
3.25   YES
 L0000145   0   0.70769E-04 449294.1 3759040.9   198.0   3.49   21.40
3.25   YES

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  L0000146        0   0.70769E-04  449294.5 3759086.9   197.3     3.49     21.40
3.25     YES
  L0000147        0   0.70769E-04  449294.9 3759132.9   198.0     3.49     21.40
3.25     YES
  L0000148        0   0.70769E-04  449295.3 3759178.9   198.4     3.49     21.40
3.25     YES
  L0000149        0   0.70769E-04  449295.7 3759224.9   199.0     3.49     21.40
3.25     YES
  L0000150        0   0.70769E-04  449296.1 3759270.9   200.9     3.49     21.40
3.25     YES
  L0000151        0   0.70769E-04  449296.5 3759316.9   201.8     3.49     21.40
3.25     YES
  L0000152        0   0.70769E-04  449296.9 3759362.9   201.2     3.49     21.40
3.25     YES
  L0000153        0   0.70769E-04  449297.3 3759408.9   201.0     3.49     21.40
3.25     YES
  L0000154        0   0.70769E-04  449297.7 3759454.9   201.0     3.49     21.40
3.25     YES
  L0000155        0   0.70769E-04  449298.1 3759500.9   201.0     3.49     21.40
3.25     YES
  L0000156        0   0.70769E-04  449298.5 3759546.9   201.7     3.49     21.40
3.25     YES
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                              PAGE   3
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN   ADJ_U*

                                      *** SOURCE IDs DEFINING SOURCE GROUPS
***

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

  ALL   L0000131   , L0000132   , L0000133   , L0000134   , L0000135   ,
L0000136   , L0000137   , L0000138   ,

             L0000139   , L0000140   , L0000141   , L0000142   , L0000143   ,
L0000144   , L0000145   , L0000146   ,

             L0000147   , L0000148   , L0000149   , L0000150   , L0000151   ,
L0000152   , L0000153   , L0000154   ,

             L0000155   , L0000156   ,

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  *** AERMET - VERSION  16216 ***    ***
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  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*



                                        *** SOURCE IDs DEFINED AS URBAN SOURCES
***

   URBAN ID    URBAN POP                                       SOURCE IDs
   --------    ---------                                       ----------


             2189641.   L0000131    , L0000132    , L0000133    , L0000134     ,
L0000135    , L0000136    , L0000137    ,
  L0000138    ,

             L0000139    , L0000140    , L0000141    , L0000142    , L0000143     ,
L0000144    , L0000145    , L0000146    ,

             L0000147    , L0000148    , L0000149    , L0000150    , L0000151     ,
L0000152    , L0000153    , L0000154    ,

             L0000155    , L0000156    ,
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                          ***          11/11/21
  *** AERMET - VERSION  16216 ***    ***
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                                    PAGE    5
  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


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


    ( 449368.0, 3758763.5,    192.6,    195.0,       0.0);        ( 449371.9,
3758763.5,    192.2,    195.0,      0.0);
    ( 449375.8, 3758763.5,    191.8,    195.0,       0.0);        ( 449379.6,
3758763.5,    191.4,    195.0,      0.0);
    ( 449383.5, 3758763.5,    191.2,    195.0,       0.0);        ( 449387.4,
3758763.5,    190.9,    195.0,      0.0);
    ( 449391.2, 3758763.5,    190.6,    190.6,       0.0);        ( 449395.1,
3758763.5,    190.4,    190.4,      0.0);
    ( 449399.0, 3758763.5,    190.1,    190.1,       0.0);        ( 449402.8,
3758763.5,    189.9,    189.9,      0.0);
    ( 449406.7, 3758763.5,    189.6,    189.6,       0.0);        ( 449410.6,
3758763.5,    189.4,    189.4,      0.0);
    ( 449414.5, 3758763.5,    189.3,    189.3,       0.0);        ( 449418.3,
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3758763.5,   188.9,   188.9,   0.0);
     (449429.9, 3758763.5,   188.7,   188.7,   0.0);   (449433.8,
3758763.5,   188.6,   188.6,   0.0);
     (449437.7, 3758763.5,   188.5,   188.5,   0.0);   (449441.5,
3758763.5,   188.4,   188.4,   0.0);
     (449445.4, 3758763.5,   188.3,   188.3,   0.0);   (449368.0,
3758777.6,   192.5,   195.0,   0.0);
     (449371.9, 3758777.6,   192.0,   195.0,   0.0);   (449375.8,
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     (449379.6, 3758777.6,   191.0,   195.0,   0.0);   (449383.5,
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     (449387.4, 3758777.6,   190.5,   195.0,   0.0);   (449391.2,
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     (449395.1, 3758777.6,   190.0,   195.0,   0.0);   (449399.0,
3758777.6,   189.7,   195.0,   0.0);
     (449402.8, 3758777.6,   189.5,   195.0,   0.0);   (449406.7,
3758777.6,   189.2,   195.0,   0.0);
     (449410.6, 3758777.6,   189.0,   189.0,   0.0);   (449414.5,
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     (449418.3, 3758777.6,   188.8,   188.8,   0.0);   (449422.2,
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     (449426.1, 3758777.6,   188.5,   188.5,   0.0);   (449429.9,
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3758777.6,   188.0,   188.0,   0.0);
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3758791.6,   191.5,   195.0,   0.0);
     (449383.5, 3758791.6,   191.2,   195.0,   0.0);   (449387.4,
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     (449391.2, 3758791.6,   190.7,   190.7,   0.0);   (449395.1,
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     (449399.0, 3758791.6,   190.2,   190.2,   0.0);   (449402.8,
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     (449406.7, 3758791.6,   189.7,   189.7,   0.0);   (449410.6,
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3758791.6,   189.0,   189.0,   0.0);
     (449429.9, 3758791.6,   188.8,   188.8,   0.0);   (449433.8,
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     (449445.4, 3758791.6,   188.4,   188.4,   0.0);   (449368.0,

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     ( 449379.6, 3758805.6,       192.0,       192.0,        0.0);              ( 449383.5,
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     ( 449387.4, 3758805.6,       191.5,       191.5,        0.0);              ( 449391.2,
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     ( 449395.1, 3758805.6,       190.9,       190.9,        0.0);              ( 449399.0,
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     ( 449402.8, 3758805.6,       190.4,       190.4,        0.0);              ( 449406.7,
3758805.6,       190.2,       190.2,        0.0);
     ( 449410.6, 3758805.6,       189.9,       189.9,        0.0);              ( 449414.5,
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     ( 449433.8, 3758805.6,       189.2,       189.2,        0.0);              ( 449437.7,
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     ( 449375.8, 3758819.7,       192.2,       192.2,        0.0);              ( 449379.6,
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     ( 449383.5, 3758819.7,       191.7,       191.7,        0.0);              ( 449387.4,
3758819.7,       191.5,       191.5,        0.0);
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                          ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   10:36:53

                              PAGE   6

 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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

```
     ( 449391.2, 3758819.7,       191.2,       191.2,        0.0);              ( 449395.1,
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     ( 449399.0, 3758819.7,       190.7,       190.7,        0.0);              ( 449402.8,
3758819.7,       190.4,       190.4,        0.0);
     ( 449406.7, 3758819.7,       190.2,       190.2,        0.0);              ( 449410.6,
3758819.7,       190.0,       190.0,        0.0);
     ( 449414.5, 3758819.7,       189.8,       189.8,        0.0);              ( 449418.3,
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     ( 449422.2, 3758819.7,       189.6,       189.6,        0.0);              ( 449426.1,
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     ( 449429.9, 3758819.7,       189.3,       189.3,        0.0);              ( 449433.8,
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    (449445.4, 3758819.7,   188.8,   188.8,   0.0);   (449368.0,
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    (449371.9, 3758833.7,   192.5,   192.5,   0.0);   (449375.8,
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    (449387.4, 3758833.7,   191.5,   191.5,   0.0);   (449391.2,
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    (449433.8, 3758833.7,   189.2,   189.2,   0.0);   (449437.7,
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    (449375.8, 3758847.8,   193.0,   193.0,   0.0);   (449379.6,
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    (449383.5, 3758847.8,   192.5,   192.5,   0.0);   (449387.4,
3758847.8,   192.2,   192.2,   0.0);
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    (449406.7, 3758847.8,   191.0,   191.0,   0.0);   (449410.6,
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    (449414.5, 3758847.8,   190.5,   190.5,   0.0);   (449418.3,
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    (449422.2, 3758847.8,   190.2,   190.2,   0.0);   (449426.1,
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    (449437.7, 3758847.8,   189.5,   189.5,   0.0);   (449441.5,
3758847.8,   189.3,   189.3,   0.0);
    (449445.4, 3758847.8,   189.2,   189.2,   0.0);   (449368.0,
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    (449371.9, 3758861.8,   194.0,   194.0,   0.0);   (449375.8,
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    (449379.6, 3758861.8,   193.7,   193.7,   0.0);   (449383.5,

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     ( 449402.8, 3758861.8,     192.1,     192.1,      0.0);        ( 449406.7,
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     ( 449410.6, 3758861.8,     191.6,     191.6,      0.0);        ( 449414.5,
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     ( 449418.3, 3758861.8,     191.2,     191.2,      0.0);        ( 449422.2,
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     ( 449426.1, 3758861.8,     190.7,     190.7,      0.0);        ( 449429.9,
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     ( 449433.8, 3758861.8,     190.2,     190.2,      0.0);        ( 449437.7,
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     ( 449441.5, 3758861.8,     189.8,     189.8,      0.0);        ( 449445.4,
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     ( 449368.0, 3758875.8,     194.7,     194.7,      0.0);        ( 449371.9,
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     ( 449375.8, 3758875.8,     194.4,     194.4,      0.0);        ( 449379.6,
 3758875.8,     194.3,     194.3,      0.0);
     ( 449383.5, 3758875.8,     194.1,     194.1,      0.0);        ( 449387.4,
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     ( 449391.2, 3758875.8,     193.5,     193.5,      0.0);        ( 449395.1,
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     ( 449399.0, 3758875.8,     193.0,     193.0,      0.0);        ( 449402.8,
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     ( 449406.7, 3758875.8,     192.5,     192.5,      0.0);        ( 449410.6,
 3758875.8,     192.2,     192.2,      0.0);
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                         PAGE   7
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


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


     ( 449414.5, 3758875.8,     192.0,     192.0,      0.0);        ( 449418.3,
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     ( 449422.2, 3758875.8,     191.5,     191.5,      0.0);        ( 449426.1,
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     ( 449429.9, 3758875.8,     191.0,     191.0,      0.0);        ( 449433.8,
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     ( 449437.7, 3758875.8,     190.4,     190.4,      0.0);        ( 449441.5,
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     ( 449445.4, 3758875.8,     190.1,     190.1,      0.0);        ( 449368.0,
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3758889.9,   194.9,   194.9,   0.0);
    (449379.6, 3758889.9,   194.8,   194.8,   0.0);   (449383.5,
3758889.9,   194.5,   194.5,   0.0);
    (449387.4, 3758889.9,   194.3,   194.3,   0.0);   (449391.2,
3758889.9,   194.0,   194.0,   0.0);
    (449395.1, 3758889.9,   193.7,   193.7,   0.0);   (449399.0,
3758889.9,   193.5,   193.5,   0.0);
    (449402.8, 3758889.9,   193.2,   193.2,   0.0);   (449406.7,
3758889.9,   193.0,   193.0,   0.0);
    (449410.6, 3758889.9,   192.7,   192.7,   0.0);   (449414.5,
3758889.9,   192.5,   192.5,   0.0);
    (449418.3, 3758889.9,   192.2,   192.2,   0.0);   (449422.2,
3758889.9,   191.9,   191.9,   0.0);
    (449426.1, 3758889.9,   191.7,   191.7,   0.0);   (449429.9,
3758889.9,   191.4,   191.4,   0.0);
    (449433.8, 3758889.9,   191.2,   191.2,   0.0);   (449437.7,
3758889.9,   190.9,   190.9,   0.0);
    (449441.5, 3758889.9,   190.7,   190.7,   0.0);   (449445.4,
3758889.9,   190.6,   190.6,   0.0);
    (449368.0, 3758903.9,   195.8,   195.8,   0.0);   (449371.9,
3758903.9,   195.7,   195.7,   0.0);
    (449375.8, 3758903.9,   195.6,   195.6,   0.0);   (449379.6,
3758903.9,   195.5,   195.5,   0.0);
    (449383.5, 3758903.9,   195.2,   195.2,   0.0);   (449387.4,
3758903.9,   195.0,   195.0,   0.0);
    (449391.2, 3758903.9,   194.7,   194.7,   0.0);   (449395.1,
3758903.9,   194.5,   194.5,   0.0);
    (449399.0, 3758903.9,   194.2,   194.2,   0.0);   (449402.8,
3758903.9,   194.0,   194.0,   0.0);
    (449406.7, 3758903.9,   193.7,   193.7,   0.0);   (449410.6,
3758903.9,   193.4,   193.4,   0.0);
    (449414.5, 3758903.9,   193.1,   193.1,   0.0);   (449418.3,
3758903.9,   192.8,   192.8,   0.0);
    (449422.2, 3758903.9,   192.6,   192.6,   0.0);   (449426.1,
3758903.9,   192.3,   192.3,   0.0);
    (449429.9, 3758903.9,   192.0,   192.0,   0.0);   (449433.8,
3758903.9,   191.7,   195.0,   0.0);
    (449437.7, 3758903.9,   191.4,   195.0,   0.0);   (449441.5,
3758903.9,   191.2,   191.2,   0.0);
    (449445.4, 3758903.9,   191.1,   191.1,   0.0);   (449368.0,
3758918.0,   196.6,   196.6,   0.0);
    (449371.9, 3758918.0,   196.5,   196.5,   0.0);   (449375.8,
3758918.0,   196.5,   196.5,   0.0);
    (449379.6, 3758918.0,   196.4,   196.4,   0.0);   (449383.5,
3758918.0,   196.2,   196.2,   0.0);
    (449387.4, 3758918.0,   195.9,   195.9,   0.0);   (449391.2,
3758918.0,   195.7,   195.7,   0.0);
    (449395.1, 3758918.0,   195.4,   195.4,   0.0);   (449399.0,

3758918.0,   195.1,   195.1,   0.0);
    (449402.8, 3758918.0,   194.9,   194.9,   0.0);   (449406.7,
3758918.0,   194.6,   194.6,   0.0);
    (449410.6, 3758918.0,   194.3,   194.3,   0.0);   (449414.5,
3758918.0,   194.0,   195.0,   0.0);
    (449418.3, 3758918.0,   193.6,   195.0,   0.0);   (449422.2,
3758918.0,   193.3,   195.0,   0.0);
    (449426.1, 3758918.0,   192.9,   195.0,   0.0);   (449429.9,
3758918.0,   192.6,   195.0,   0.0);
    (449433.8, 3758918.0,   192.2,   195.0,   0.0);   (449437.7,
3758918.0,   191.9,   195.0,   0.0);
    (449441.5, 3758918.0,   191.7,   195.0,   0.0);   (449445.4,
3758918.0,   191.5,   191.5,   0.0);
    (449368.0, 3758932.0,   197.2,   197.2,   0.0);   (449371.9,
3758932.0,   197.2,   197.2,   0.0);
    (449375.8, 3758932.0,   197.2,   197.2,   0.0);   (449379.6,
3758932.0,   197.2,   197.2,   0.0);
    (449383.5, 3758932.0,   196.9,   196.9,   0.0);   (449387.4,
3758932.0,   196.7,   196.7,   0.0);
    (449391.2, 3758932.0,   196.4,   196.4,   0.0);   (449395.1,
3758932.0,   196.2,   196.2,   0.0);
    (449399.0, 3758932.0,   195.9,   195.9,   0.0);   (449402.8,
3758932.0,   195.6,   195.6,   0.0);
    (449406.7, 3758932.0,   195.4,   195.4,   0.0);   (449410.6,
3758932.0,   195.1,   195.1,   0.0);
    (449414.5, 3758932.0,   194.7,   194.7,   0.0);   (449418.3,
3758932.0,   194.3,   194.3,   0.0);
    (449422.2, 3758932.0,   193.9,   193.9,   0.0);   (449426.1,
3758932.0,   193.5,   193.5,   0.0);
    (449429.9, 3758932.0,   193.1,   193.1,   0.0);   (449433.8,
3758932.0,   192.8,   192.8,   0.0);
⬧ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   10:36:53

                            PAGE   8
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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

    (449437.7, 3758932.0,   192.4,   192.4,   0.0);   (449441.5,
3758932.0,   192.1,   192.1,   0.0);
    (449445.4, 3758932.0,   192.0,   192.0,   0.0);   (449368.0,
3758946.0,   197.7,   197.7,   0.0);
    (449371.9, 3758946.0,   197.7,   197.7,   0.0);   (449375.8,
3758946.0,   197.7,   197.7,   0.0);
    (449379.6, 3758946.0,   197.7,   197.7,   0.0);   (449383.5,

3758946.0,   197.4,   197.4,   0.0);
     (449387.4, 3758946.0,   197.1,   197.1,   0.0);   (449391.2,
3758946.0,   196.9,   196.9,   0.0);
     (449395.1, 3758946.0,   196.6,   196.6,   0.0);   (449399.0,
3758946.0,   196.4,   196.4,   0.0);
     (449402.8, 3758946.0,   196.1,   196.1,   0.0);   (449406.7,
3758946.0,   195.8,   195.8,   0.0);
     (449410.6, 3758946.0,   195.5,   195.5,   0.0);   (449414.5,
3758946.0,   195.2,   195.2,   0.0);
     (449418.3, 3758946.0,   194.8,   194.8,   0.0);   (449422.2,
3758946.0,   194.4,   194.4,   0.0);
     (449426.1, 3758946.0,   194.0,   196.0,   0.0);   (449429.9,
3758946.0,   193.6,   196.0,   0.0);
     (449433.8, 3758946.0,   193.2,   196.0,   0.0);   (449437.7,
3758946.0,   192.8,   196.0,   0.0);
     (449441.5, 3758946.0,   192.5,   196.0,   0.0);   (449445.4,
3758946.0,   192.3,   192.3,   0.0);
     (449368.0, 3758960.1,   198.0,   198.0,   0.0);   (449371.9,
3758960.1,   198.0,   198.0,   0.0);
     (449375.8, 3758960.1,   198.0,   198.0,   0.0);   (449379.6,
3758960.1,   198.0,   198.0,   0.0);
     (449383.5, 3758960.1,   197.8,   197.8,   0.0);   (449387.4,
3758960.1,   197.5,   197.5,   0.0);
     (449391.2, 3758960.1,   197.3,   197.3,   0.0);   (449395.1,
3758960.1,   197.0,   197.0,   0.0);
     (449399.0, 3758960.1,   196.8,   196.8,   0.0);   (449402.8,
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     (449406.7, 3758960.1,   196.3,   196.3,   0.0);   (449410.6,
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3758960.1,   194.5,   194.5,   0.0);
     (449429.9, 3758960.1,   194.1,   194.1,   0.0);   (449433.8,
3758960.1,   193.7,   193.7,   0.0);
     (449437.7, 3758960.1,   193.3,   193.3,   0.0);   (449441.5,
3758960.1,   193.0,   193.0,   0.0);
     (449445.4, 3758960.1,   192.7,   192.7,   0.0);   (449368.0,
3758974.1,   198.0,   198.0,   0.0);
     (449371.9, 3758974.1,   198.0,   198.0,   0.0);   (449375.8,
3758974.1,   198.0,   198.0,   0.0);
     (449379.6, 3758974.1,   198.0,   198.0,   0.0);   (449383.5,
3758974.1,   197.8,   197.8,   0.0);
     (449387.4, 3758974.1,   197.6,   197.6,   0.0);   (449391.2,
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     (449395.1, 3758974.1,   197.3,   197.3,   0.0);   (449399.0,
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     (449402.8, 3758974.1,   196.9,   196.9,   0.0);   (449406.7,
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     (449410.6, 3758974.1,   196.5,   196.5,   0.0);   (449414.5,

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     ( 449426.1, 3758974.1,      194.9,      197.0,      0.0);           ( 449429.9,
3758974.1,      194.5,      197.0,      0.0);
     ( 449433.8, 3758974.1,      194.2,      197.0,      0.0);           ( 449437.7,
3758974.1,      193.8,      197.0,      0.0);
     ( 449441.5, 3758974.1,      193.4,      197.0,      0.0);           ( 449445.4,
3758974.1,      193.1,      197.0,      0.0);
     ( 449368.0, 3758988.2,      198.1,      198.1,      0.0);           ( 449371.9,
3758988.2,      198.1,      198.1,      0.0);
     ( 449375.8, 3758988.2,      198.1,      198.1,      0.0);           ( 449379.6,
3758988.2,      198.1,      198.1,      0.0);
     ( 449383.5, 3758988.2,      197.9,      197.9,      0.0);           ( 449387.4,
3758988.2,      197.8,      197.8,      0.0);
     ( 449391.2, 3758988.2,      197.6,      197.6,      0.0);           ( 449395.1,
3758988.2,      197.5,      197.5,      0.0);
     ( 449399.0, 3758988.2,      197.4,      197.4,      0.0);           ( 449402.8,
3758988.2,      197.2,      197.2,      0.0);
     ( 449406.7, 3758988.2,      197.1,      197.1,      0.0);           ( 449410.6,
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     ( 449414.5, 3758988.2,      196.5,      196.5,      0.0);           ( 449418.3,
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     ( 449422.2, 3758988.2,      195.8,      195.8,      0.0);           ( 449426.1,
3758988.2,      195.4,      195.4,      0.0);
     ( 449429.9, 3758988.2,      195.0,      195.0,      0.0);           ( 449433.8,
3758988.2,      194.6,      194.6,      0.0);
     ( 449437.7, 3758988.2,      194.2,      194.2,      0.0);           ( 449441.5,
3758988.2,      193.9,      193.9,      0.0);
     ( 449445.4, 3758988.2,      193.5,      193.5,      0.0);           ( 449368.0,
3759002.2,      198.5,      198.5,      0.0);
     ( 449371.9, 3759002.2,      198.5,      198.5,      0.0);           ( 449375.8,
3759002.2,      198.5,      198.5,      0.0);
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⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                         ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   10:36:53

                              PAGE   9
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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

     (449379.6, 3759002.2,   198.5,   198.5,   0.0);   (449383.5,
3759002.2,   198.3,   198.3,   0.0);
     (449387.4, 3759002.2,   198.1,   198.1,   0.0);   (449391.2,
3759002.2,   197.9,   197.9,   0.0);
     (449395.1, 3759002.2,   197.7,   197.7,   0.0);   (449399.0,

3759002.2,   197.5,   197.5,   0.0);
      (449402.8, 3759002.2,   197.3,   197.3,   0.0);   (449406.7,
3759002.2,   197.1,   197.1,   0.0);
      (449410.6, 3759002.2,   196.9,   196.9,   0.0);   (449414.5,
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      (449418.3, 3759002.2,   196.3,   196.3,   0.0);   (449422.2,
3759002.2,   196.0,   196.0,   0.0);
      (449426.1, 3759002.2,   195.6,   195.6,   0.0);   (449429.9,
3759002.2,   195.3,   195.3,   0.0);
      (449433.8, 3759002.2,   195.0,   195.0,   0.0);   (449437.7,
3759002.2,   194.7,   194.7,   0.0);
      (449441.5, 3759002.2,   194.3,   194.3,   0.0);   (449445.4,
3759002.2,   193.9,   193.9,   0.0);
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      (449375.8, 3759016.2,   199.0,   199.0,   0.0);   (449379.6,
3759016.2,   199.0,   199.0,   0.0);
      (449383.5, 3759016.2,   198.7,   198.7,   0.0);   (449387.4,
3759016.2,   198.5,   198.5,   0.0);
      (449391.2, 3759016.2,   198.2,   198.2,   0.0);   (449395.1,
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      (449399.0, 3759016.2,   197.7,   197.7,   0.0);   (449402.8,
3759016.2,   197.4,   197.4,   0.0);
      (449406.7, 3759016.2,   197.2,   197.2,   0.0);   (449410.6,
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      (449414.5, 3759016.2,   196.7,   196.7,   0.0);   (449418.3,
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      (449422.2, 3759016.2,   196.2,   196.2,   0.0);   (449426.1,
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      (449429.9, 3759016.2,   195.6,   195.6,   0.0);   (449433.8,
3759016.2,   195.4,   195.4,   0.0);
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3759016.2,   194.8,   195.0,   0.0);
      (449445.4, 3759016.2,   194.4,   195.0,   0.0);   (449368.0,
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      (449371.9, 3759030.3,   198.5,   198.5,   0.0);   (449375.8,
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      (449387.4, 3759030.3,   198.0,   198.0,   0.0);   (449391.2,
3759030.3,   197.8,   197.8,   0.0);
      (449395.1, 3759030.3,   197.5,   197.5,   0.0);   (449399.0,
3759030.3,   197.2,   197.2,   0.0);
      (449402.8, 3759030.3,   197.0,   197.0,   0.0);   (449406.7,
3759030.3,   196.7,   196.7,   0.0);
      (449410.6, 3759030.3,   196.5,   196.5,   0.0);   (449414.5,
3759030.3,   196.3,   196.3,   0.0);
      (449418.3, 3759030.3,   196.1,   196.1,   0.0);   (449422.2,
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      (449426.1, 3759030.3,   195.7,   195.7,   0.0);   (449429.9,

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    ( 449433.8, 3759030.3,      195.3,       195.3,        0.0);          ( 449437.7,
3759030.3,       195.1,       195.1,        0.0);
    ( 449441.5, 3759030.3,      194.8,       194.8,        0.0);          ( 449445.4,
3759030.3,       194.4,       194.4,        0.0);
    ( 449368.0, 3759044.3,      198.1,       198.1,        0.0);          ( 449371.9,
3759044.3,       198.1,       198.1,        0.0);
    ( 449375.8, 3759044.3,      198.1,       198.1,        0.0);          ( 449379.6,
3759044.3,       198.1,       198.1,        0.0);
    ( 449383.5, 3759044.3,      197.8,       197.8,        0.0);          ( 449387.4,
3759044.3,       197.5,       197.5,        0.0);
    ( 449391.2, 3759044.3,      197.3,       197.3,        0.0);          ( 449395.1,
3759044.3,       197.0,       197.0,        0.0);
    ( 449399.0, 3759044.3,      196.8,       196.8,        0.0);          ( 449402.8,
3759044.3,       196.5,       196.5,        0.0);
    ( 449406.7, 3759044.3,      196.2,       196.2,        0.0);          ( 449410.6,
3759044.3,       196.0,       196.0,        0.0);
    ( 449414.5, 3759044.3,      195.9,       195.9,        0.0);          ( 449418.3,
3759044.3,       195.8,       195.8,        0.0);
    ( 449422.2, 3759044.3,      195.6,       195.6,        0.0);          ( 449426.1,
3759044.3,       195.5,       195.5,        0.0);
    ( 449429.9, 3759044.3,      195.3,       195.3,        0.0);          ( 449433.8,
3759044.3,       195.2,       195.2,        0.0);
    ( 449437.7, 3759044.3,      195.1,       195.1,        0.0);          ( 449441.5,
3759044.3,       194.8,       194.8,        0.0);
    ( 449445.4, 3759044.3,      194.4,       194.4,        0.0);
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                         ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
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                              PAGE 10
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN 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
```

                  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 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                          ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   10:36:53

                                    PAGE 11
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

   Surface file: ..\KRAL_V9_ADJU\KRAL_V9.SFC
                 Met Version: 16216
   Profile file: ..\KRAL_V9_ADJU\KRAL_V9.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:   3171   Upper air station no.:   3190
                 Name: UNKNOWN   Name: UNKNOWN

                 Year: 2012   Year: 2012

 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
- -
- -
 12 01 01   1 01 -25.6 0.266 -9.000 -9.000 -999. 330.   77.9 0.15   2.40
1.00   2.93   55.   10.1 288.1   2.0
 12 01 01   1 02 -26.8 0.277 -9.000 -9.000 -999. 351.   84.7 0.15   2.40
1.00   3.05   55.   10.1 287.0   2.0
 12 01 01   1 03 -21.5 0.221 -9.000 -9.000 -999. 250.   53.5 0.15   2.40

```
1.00    2.45   74.    10.1  284.2    2.0
 12 01 01   1 04  -22.0  0.227 -9.000 -9.000 -999.   260.     56.8  0.15    2.40
1.00    2.52   77.    10.1  285.9    2.0
 12 01 01   1 05  -20.0  0.206 -9.000 -9.000 -999.   225.     46.8  0.15    2.40
1.00    2.30   80.    10.1  285.4    2.0
 12 01 01   1 06  -14.4  0.171 -9.000 -9.000 -999.   170.     32.1  0.15    2.40
1.00    1.93   79.    10.1  287.0    2.0
 12 01 01   1 07  -14.9  0.174 -9.000 -9.000 -999.   174.     33.2  0.15    2.40
1.00    1.96   77.    10.1  284.2    2.0
 12 01 01   1 08  -11.9  0.169 -9.000 -9.000 -999.   167.     36.1  0.15    2.40
0.53    1.89   77.    10.1  288.1    2.0
 12 01 01   1 09   40.4  0.234  0.359  0.006    40.   272.    -28.1  0.15    2.40
0.31    2.10   81.    10.1  289.2    2.0
 12 01 01   1 10  112.6  0.246  0.742  0.005   129.   293.    -11.8  0.15    2.40
0.24    1.99  101.    10.1  296.4    2.0
 12 01 01   1 11  161.0  0.402  1.188  0.005   369.   611.    -35.6  0.15    2.40
0.21    3.68   78.    10.1  298.8    2.0
 12 01 01   1 12  184.7  0.337  1.516  0.005   668.   473.    -18.4  0.15    2.40
0.20    2.89   68.    10.1  300.4    2.0
 12 01 01   1 13  183.9  0.310  1.809  0.005  1139.   414.    -14.2  0.15    2.40
0.20    2.57   64.    10.1  302.5    2.0
 12 01 01   1 14  156.6  0.374  1.852  0.005  1434.   549.    -29.5  0.15    2.40
0.22    3.37   63.    10.1  303.1    2.0
 12 01 01   1 15  104.3  0.382  1.658  0.005  1546.   567.    -47.2  0.15    2.40
0.25    3.59   62.    10.1  302.5    2.0
 12 01 01   1 16   31.8  0.374  1.123  0.005  1573.   550.   -145.8  0.15    2.40
0.34    3.76   69.    10.1  300.9    2.0
 12 01 01   1 17  -23.3  0.276 -9.000 -9.000 -999.   354.     84.0  0.15    2.40
0.62    3.03   59.    10.1  297.5    2.0
 12 01 01   1 18  -21.5  0.229 -9.000 -9.000 -999.   264.     57.8  0.15    2.40
1.00    2.54   54.    10.1  295.4    2.0
 12 01 01   1 19  -19.3  0.204 -9.000 -9.000 -999.   221.     45.6  0.15    2.40
1.00    2.27   79.    10.1  292.0    2.0
 12 01 01   1 20  -20.7  0.218 -9.000 -9.000 -999.   244.     52.2  0.15    2.40
1.00    2.42   79.    10.1  292.5    2.0
 12 01 01   1 21  -19.7  0.206 -9.000 -9.000 -999.   225.     46.9  0.15    2.40
1.00    2.30   95.    10.1  290.9    2.0
 12 01 01   1 22  -17.6  0.190 -9.000 -9.000 -999.   199.     39.8  0.15    2.40
1.00    2.13   78.    10.1  290.4    2.0
 12 01 01   1 23  -20.3  0.211 -9.000 -9.000 -999.   233.     49.0  0.15    2.40
1.00    2.35   52.    10.1  289.2    2.0
 12 01 01   1 24  -16.4  0.183 -9.000 -9.000 -999.   189.     37.0  0.15    2.40
1.00    2.06   75.    10.1  288.8    2.0


  First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1   55.    2.93   288.2   99.0  -99.00  -99.00


 F indicates top of profile (=1) or below (=0)
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                          ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   10:36:53

                              PAGE 12
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   L0000131   , L0000132
, L0000133   , L0000134   , L0000135   ,
                        L0000136 , L0000137   , L0000138   , L0000139   , L0000140
, L0000141   , L0000142   , L0000143   ,
                        L0000144 , L0000145   , L0000146   , L0000147   , L0000148
, L0000149   , L0000150   , L0000151   ,
                        L0000152 , L0000153   , L0000154   , L0000155   , L0000156
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
        449368.02   3758763.53   0.04363   449371.89
3758763.53   0.04167
        449375.76   3758763.53   0.03987   449379.63
3758763.53   0.03822
        449383.50   3758763.53   0.03679   449387.37
3758763.53   0.03546
        449391.24   3758763.53   0.03422   449395.11
3758763.53   0.03306
        449398.98   3758763.53   0.03197   449402.85
3758763.53   0.03094
        449406.72   3758763.53   0.02998   449410.59
3758763.53   0.02909
        449414.46   3758763.53   0.02829   449418.33
3758763.53   0.02753
        449422.20   3758763.53   0.02680   449426.07
3758763.53   0.02611
        449429.94   3758763.53   0.02545   449433.81
3758763.53   0.02483
        449437.68   3758763.53   0.02423   449441.55
3758763.53   0.02367
        449445.42   3758763.53   0.02315   449368.02

3758777.57   0.04369
        449371.89   3758777.57   0.04164   449375.76
3758777.57   0.03976
        449379.63   3758777.57   0.03805   449383.50
3758777.57   0.03663
        449387.37   3758777.57   0.03530   449391.24
3758777.57   0.03408
        449395.11   3758777.57   0.03292   449398.98
3758777.57   0.03184
        449402.85   3758777.57   0.03082   449406.72
3758777.57   0.02986
        449410.59   3758777.57   0.02898   449414.46
3758777.57   0.02819
        449418.33   3758777.57   0.02743   449422.20
3758777.57   0.02671
        449426.07   3758777.57   0.02603   449429.94
3758777.57   0.02537
        449433.81   3758777.57   0.02475   449437.68
3758777.57   0.02416
        449441.55   3758777.57   0.02361   449445.42
3758777.57   0.02310
        449368.02   3758791.61   0.04393   449371.89
3758791.61   0.04196
        449375.76   3758791.61   0.04016   449379.63
3758791.61   0.03850
        449383.50   3758791.61   0.03704   449387.37
3758791.61   0.03569
        449391.24   3758791.61   0.03444   449395.11
3758791.61   0.03327
        449398.98   3758791.61   0.03217   449402.85
3758791.61   0.03113
        449406.72   3758791.61   0.03016   449410.59
3758791.61   0.02926
        449414.46   3758791.61   0.02845   449418.33
3758791.61   0.02768
        449422.20   3758791.61   0.02696   449426.07
3758791.61   0.02626
        449429.94   3758791.61   0.02560   449433.81
3758791.61   0.02497
        449437.68   3758791.61   0.02437   449441.55
3758791.61   0.02380
        449445.42   3758791.61   0.02328   449368.02
3758805.65   0.04415
        449371.89   3758805.65   0.04226   449375.76
3758805.65   0.04053
        449379.63   3758805.65   0.03893   449383.50
3758805.65   0.03745
        449387.37   3758805.65   0.03607   449391.24
3758805.65   0.03479
        449395.11   3758805.65   0.03360   449398.98

```
3758805.65       0.03248
        449402.85    3758805.65         0.03143                      449406.72
3758805.65       0.03044
        449410.59    3758805.65         0.02953                      449414.46
3758805.65       0.02871
        449418.33    3758805.65         0.02793                      449422.20
3758805.65       0.02719
        449426.07    3758805.65         0.02649                      449429.94
3758805.65       0.02582
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                          ***   11/11/21
  *** AERMET - VERSION 16216 ***   ***
                          ***   10:36:53

                                  PAGE 13
 *** MODELOPTs: RegDFAULT CONC   ELEV   URBAN   ADJ_U*

                  *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000131   , L0000132
 , L0000133   , L0000134   , L0000135   ,
                       L0000136   , L0000137   , L0000138   , L0000139   , L0000140
 , L0000141   , L0000142   , L0000143   ,
                       L0000144   , L0000145   , L0000146   , L0000147   , L0000148
 , L0000149   , L0000150   , L0000151   ,
                       L0000152   , L0000153   , L0000154   , L0000155   , L0000156
 ,

                                           *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

```
      X-COORD (M)   Y-COORD (M)      CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
        449433.81    3758805.65         0.02519                      449437.68
3758805.65       0.02458
        449441.55    3758805.65         0.02399                      449445.42
3758805.65       0.02344
        449368.02    3758819.69         0.04420                      449371.89
3758819.69       0.04232
        449375.76    3758819.69         0.04059                      449379.63
3758819.69       0.03899
        449383.50    3758819.69         0.03751                      449387.37
3758819.69       0.03613
        449391.24    3758819.69         0.03484                      449395.11
3758819.69       0.03365
```

449398.98	3758819.69	0.03253	449402.85	
3758819.69	0.03148			
449406.72	3758819.69	0.03049	449410.59	
3758819.69	0.02957			
449414.46	3758819.69	0.02875	449418.33	
3758819.69	0.02797			
449422.20	3758819.69	0.02723	449426.07	
3758819.69	0.02653			
449429.94	3758819.69	0.02586	449433.81	
3758819.69	0.02522			
449437.68	3758819.69	0.02461	449441.55	
3758819.69	0.02403			
449445.42	3758819.69	0.02347	449368.02	
3758833.73	0.04420			
449371.89	3758833.73	0.04232	449375.76	
3758833.73	0.04059			
449379.63	3758833.73	0.03899	449383.50	
3758833.73	0.03751			
449387.37	3758833.73	0.03614	449391.24	
3758833.73	0.03485			
449395.11	3758833.73	0.03366	449398.98	
3758833.73	0.03254			
449402.85	3758833.73	0.03149	449406.72	
3758833.73	0.03050			
449410.59	3758833.73	0.02959	449414.46	
3758833.73	0.02877			
449418.33	3758833.73	0.02799	449422.20	
3758833.73	0.02725			
449426.07	3758833.73	0.02655	449429.94	
3758833.73	0.02588			
449433.81	3758833.73	0.02524	449437.68	
3758833.73	0.02464			
449441.55	3758833.73	0.02405	449445.42	
3758833.73	0.02350			
449368.02	3758847.77	0.04471	449371.89	
3758847.77	0.04284			
449375.76	3758847.77	0.04112	449379.63	
3758847.77	0.03953			
449383.50	3758847.77	0.03802	449387.37	
3758847.77	0.03663			
449391.24	3758847.77	0.03532	449395.11	
3758847.77	0.03410			
449398.98	3758847.77	0.03296	449402.85	
3758847.77	0.03189			
449406.72	3758847.77	0.03089	449410.59	
3758847.77	0.02995			
449414.46	3758847.77	0.02909	449418.33	
3758847.77	0.02828			
449422.20	3758847.77	0.02751	449426.07	
3758847.77	0.02678			

```
        449429.94    3758847.77        0.02608                      449433.81
3758847.77        0.02542
        449437.68    3758847.77        0.02478                      449441.55
3758847.77        0.02419
        449445.42    3758847.77        0.02363                      449368.02
3758861.81        0.04516
        449371.89    3758861.81        0.04342                      449375.76
3758861.81        0.04172
        449379.63    3758861.81        0.04014                      449383.50
3758861.81        0.03860
        449387.37    3758861.81        0.03718                      449391.24
3758861.81        0.03585
        449395.11    3758861.81        0.03461                      449398.98
3758861.81        0.03345
        449402.85    3758861.81        0.03236                      449406.72
3758861.81        0.03133
        449410.59    3758861.81        0.03037                      449414.46
3758861.81        0.02946
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   10:36:53

                               PAGE 14

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                  *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000131   , L0000132
, L0000133   , L0000134   , L0000135   ,
                  L0000136   , L0000137   , L0000138   , L0000139   , L0000140
, L0000141   , L0000142   , L0000143   ,
                  L0000144   , L0000145   , L0000146   , L0000147   , L0000148
, L0000149   , L0000150   , L0000151   ,
                  L0000152   , L0000153   , L0000154   , L0000155   , L0000156
,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
        449418.33   3758861.81   0.02861   449422.20
3758861.81   0.02780
        449426.07   3758861.81   0.02704   449429.94

```
3758861.81          0.02631
        449433.81      3758861.81          0.02562                              449437.68
3758861.81          0.02496
        449441.55      3758861.81          0.02435                              449445.42
3758861.81          0.02378
        449368.02      3758875.85          0.04548                              449371.89
3758875.85          0.04364
        449375.76      3758875.85          0.04194                              449379.63
3758875.85          0.04037
        449383.50      3758875.85          0.03883                              449387.37
3758875.85          0.03749
        449391.24      3758875.85          0.03615                              449395.11
3758875.85          0.03490
        449398.98      3758875.85          0.03373                              449402.85
3758875.85          0.03263
        449406.72      3758875.85          0.03160                              449410.59
3758875.85          0.03062
        449414.46      3758875.85          0.02970                              449418.33
3758875.85          0.02884
        449422.20      3758875.85          0.02801                              449426.07
3758875.85          0.02723
        449429.94      3758875.85          0.02649                              449433.81
3758875.85          0.02578
        449437.68      3758875.85          0.02512                              449441.55
3758875.85          0.02450
        449445.42      3758875.85          0.02393                              449368.02
3758889.89          0.04564
        449371.89      3758889.89          0.04380                              449375.76
3758889.89          0.04210
        449379.63      3758889.89          0.04057                              449383.50
3758889.89          0.03903
        449387.37      3758889.89          0.03760                              449391.24
3758889.89          0.03635
        449395.11      3758889.89          0.03509                              449398.98
3758889.89          0.03392
        449402.85      3758889.89          0.03282                              449406.72
3758889.89          0.03178
        449410.59      3758889.89          0.03080                              449414.46
3758889.89          0.02987
        449418.33      3758889.89          0.02900                              449422.20
3758889.89          0.02818
        449426.07      3758889.89          0.02739                              449429.94
3758889.89          0.02665
        449433.81      3758889.89          0.02594                              449437.68
3758889.89          0.02526
        449441.55      3758889.89          0.02464                              449445.42
3758889.89          0.02407
        449368.02      3758903.93          0.04595                              449371.89
3758903.93          0.04412
        449375.76      3758903.93          0.04243                              449379.63
```

```
3758903.93        0.04085
        449383.50     3758903.93        0.03931                        449387.37
3758903.93        0.03787
        449391.24     3758903.93        0.03658                        449395.11
3758903.93        0.03532
        449398.98     3758903.93        0.03414                        449402.85
3758903.93        0.03312
        449406.72     3758903.93        0.03207                        449410.59
3758903.93        0.03108
        449414.46     3758903.93        0.03013                        449418.33
3758903.93        0.02924
        449422.20     3758903.93        0.02839                        449426.07
3758903.93        0.02759
        449429.94     3758903.93        0.02683                        449433.81
3758903.93        0.02610
        449437.68     3758903.93        0.02541                        449441.55
3758903.93        0.02478
        449445.42     3758903.93        0.02421                        449368.02
3758917.97        0.04630
        449371.89     3758917.97        0.04447                        449375.76
3758917.97        0.04279
        449379.63     3758917.97        0.04121                        449383.50
3758917.97        0.03968
        449387.37     3758917.97        0.03825                        449391.24
3758917.97        0.03691
        449395.11     3758917.97        0.03565                        449398.98
3758917.97        0.03447
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                           ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   10:36:53

                           PAGE 15
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                           INCLUDING SOURCE(S):   L0000131   , L0000132
 , L0000133   , L0000134   , L0000135   ,
                L0000136   , L0000137   , L0000138   , L0000139   , L0000140
 , L0000141   , L0000142   , L0000143   ,
                L0000144   , L0000145   , L0000146   , L0000147   , L0000148
 , L0000149   , L0000150   , L0000151   ,
                L0000152   , L0000153   , L0000154   , L0000155   , L0000156
 ,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

```
                    **

       X-COORD (M)    Y-COORD (M)         CONC                        X-COORD (M)
 Y-COORD (M)         CONC
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
        449402.85    3758917.97        0.03335                       449406.72
3758917.97        0.03236
        449410.59    3758917.97        0.03135                       449414.46
3758917.97        0.03046
        449418.33    3758917.97        0.02953                       449422.20
3758917.97        0.02865
        449426.07    3758917.97        0.02782                       449429.94
3758917.97        0.02703
        449433.81    3758917.97        0.02627                       449437.68
3758917.97        0.02556
        449441.55    3758917.97        0.02492                       449445.42
3758917.97        0.02434
        449368.02    3758932.01        0.04656                       449371.89
3758932.01        0.04471
        449375.76    3758932.01        0.04301                       449379.63
3758932.01        0.04143
        449383.50    3758932.01        0.03995                       449387.37
3758932.01        0.03851
        449391.24    3758932.01        0.03717                       449395.11
3758932.01        0.03592
        449398.98    3758932.01        0.03473                       449402.85
3758932.01        0.03362
        449406.72    3758932.01        0.03257                       449410.59
3758932.01        0.03156
        449414.46    3758932.01        0.03062                       449418.33
3758932.01        0.02968
        449422.20    3758932.01        0.02887                       449426.07
3758932.01        0.02802
        449429.94    3758932.01        0.02721                       449433.81
3758932.01        0.02644
        449437.68    3758932.01        0.02571                       449441.55
3758932.01        0.02505
        449445.42    3758932.01        0.02446                       449368.02
3758946.05        0.04677
        449371.89    3758946.05        0.04491                       449375.76
3758946.05        0.04318
        449379.63    3758946.05        0.04159                       449383.50
3758946.05        0.04006
        449387.37    3758946.05        0.03863                       449391.24
3758946.05        0.03734
        449395.11    3758946.05        0.03607                       449398.98
3758946.05        0.03489
        449402.85    3758946.05        0.03377                       449406.72
3758946.05        0.03272
```

```
       449410.59    3758946.05        0.03171                        449414.46
3758946.05       0.03073
       449418.33    3758946.05        0.02984                        449422.20
3758946.05       0.02894
       449426.07    3758946.05        0.02817                        449429.94
3758946.05       0.02736
       449433.81    3758946.05        0.02658                        449437.68
3758946.05       0.02585
       449441.55    3758946.05        0.02518                        449445.42
3758946.05       0.02456
       449368.02    3758960.09        0.04695                        449371.89
3758960.09       0.04507
       449375.76    3758960.09        0.04333                        449379.63
3758960.09       0.04172
       449383.50    3758960.09        0.04020                        449387.37
3758960.09       0.03876
       449391.24    3758960.09        0.03743                        449395.11
3758960.09       0.03616
       449398.98    3758960.09        0.03503                        449402.85
3758960.09       0.03392
       449406.72    3758960.09        0.03287                        449410.59
3758960.09       0.03186
       449414.46    3758960.09        0.03088                        449418.33
3758960.09       0.02994
       449422.20    3758960.09        0.02910                        449426.07
3758960.09       0.02824
       449429.94    3758960.09        0.02743                        449433.81
3758960.09       0.02673
       449437.68    3758960.09        0.02599                        449441.55
3758960.09       0.02530
       449445.42    3758960.09        0.02466                        449368.02
3758974.13       0.04704
       449371.89    3758974.13        0.04515                        449375.76
3758974.13       0.04341
       449379.63    3758974.13        0.04180                        449383.50
3758974.13       0.04027
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   10:36:53

                               PAGE 16
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN   ADJ_U*

                *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                             INCLUDING SOURCE(S):   L0000131   , L0000132
, L0000133   , L0000134   , L0000135   ,
                L0000136   , L0000137   , L0000138   , L0000139   , L0000140
, L0000141   , L0000142   , L0000143   ,

```
                L0000144    , L0000145    , L0000146    , L0000147    , L0000148
  , L0000149    , L0000150    , L0000151    ,
                L0000152    , L0000153    , L0000154    , L0000155    , L0000156
  ,
```

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
  -
- -

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
449387.37	3758974.13	0.03885	449391.24	3758974.13	0.03752
449395.11	3758974.13	0.03627	449398.98	3758974.13	0.03509
449402.85	3758974.13	0.03404	449406.72	3758974.13	0.03300
449410.59	3758974.13	0.03201	449414.46	3758974.13	0.03102
449418.33	3758974.13	0.03009	449422.20	3758974.13	0.02920
449426.07	3758974.13	0.02835	449429.94	3758974.13	0.02758
449433.81	3758974.13	0.02680	449437.68	3758974.13	0.02613
449441.55	3758974.13	0.02543	449445.42	3758974.13	0.02477
449368.02	3758988.17	0.04711	449371.89	3758988.17	0.04522
449375.76	3758988.17	0.04348	449379.63	3758988.17	0.04186
449383.50	3758988.17	0.04035	449387.37	3758988.17	0.03893
449391.24	3758988.17	0.03760	449395.11	3758988.17	0.03636
449398.98	3758988.17	0.03520	449402.85	3758988.17	0.03410
449406.72	3758988.17	0.03307	449410.59	3758988.17	0.03213
449414.46	3758988.17	0.03115	449418.33	3758988.17	0.03022
449422.20	3758988.17	0.02933	449426.07	3758988.17	0.02848
449429.94	3758988.17	0.02767	449433.81	3758988.17	0.02694
449437.68	3758988.17	0.02620	449441.55		

```
3758988.17       0.02556
        449445.42    3758988.17        0.02488                    449368.02
3759002.21       0.04708
        449371.89    3759002.21        0.04518                    449375.76
3759002.21       0.04343
        449379.63    3759002.21        0.04182                    449383.50
3759002.21       0.04039
        449387.37    3759002.21        0.03901                    449391.24
3759002.21       0.03770
        449395.11    3759002.21        0.03645                    449398.98
3759002.21       0.03527
        449402.85    3759002.21        0.03416                    449406.72
3759002.21       0.03311
        449410.59    3759002.21        0.03216                    449414.46
3759002.21       0.03119
        449418.33    3759002.21        0.03027                    449422.20
3759002.21       0.02940
        449426.07    3759002.21        0.02856                    449429.94
3759002.21       0.02777
        449433.81    3759002.21        0.02701                    449437.68
3759002.21       0.02633
        449441.55    3759002.21        0.02563                    449445.42
3759002.21       0.02501
        449368.02    3759016.25        0.04709                    449371.89
3759016.25       0.04519
        449375.76    3759016.25        0.04345                    449379.63
3759016.25       0.04183
        449383.50    3759016.25        0.04036                    449387.37
3759016.25       0.03903
        449391.24    3759016.25        0.03774                    449395.11
3759016.25       0.03652
        449398.98    3759016.25        0.03533                    449402.85
3759016.25       0.03421
        449406.72    3759016.25        0.03315                    449410.59
3759016.25       0.03218
        449414.46    3759016.25        0.03123                    449418.33
3759016.25       0.03032
        449422.20    3759016.25        0.02946                    449426.07
3759016.25       0.02864
        449429.94    3759016.25        0.02786                    449433.81
3759016.25       0.02712
        449437.68    3759016.25        0.02641                    449441.55
3759016.25       0.02575
        449445.42    3759016.25        0.02507                    449368.02
3759030.29       0.04721
```

                  *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   L0000131   , L0000132
 , L0000133   , L0000134   , L0000135   ,
                    L0000136   , L0000137   , L0000138   , L0000139   , L0000140
 , L0000141   , L0000142   , L0000143   ,
                    L0000144   , L0000145   , L0000146   , L0000147   , L0000148
 , L0000149   , L0000150   , L0000151   ,
                    L0000152   , L0000153   , L0000154   , L0000155   , L0000156
 ,

                                     *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
 Y-COORD (M)   CONC
  -
 -
         449371.89   3759030.29   0.04531   449375.76
3759030.29   0.04355
         449379.63   3759030.29   0.04193   449383.50
3759030.29   0.04049
         449387.37   3759030.29   0.03910   449391.24
3759030.29   0.03774
         449395.11   3759030.29   0.03646   449398.98
3759030.29   0.03526
         449402.85   3759030.29   0.03412   449406.72
3759030.29   0.03308
         449410.59   3759030.29   0.03207   449414.46
3759030.29   0.03113
         449418.33   3759030.29   0.03024   449422.20
3759030.29   0.02939
         449426.07   3759030.29   0.02858   449429.94
3759030.29   0.02782
         449433.81   3759030.29   0.02709   449437.68
3759030.29   0.02640
         449441.55   3759030.29   0.02575   449445.42
3759030.29   0.02506
         449368.02   3759044.33   0.04736   449371.89
3759044.33   0.04545
         449375.76   3759044.33   0.04368   449379.63
3759044.33   0.04205
         449383.50   3759044.33   0.04049   449387.37
3759044.33   0.03903

```
        449391.24    3759044.33        0.03765                        449395.11
3759044.33      0.03635
        449398.98    3759044.33        0.03517                        449402.85
3759044.33      0.03402
        449406.72    3759044.33        0.03294                        449410.59
3759044.33      0.03193
        449414.46    3759044.33        0.03101                        449418.33
3759044.33      0.03013
        449422.20    3759044.33        0.02931                        449426.07
3759044.33      0.02852
        449429.94    3759044.33        0.02777                        449433.81
3759044.33      0.02706
        449437.68    3759044.33        0.02639                        449441.55
3759044.33      0.02574
        449445.42    3759044.33        0.02505
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                       ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                       ***   10:36:53

                                    PAGE 18
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS
AVERAGED OVER   5 YEARS ***

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

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

ALL   1ST HIGHEST VALUE IS   0.04736 AT (449368.02, 3759044.33,
198.07,   198.07,   0.00) DC
         2ND HIGHEST VALUE IS   0.04721 AT (449368.02, 3759030.29,
198.53,   198.53,   0.00) DC
         3RD HIGHEST VALUE IS   0.04711 AT (449368.02, 3758988.17,
198.06,   198.06,   0.00) DC
         4TH HIGHEST VALUE IS   0.04709 AT (449368.02, 3759016.25,
199.00,   199.00,   0.00) DC
         5TH HIGHEST VALUE IS   0.04708 AT (449368.02, 3759002.21,
198.53,   198.53,   0.00) DC
         6TH HIGHEST VALUE IS   0.04704 AT (449368.02, 3758974.13,
198.00,   198.00,   0.00) DC

```
        7TH HIGHEST VALUE IS        0.04695 AT (  449368.02,  3758960.09,
198.00,   198.00,   0.00)  DC
        8TH HIGHEST VALUE IS        0.04677 AT (  449368.02,  3758946.05,
197.66,   197.66,   0.00)  DC
        9TH HIGHEST VALUE IS        0.04656 AT (  449368.02,  3758932.01,
197.19,   197.19,   0.00)  DC
       10TH HIGHEST VALUE IS        0.04630 AT (  449368.02,  3758917.97,
196.55,   196.55,   0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\DPM\DPM.ISC
                       ***        11/11/21
 *** AERMET - VERSION  16216 ***   ***
                      ***        10:36:53

                             PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

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

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

 A Total of           0 Fatal Error Message(s)
 A Total of           2 Warning Message(s)
 A Total of        1638 Informational Message(s)

 A Total of       43848 Hours Were Processed

 A Total of        1039 Calm Hours Identified

 A Total of         599 Missing Hours Identified (  1.37 Percent)


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


    ********   WARNING MESSAGES   ********
 ME W186    130       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187    130       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


    ********************************
    *** AERMOD Finishes Successfully ***
    ********************************
```

```
** Lakes Environmental AERMOD MPI
**
**************************************
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 10.0.1
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 11/11/2021
** FILE: C:\LAKES\AERMOD VIEW\14172 HRA\DSLTOG\DSLTOG.ADI
**
**************************************
**
**
**************************************
** AERMOD CONTROL PATHWAY
**************************************
**
**
CO STARTING
   TITLEONE C:\LAKES\AERMOD VIEW\14172 HRA\DSLTOG\DSLTOG.ISC
   MODELOPT DFAULT CONC
   AVERTIME 1 8
   URBANOPT 2189641
   POLLUTID TOGDSL
   RUNORNOT RUN
   ERRORFIL DSLTOG.ERR
CO FINISHED
**
**************************************
** AERMOD SOURCE PATHWAY
**************************************
**
**
SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** -------------------------------------------------------------------
** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC I-15 FREEWAY
** PREFIX
** LENGTH OF SIDE = 46.00
** CONFIGURATION = ADJACENT
** EMISSION RATE = 0.00077
** VERTICAL DIMENSION = 6.99
** SZINIT = 3.25
** NODES = 2
** 449288.372, 3758373.924, 188.51, 3.49, 21.40
** 449298.585, 3759554.578, 201.92, 3.49, 21.40
```

```
** --------------------------------------------------------------------
   LOCATION L0000001     VOLUME    449288.571 3758396.923 188.77
   LOCATION L0000002     VOLUME    449288.969 3758442.921 189.29
   LOCATION L0000003     VOLUME    449289.367 3758488.920 189.82
   LOCATION L0000004     VOLUME    449289.765 3758534.918 190.34
   LOCATION L0000005     VOLUME    449290.163 3758580.916 190.86
   LOCATION L0000006     VOLUME    449290.561 3758626.914 191.38
   LOCATION L0000007     VOLUME    449290.958 3758672.913 191.91
   LOCATION L0000008     VOLUME    449291.356 3758718.911 192.43
   LOCATION L0000009     VOLUME    449291.754 3758764.909 192.95
   LOCATION L0000010     VOLUME    449292.152 3758810.908 193.47
   LOCATION L0000011     VOLUME    449292.550 3758856.906 194.00
   LOCATION L0000012     VOLUME    449292.948 3758902.904 194.52
   LOCATION L0000013     VOLUME    449293.346 3758948.902 195.04
   LOCATION L0000014     VOLUME    449293.744 3758994.901 195.56
   LOCATION L0000015     VOLUME    449294.142 3759040.899 196.09
   LOCATION L0000016     VOLUME    449294.540 3759086.897 196.61
   LOCATION L0000017     VOLUME    449294.938 3759132.895 197.13
   LOCATION L0000018     VOLUME    449295.335 3759178.894 197.65
   LOCATION L0000019     VOLUME    449295.733 3759224.892 198.18
   LOCATION L0000020     VOLUME    449296.131 3759270.890 198.70
   LOCATION L0000021     VOLUME    449296.529 3759316.889 199.22
   LOCATION L0000022     VOLUME    449296.927 3759362.887 199.74
   LOCATION L0000023     VOLUME    449297.325 3759408.885 200.27
   LOCATION L0000024     VOLUME    449297.723 3759454.883 200.79
   LOCATION L0000025     VOLUME    449298.121 3759500.882 201.31
   LOCATION L0000026     VOLUME    449298.519 3759546.880 201.83
** END OF LINE VOLUME SOURCE ID = SLINE1
** SOURCE PARAMETERS **
** LINE VOLUME SOURCE ID = SLINE1
   SRCPARAM L0000001     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000002     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000003     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000004     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000005     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000006     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000007     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000008     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000009     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000010     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000011     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000012     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000013     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000014     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000015     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000016     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000017     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000018     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000019     0.0000296154      3.49      21.40       3.25
   SRCPARAM L0000020     0.0000296154      3.49      21.40       3.25
```

```
     SRCPARAM L0000021      0.0000296154      3.49     21.40       3.25
     SRCPARAM L0000022      0.0000296154      3.49     21.40       3.25
     SRCPARAM L0000023      0.0000296154      3.49     21.40       3.25
     SRCPARAM L0000024      0.0000296154      3.49     21.40       3.25
     SRCPARAM L0000025      0.0000296154      3.49     21.40       3.25
     SRCPARAM L0000026      0.0000296154      3.49     21.40       3.25
**  -----------------------------------------------------------------
     URBANSRC ALL
     SRCGROUP ALL
SO FINISHED
**
************************************
** AERMOD RECEPTOR PATHWAY
************************************
**
**
RE STARTING
     INCLUDED DSLTOG.ROU
RE FINISHED
**
*************************************
** AERMOD METEOROLOGY PATHWAY
*************************************
**
**
ME STARTING
     SURFFILE ..\KRAL_V9_ADJU\KRAL_V9.SFC
     PROFFILE ..\KRAL_V9_ADJU\KRAL_V9.PFL
     SURFDATA 3171 2012
     UAIRDATA 3190 2012
     PROFBASE 245.0 METERS
ME FINISHED
**
*************************************
** AERMOD OUTPUT PATHWAY
*************************************
**
**
OU STARTING
     RECTABLE ALLAVE 1ST
     RECTABLE 1 1ST
     RECTABLE 8 1ST
** AUTO-GENERATED PLOTFILES
     PLOTFILE   1 ALL 1ST DSLTOG.AD\01H1GALL.PLT 31
     PLOTFILE   8 ALL 1ST DSLTOG.AD\08H1GALL.PLT 32
     SUMMFILE DSLTOG.SUM
OU FINISHED


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

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

  A Total of           0 Fatal Error Message(s)
  A Total of           2 Warning Message(s)
  A Total of           0 Informational Message(s)


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


     ********    WARNING MESSAGES    ********
  ME W186    130       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
       0.50
  ME W187    130       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


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

 ♠ *** AERMOD - VERSION  19191 ***    *** C:\LAKES\AERMOD VIEW\14172
 HRA\DSLTOG\DSLTOG.ISC                        ***          11/11/21
  *** AERMET - VERSION  16216 ***    ***
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                                  PAGE   1
  *** MODELOPTs:     RegDFAULT  CONC  ELEV  URBAN  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 URBAN Dispersion Algorithm for the SBL for    26 Source(s),
    for Total of    1 Urban Area(s):
    Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m

  **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.
        6. Urban Roughness Length of 1.0 Meter Assumed.

 **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 Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of: TOGDSL

 **Model Calculates 2 Short Term Average(s) of: 1-HR   8-HR

 **This Run Includes: 26 Source(s);   1 Source Group(s); and   441
Receptor(s)

                with: 0 POINT(s), including
                            0 POINTCAP(s) and   0 POINTHOR(s)
                and: 26 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: 16216

 **Output Options Selected:
        Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
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) =   245.00 ; Decay
Coef. =   0.000   ; Rot. Angle =   0.0
                Emission Units = GRAMS/SEC   ;

```
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:  DSLTOG.ERR

 **File for Summary of Results:   DSLTOG.SUM

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                              PAGE   2
 *** MODELOPTs:    RegDFAULT  CONC  ELEV   URBAN  ADJ_U*


                                                   *** VOLUME SOURCE DATA ***

            NUMBER EMISSION RATE                   BASE    RELEASE     INIT.
INIT.   URBAN  EMISSION RATE
   SOURCE     PART.  (GRAMS/SEC)    X        Y      ELEV.   HEIGHT      SY
SZ     SOURCE SCALAR VARY
     ID        CATS.              (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)           BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - -

 L0000001       0  0.29615E-04  449288.6 3758396.9  188.8     3.49     21.40
3.25    YES
 L0000002       0  0.29615E-04  449289.0 3758442.9  189.3     3.49     21.40
3.25    YES
 L0000003       0  0.29615E-04  449289.4 3758488.9  189.8     3.49     21.40
3.25    YES
 L0000004       0  0.29615E-04  449289.8 3758534.9  190.3     3.49     21.40
3.25    YES
 L0000005       0  0.29615E-04  449290.2 3758580.9  190.9     3.49     21.40
3.25    YES
 L0000006       0  0.29615E-04  449290.6 3758626.9  191.4     3.49     21.40
3.25    YES
 L0000007       0  0.29615E-04  449291.0 3758672.9  191.9     3.49     21.40
3.25    YES
 L0000008       0  0.29615E-04  449291.4 3758718.9  192.4     3.49     21.40
3.25    YES
```

```
  L0000009          0   0.29615E-04   449291.8 3758764.9   193.0     3.49     21.40
3.25      YES
  L0000010          0   0.29615E-04   449292.2 3758810.9   193.5     3.49     21.40
3.25      YES
  L0000011          0   0.29615E-04   449292.5 3758856.9   194.0     3.49     21.40
3.25      YES
  L0000012          0   0.29615E-04   449292.9 3758902.9   194.5     3.49     21.40
3.25      YES
  L0000013          0   0.29615E-04   449293.3 3758948.9   195.0     3.49     21.40
3.25      YES
  L0000014          0   0.29615E-04   449293.7 3758994.9   195.6     3.49     21.40
3.25      YES
  L0000015          0   0.29615E-04   449294.1 3759040.9   196.1     3.49     21.40
3.25      YES
  L0000016          0   0.29615E-04   449294.5 3759086.9   196.6     3.49     21.40
3.25      YES
  L0000017          0   0.29615E-04   449294.9 3759132.9   197.1     3.49     21.40
3.25      YES
  L0000018          0   0.29615E-04   449295.3 3759178.9   197.7     3.49     21.40
3.25      YES
  L0000019          0   0.29615E-04   449295.7 3759224.9   198.2     3.49     21.40
3.25      YES
  L0000020          0   0.29615E-04   449296.1 3759270.9   198.7     3.49     21.40
3.25      YES
  L0000021          0   0.29615E-04   449296.5 3759316.9   199.2     3.49     21.40
3.25      YES
  L0000022          0   0.29615E-04   449296.9 3759362.9   199.7     3.49     21.40
3.25      YES
  L0000023          0   0.29615E-04   449297.3 3759408.9   200.3     3.49     21.40
3.25      YES
  L0000024          0   0.29615E-04   449297.7 3759454.9   200.8     3.49     21.40
3.25      YES
  L0000025          0   0.29615E-04   449298.1 3759500.9   201.3     3.49     21.40
3.25      YES
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3.25      YES
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
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 *** AERMET - VERSION 16216 ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

                                    *** SOURCE IDs DEFINING SOURCE GROUPS
***

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

```
   ALL        L0000001   , L0000002   , L0000003   , L0000004   , L0000005   ,
L0000006   , L0000007   , L0000008   ,

           L0000009   , L0000010   , L0000011   , L0000012   , L0000013   ,
L0000014   , L0000015   , L0000016   ,

           L0000017   , L0000018   , L0000019   , L0000020   , L0000021   ,
L0000022   , L0000023   , L0000024   ,

           L0000025   , L0000026   ,
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                 *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP   SOURCE IDs
  --------   ---------   ----------

           2189641. L0000001   , L0000002   , L0000003   , L0000004   ,
L0000005   , L0000006   , L0000007   ,
 L0000008   ,

           L0000009   , L0000010   , L0000011   , L0000012   , L0000013   ,
L0000014   , L0000015   , L0000016   ,

           L0000017   , L0000018   , L0000019   , L0000020   , L0000021   ,
L0000022   , L0000023   , L0000024   ,

           L0000025   , L0000026   ,
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

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3758763.5,      190.4,      190.4,      0.0);
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     ( 449387.4, 3758805.6,     191.5,     191.5,        0.0);          ( 449391.2,
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     ( 449402.8, 3758805.6,     190.4,     190.4,        0.0);          ( 449406.7,
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3758819.7,     191.5,     191.5,        0.0);
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
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 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

                                    *** DISCRETE CARTESIAN RECEPTORS ***

(449391.2, 3758819.7,   191.2,   191.2,   0.0);   (449395.1,
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(449375.8, 3758847.8,   193.0,   193.0,   0.0);   (449379.6,
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(449383.5, 3758847.8,   192.5,   192.5,   0.0);   (449387.4,
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     ( 449387.4, 3758861.8,      193.2,      193.2,        0.0);              ( 449391.2,
3758861.8,      192.9,      192.9,        0.0);
     ( 449395.1, 3758861.8,      192.7,      192.7,        0.0);              ( 449399.0,
3758861.8,      192.4,      192.4,        0.0);
     ( 449402.8, 3758861.8,      192.1,      192.1,        0.0);              ( 449406.7,
3758861.8,      191.9,      191.9,        0.0);
     ( 449410.6, 3758861.8,      191.6,      191.6,        0.0);              ( 449414.5,
3758861.8,      191.4,      191.4,        0.0);
     ( 449418.3, 3758861.8,      191.2,      191.2,        0.0);              ( 449422.2,
3758861.8,      190.9,      190.9,        0.0);
     ( 449426.1, 3758861.8,      190.7,      190.7,        0.0);              ( 449429.9,
3758861.8,      190.4,      190.4,        0.0);
     ( 449433.8, 3758861.8,      190.2,      190.2,        0.0);              ( 449437.7,
3758861.8,      190.0,      190.0,        0.0);
     ( 449441.5, 3758861.8,      189.8,      189.8,        0.0);              ( 449445.4,
3758861.8,      189.7,      189.7,        0.0);
     ( 449368.0, 3758875.8,      194.7,      194.7,        0.0);              ( 449371.9,
3758875.8,      194.6,      194.6,        0.0);
     ( 449375.8, 3758875.8,      194.4,      194.4,        0.0);              ( 449379.6,
3758875.8,      194.3,      194.3,        0.0);
     ( 449383.5, 3758875.8,      194.1,      194.1,        0.0);              ( 449387.4,
3758875.8,      193.8,      193.8,        0.0);
     ( 449391.2, 3758875.8,      193.5,      193.5,        0.0);              ( 449395.1,
3758875.8,      193.3,      193.3,        0.0);
     ( 449399.0, 3758875.8,      193.0,      193.0,        0.0);              ( 449402.8,
3758875.8,      192.8,      192.8,        0.0);
     ( 449406.7, 3758875.8,      192.5,      192.5,        0.0);              ( 449410.6,
3758875.8,      192.2,      192.2,        0.0);
```
⬥ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:28:21

                        PAGE   7
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

```
     ( 449414.5, 3758875.8,      192.0,      192.0,        0.0);        ( 449418.3,
3758875.8,      191.7,      191.7,        0.0);
     ( 449422.2, 3758875.8,      191.5,      191.5,        0.0);        ( 449426.1,
3758875.8,      191.2,      191.2,        0.0);
     ( 449429.9, 3758875.8,      191.0,      191.0,        0.0);        ( 449433.8,
3758875.8,      190.7,      190.7,        0.0);
     ( 449437.7, 3758875.8,      190.4,      190.4,        0.0);        ( 449441.5,
3758875.8,      190.2,      190.2,        0.0);
     ( 449445.4, 3758875.8,      190.1,      190.1,        0.0);        ( 449368.0,
3758889.9,      195.2,      195.2,        0.0);
     ( 449371.9, 3758889.9,      195.0,      195.0,        0.0);        ( 449375.8,
3758889.9,      194.9,      194.9,        0.0);
     ( 449379.6, 3758889.9,      194.8,      194.8,        0.0);        ( 449383.5,
3758889.9,      194.5,      194.5,        0.0);
     ( 449387.4, 3758889.9,      194.3,      194.3,        0.0);        ( 449391.2,
3758889.9,      194.0,      194.0,        0.0);
     ( 449395.1, 3758889.9,      193.7,      193.7,        0.0);        ( 449399.0,
3758889.9,      193.5,      193.5,        0.0);
     ( 449402.8, 3758889.9,      193.2,      193.2,        0.0);        ( 449406.7,
3758889.9,      193.0,      193.0,        0.0);
     ( 449410.6, 3758889.9,      192.7,      192.7,        0.0);        ( 449414.5,
3758889.9,      192.5,      192.5,        0.0);
     ( 449418.3, 3758889.9,      192.2,      192.2,        0.0);        ( 449422.2,
3758889.9,      191.9,      191.9,        0.0);
     ( 449426.1, 3758889.9,      191.7,      191.7,        0.0);        ( 449429.9,
3758889.9,      191.4,      191.4,        0.0);
     ( 449433.8, 3758889.9,      191.2,      191.2,        0.0);        ( 449437.7,
3758889.9,      190.9,      190.9,        0.0);
     ( 449441.5, 3758889.9,      190.7,      190.7,        0.0);        ( 449445.4,
3758889.9,      190.6,      190.6,        0.0);
     ( 449368.0, 3758903.9,      195.8,      195.8,        0.0);        ( 449371.9,
3758903.9,      195.7,      195.7,        0.0);
     ( 449375.8, 3758903.9,      195.6,      195.6,        0.0);        ( 449379.6,
3758903.9,      195.5,      195.5,        0.0);
     ( 449383.5, 3758903.9,      195.2,      195.2,        0.0);        ( 449387.4,
3758903.9,      195.0,      195.0,        0.0);
     ( 449391.2, 3758903.9,      194.7,      194.7,        0.0);        ( 449395.1,
3758903.9,      194.5,      194.5,        0.0);
     ( 449399.0, 3758903.9,      194.2,      194.2,        0.0);        ( 449402.8,
3758903.9,      194.0,      194.0,        0.0);
     ( 449406.7, 3758903.9,      193.7,      193.7,        0.0);        ( 449410.6,
3758903.9,      193.4,      193.4,        0.0);
     ( 449414.5, 3758903.9,      193.1,      193.1,        0.0);        ( 449418.3,
3758903.9,      192.8,      192.8,        0.0);
     ( 449422.2, 3758903.9,      192.6,      192.6,        0.0);        ( 449426.1,
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3758903.9,       192.3,       192.3,          0.0);
   ( 449429.9, 3758903.9,       192.0,       192.0,          0.0);          ( 449433.8,
3758903.9,       191.7,       195.0,          0.0);
   ( 449437.7, 3758903.9,       191.4,       195.0,          0.0);          ( 449441.5,
3758903.9,       191.2,       191.2,          0.0);
   ( 449445.4, 3758903.9,       191.1,       191.1,          0.0);          ( 449368.0,
3758918.0,       196.6,       196.6,          0.0);
   ( 449371.9, 3758918.0,       196.5,       196.5,          0.0);          ( 449375.8,
3758918.0,       196.5,       196.5,          0.0);
   ( 449379.6, 3758918.0,       196.4,       196.4,          0.0);          ( 449383.5,
3758918.0,       196.2,       196.2,          0.0);
   ( 449387.4, 3758918.0,       195.9,       195.9,          0.0);          ( 449391.2,
3758918.0,       195.7,       195.7,          0.0);
   ( 449395.1, 3758918.0,       195.4,       195.4,          0.0);          ( 449399.0,
3758918.0,       195.1,       195.1,          0.0);
   ( 449402.8, 3758918.0,       194.9,       194.9,          0.0);          ( 449406.7,
3758918.0,       194.6,       194.6,          0.0);
   ( 449410.6, 3758918.0,       194.3,       194.3,          0.0);          ( 449414.5,
3758918.0,       194.0,       195.0,          0.0);
   ( 449418.3, 3758918.0,       193.6,       195.0,          0.0);          ( 449422.2,
3758918.0,       193.3,       195.0,          0.0);
   ( 449426.1, 3758918.0,       192.9,       195.0,          0.0);          ( 449429.9,
3758918.0,       192.6,       195.0,          0.0);
   ( 449433.8, 3758918.0,       192.2,       195.0,          0.0);          ( 449437.7,
3758918.0,       191.9,       195.0,          0.0);
   ( 449441.5, 3758918.0,       191.7,       195.0,          0.0);          ( 449445.4,
3758918.0,       191.5,       191.5,          0.0);
   ( 449368.0, 3758932.0,       197.2,       197.2,          0.0);          ( 449371.9,
3758932.0,       197.2,       197.2,          0.0);
   ( 449375.8, 3758932.0,       197.2,       197.2,          0.0);          ( 449379.6,
3758932.0,       197.2,       197.2,          0.0);
   ( 449383.5, 3758932.0,       196.9,       196.9,          0.0);          ( 449387.4,
3758932.0,       196.7,       196.7,          0.0);
   ( 449391.2, 3758932.0,       196.4,       196.4,          0.0);          ( 449395.1,
3758932.0,       196.2,       196.2,          0.0);
   ( 449399.0, 3758932.0,       195.9,       195.9,          0.0);          ( 449402.8,
3758932.0,       195.6,       195.6,          0.0);
   ( 449406.7, 3758932.0,       195.4,       195.4,          0.0);          ( 449410.6,
3758932.0,       195.1,       195.1,          0.0);
   ( 449414.5, 3758932.0,       194.7,       194.7,          0.0);          ( 449418.3,
3758932.0,       194.3,       194.3,          0.0);
   ( 449422.2, 3758932.0,       193.9,       193.9,          0.0);          ( 449426.1,
3758932.0,       193.5,       193.5,          0.0);
   ( 449429.9, 3758932.0,       193.1,       193.1,          0.0);          ( 449433.8,
3758932.0,       192.8,       192.8,          0.0);
```

*** MODELOPTs: RegDFAULT CONC   ELEV   URBAN   ADJ_U*

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

     (449437.7, 3758932.0,   192.4,   192.4,   0.0);   (449441.5,
3758932.0,   192.1,   192.1,   0.0);
     (449445.4, 3758932.0,   192.0,   192.0,   0.0);   (449368.0,
3758946.0,   197.7,   197.7,   0.0);
     (449371.9, 3758946.0,   197.7,   197.7,   0.0);   (449375.8,
3758946.0,   197.7,   197.7,   0.0);
     (449379.6, 3758946.0,   197.7,   197.7,   0.0);   (449383.5,
3758946.0,   197.4,   197.4,   0.0);
     (449387.4, 3758946.0,   197.1,   197.1,   0.0);   (449391.2,
3758946.0,   196.9,   196.9,   0.0);
     (449395.1, 3758946.0,   196.6,   196.6,   0.0);   (449399.0,
3758946.0,   196.4,   196.4,   0.0);
     (449402.8, 3758946.0,   196.1,   196.1,   0.0);   (449406.7,
3758946.0,   195.8,   195.8,   0.0);
     (449410.6, 3758946.0,   195.5,   195.5,   0.0);   (449414.5,
3758946.0,   195.2,   195.2,   0.0);
     (449418.3, 3758946.0,   194.8,   194.8,   0.0);   (449422.2,
3758946.0,   194.4,   194.4,   0.0);
     (449426.1, 3758946.0,   194.0,   196.0,   0.0);   (449429.9,
3758946.0,   193.6,   196.0,   0.0);
     (449433.8, 3758946.0,   193.2,   196.0,   0.0);   (449437.7,
3758946.0,   192.8,   196.0,   0.0);
     (449441.5, 3758946.0,   192.5,   196.0,   0.0);   (449445.4,
3758946.0,   192.3,   192.3,   0.0);
     (449368.0, 3758960.1,   198.0,   198.0,   0.0);   (449371.9,
3758960.1,   198.0,   198.0,   0.0);
     (449375.8, 3758960.1,   198.0,   198.0,   0.0);   (449379.6,
3758960.1,   198.0,   198.0,   0.0);
     (449383.5, 3758960.1,   197.8,   197.8,   0.0);   (449387.4,
3758960.1,   197.5,   197.5,   0.0);
     (449391.2, 3758960.1,   197.3,   197.3,   0.0);   (449395.1,
3758960.1,   197.0,   197.0,   0.0);
     (449399.0, 3758960.1,   196.8,   196.8,   0.0);   (449402.8,
3758960.1,   196.5,   196.5,   0.0);
     (449406.7, 3758960.1,   196.3,   196.3,   0.0);   (449410.6,
3758960.1,   196.0,   196.0,   0.0);
     (449414.5, 3758960.1,   195.6,   195.6,   0.0);   (449418.3,
3758960.1,   195.2,   195.2,   0.0);
     (449422.2, 3758960.1,   194.9,   194.9,   0.0);   (449426.1,
3758960.1,   194.5,   194.5,   0.0);
     (449429.9, 3758960.1,   194.1,   194.1,   0.0);   (449433.8,
3758960.1,   193.7,   193.7,   0.0);
     (449437.7, 3758960.1,   193.3,   193.3,   0.0);   (449441.5,

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3758960.1,      193.0,      193.0,         0.0);
     ( 449445.4, 3758960.1,      192.7,      192.7,         0.0);         ( 449368.0,
3758974.1,      198.0,      198.0,         0.0);
     ( 449371.9, 3758974.1,      198.0,      198.0,         0.0);         ( 449375.8,
3758974.1,      198.0,      198.0,         0.0);
     ( 449379.6, 3758974.1,      198.0,      198.0,         0.0);         ( 449383.5,
3758974.1,      197.8,      197.8,         0.0);
     ( 449387.4, 3758974.1,      197.6,      197.6,         0.0);         ( 449391.2,
3758974.1,      197.5,      197.5,         0.0);
     ( 449395.1, 3758974.1,      197.3,      197.3,         0.0);         ( 449399.0,
3758974.1,      197.1,      197.1,         0.0);
     ( 449402.8, 3758974.1,      196.9,      196.9,         0.0);         ( 449406.7,
3758974.1,      196.7,      196.7,         0.0);
     ( 449410.6, 3758974.1,      196.5,      196.5,         0.0);         ( 449414.5,
3758974.1,      196.1,      196.1,         0.0);
     ( 449418.3, 3758974.1,      195.7,      195.7,         0.0);         ( 449422.2,
3758974.1,      195.3,      195.3,         0.0);
     ( 449426.1, 3758974.1,      194.9,      197.0,         0.0);         ( 449429.9,
3758974.1,      194.5,      197.0,         0.0);
     ( 449433.8, 3758974.1,      194.2,      197.0,         0.0);         ( 449437.7,
3758974.1,      193.8,      197.0,         0.0);
     ( 449441.5, 3758974.1,      193.4,      197.0,         0.0);         ( 449445.4,
3758974.1,      193.1,      197.0,         0.0);
     ( 449368.0, 3758988.2,      198.1,      198.1,         0.0);         ( 449371.9,
3758988.2,      198.1,      198.1,         0.0);
     ( 449375.8, 3758988.2,      198.1,      198.1,         0.0);         ( 449379.6,
3758988.2,      198.1,      198.1,         0.0);
     ( 449383.5, 3758988.2,      197.9,      197.9,         0.0);         ( 449387.4,
3758988.2,      197.8,      197.8,         0.0);
     ( 449391.2, 3758988.2,      197.6,      197.6,         0.0);         ( 449395.1,
3758988.2,      197.5,      197.5,         0.0);
     ( 449399.0, 3758988.2,      197.4,      197.4,         0.0);         ( 449402.8,
3758988.2,      197.2,      197.2,         0.0);
     ( 449406.7, 3758988.2,      197.1,      197.1,         0.0);         ( 449410.6,
3758988.2,      196.9,      196.9,         0.0);
     ( 449414.5, 3758988.2,      196.5,      196.5,         0.0);         ( 449418.3,
3758988.2,      196.1,      196.1,         0.0);
     ( 449422.2, 3758988.2,      195.8,      195.8,         0.0);         ( 449426.1,
3758988.2,      195.4,      195.4,         0.0);
     ( 449429.9, 3758988.2,      195.0,      195.0,         0.0);         ( 449433.8,
3758988.2,      194.6,      194.6,         0.0);
     ( 449437.7, 3758988.2,      194.2,      194.2,         0.0);         ( 449441.5,
3758988.2,      193.9,      193.9,         0.0);
     ( 449445.4, 3758988.2,      193.5,      193.5,         0.0);         ( 449368.0,
3759002.2,      198.5,      198.5,         0.0);
     ( 449371.9, 3759002.2,      198.5,      198.5,         0.0);         ( 449375.8,
3759002.2,      198.5,      198.5,         0.0);
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                                        *** DISCRETE CARTESIAN RECEPTORS ***
                                    (X-COORD, Y-COORD, ZELEV, ZHILL, ZFLAG)
                                                  (METERS)

       (449379.6, 3759002.2,   198.5,   198.5,   0.0);   (449383.5,
3759002.2,   198.3,   198.3,   0.0);
       (449387.4, 3759002.2,   198.1,   198.1,   0.0);   (449391.2,
3759002.2,   197.9,   197.9,   0.0);
       (449395.1, 3759002.2,   197.7,   197.7,   0.0);   (449399.0,
3759002.2,   197.5,   197.5,   0.0);
       (449402.8, 3759002.2,   197.3,   197.3,   0.0);   (449406.7,
3759002.2,   197.1,   197.1,   0.0);
       (449410.6, 3759002.2,   196.9,   196.9,   0.0);   (449414.5,
3759002.2,   196.6,   196.6,   0.0);
       (449418.3, 3759002.2,   196.3,   196.3,   0.0);   (449422.2,
3759002.2,   196.0,   196.0,   0.0);
       (449426.1, 3759002.2,   195.6,   195.6,   0.0);   (449429.9,
3759002.2,   195.3,   195.3,   0.0);
       (449433.8, 3759002.2,   195.0,   195.0,   0.0);   (449437.7,
3759002.2,   194.7,   194.7,   0.0);
       (449441.5, 3759002.2,   194.3,   194.3,   0.0);   (449445.4,
3759002.2,   193.9,   193.9,   0.0);
       (449368.0, 3759016.2,   199.0,   199.0,   0.0);   (449371.9,
3759016.2,   199.0,   199.0,   0.0);
       (449375.8, 3759016.2,   199.0,   199.0,   0.0);   (449379.6,
3759016.2,   199.0,   199.0,   0.0);
       (449383.5, 3759016.2,   198.7,   198.7,   0.0);   (449387.4,
3759016.2,   198.5,   198.5,   0.0);
       (449391.2, 3759016.2,   198.2,   198.2,   0.0);   (449395.1,
3759016.2,   198.0,   198.0,   0.0);
       (449399.0, 3759016.2,   197.7,   197.7,   0.0);   (449402.8,
3759016.2,   197.4,   197.4,   0.0);
       (449406.7, 3759016.2,   197.2,   197.2,   0.0);   (449410.6,
3759016.2,   196.9,   196.9,   0.0);
       (449414.5, 3759016.2,   196.7,   196.7,   0.0);   (449418.3,
3759016.2,   196.4,   196.4,   0.0);
       (449422.2, 3759016.2,   196.2,   196.2,   0.0);   (449426.1,
3759016.2,   195.9,   195.9,   0.0);
       (449429.9, 3759016.2,   195.6,   195.6,   0.0);   (449433.8,
3759016.2,   195.4,   195.4,   0.0);
       (449437.7, 3759016.2,   195.1,   195.1,   0.0);   (449441.5,
3759016.2,   194.8,   195.0,   0.0);
       (449445.4, 3759016.2,   194.4,   195.0,   0.0);   (449368.0,
3759030.3,   198.5,   198.5,   0.0);
       (449371.9, 3759030.3,   198.5,   198.5,   0.0);   (449375.8,

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3759030.3,       198.5,       198.5,        0.0);
     ( 449379.6, 3759030.3,      198.5,      198.5,        0.0);          ( 449383.5,
3759030.3,       198.3,       198.3,        0.0);
     ( 449387.4, 3759030.3,      198.0,      198.0,        0.0);          ( 449391.2,
3759030.3,       197.8,       197.8,        0.0);
     ( 449395.1, 3759030.3,      197.5,      197.5,        0.0);          ( 449399.0,
3759030.3,       197.2,       197.2,        0.0);
     ( 449402.8, 3759030.3,      197.0,      197.0,        0.0);          ( 449406.7,
3759030.3,       196.7,       196.7,        0.0);
     ( 449410.6, 3759030.3,      196.5,      196.5,        0.0);          ( 449414.5,
3759030.3,       196.3,       196.3,        0.0);
     ( 449418.3, 3759030.3,      196.1,      196.1,        0.0);          ( 449422.2,
3759030.3,       195.9,       195.9,        0.0);
     ( 449426.1, 3759030.3,      195.7,      195.7,        0.0);          ( 449429.9,
3759030.3,       195.5,       195.5,        0.0);
     ( 449433.8, 3759030.3,      195.3,      195.3,        0.0);          ( 449437.7,
3759030.3,       195.1,       195.1,        0.0);
     ( 449441.5, 3759030.3,      194.8,      194.8,        0.0);          ( 449445.4,
3759030.3,       194.4,       194.4,        0.0);
     ( 449368.0, 3759044.3,      198.1,      198.1,        0.0);          ( 449371.9,
3759044.3,       198.1,       198.1,        0.0);
     ( 449375.8, 3759044.3,      198.1,      198.1,        0.0);          ( 449379.6,
3759044.3,       198.1,       198.1,        0.0);
     ( 449383.5, 3759044.3,      197.8,      197.8,        0.0);          ( 449387.4,
3759044.3,       197.5,       197.5,        0.0);
     ( 449391.2, 3759044.3,      197.3,      197.3,        0.0);          ( 449395.1,
3759044.3,       197.0,       197.0,        0.0);
     ( 449399.0, 3759044.3,      196.8,      196.8,        0.0);          ( 449402.8,
3759044.3,       196.5,       196.5,        0.0);
     ( 449406.7, 3759044.3,      196.2,      196.2,        0.0);          ( 449410.6,
3759044.3,       196.0,       196.0,        0.0);
     ( 449414.5, 3759044.3,      195.9,      195.9,        0.0);          ( 449418.3,
3759044.3,       195.8,       195.8,        0.0);
     ( 449422.2, 3759044.3,      195.6,      195.6,        0.0);          ( 449426.1,
3759044.3,       195.5,       195.5,        0.0);
     ( 449429.9, 3759044.3,      195.3,      195.3,        0.0);          ( 449433.8,
3759044.3,       195.2,       195.2,        0.0);
     ( 449437.7, 3759044.3,      195.1,      195.1,        0.0);          ( 449441.5,
3759044.3,       194.8,       194.8,        0.0);
     ( 449445.4, 3759044.3,      194.4,      194.4,        0.0);
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   11:28:21

                          PAGE 10
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN 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 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                     ***   11:28:21

                              PAGE 11
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

   Surface file: ..\KRAL_V9_ADJU\KRAL_V9.SFC
              Met Version: 16216
   Profile file: ..\KRAL_V9_ADJU\KRAL_V9.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:   3171   Upper air station no.:   3190

```
 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
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -
 12 01 01   1 01  -25.6  0.266 -9.000 -9.000 -999.  330.     77.9 0.15   2.40
1.00    2.93   55.   10.1  288.1    2.0
 12 01 01   1 02  -26.8  0.277 -9.000 -9.000 -999.  351.     84.7 0.15   2.40
1.00    3.05   55.   10.1  287.0    2.0
 12 01 01   1 03  -21.5  0.221 -9.000 -9.000 -999.  250.     53.5 0.15   2.40
1.00    2.45   74.   10.1  284.2    2.0
 12 01 01   1 04  -22.0  0.227 -9.000 -9.000 -999.  260.     56.8 0.15   2.40
1.00    2.52   77.   10.1  285.9    2.0
 12 01 01   1 05  -20.0  0.206 -9.000 -9.000 -999.  225.     46.8 0.15   2.40
1.00    2.30   80.   10.1  285.4    2.0
 12 01 01   1 06  -14.4  0.171 -9.000 -9.000 -999.  170.     32.1 0.15   2.40
1.00    1.93   79.   10.1  287.0    2.0
 12 01 01   1 07  -14.9  0.174 -9.000 -9.000 -999.  174.     33.2 0.15   2.40
1.00    1.96   77.   10.1  284.2    2.0
 12 01 01   1 08  -11.9  0.169 -9.000 -9.000 -999.  167.     36.1 0.15   2.40
0.53    1.89   77.   10.1  288.1    2.0
 12 01 01   1 09   40.4  0.234  0.359  0.006   40.  272.    -28.1 0.15   2.40
0.31    2.10   81.   10.1  289.2    2.0
 12 01 01   1 10  112.6  0.246  0.742  0.005  129.  293.    -11.8 0.15   2.40
0.24    1.99  101.   10.1  296.4    2.0
 12 01 01   1 11  161.0  0.402  1.188  0.005  369.  611.    -35.6 0.15   2.40
0.21    3.68   78.   10.1  298.8    2.0
 12 01 01   1 12  184.7  0.337  1.516  0.005  668.  473.    -18.4 0.15   2.40
0.20    2.89   68.   10.1  300.4    2.0
 12 01 01   1 13  183.9  0.310  1.809  0.005 1139.  414.    -14.2 0.15   2.40
0.20    2.57   64.   10.1  302.5    2.0
 12 01 01   1 14  156.6  0.374  1.852  0.005 1434.  549.    -29.5 0.15   2.40
0.22    3.37   63.   10.1  303.1    2.0
 12 01 01   1 15  104.3  0.382  1.658  0.005 1546.  567.    -47.2 0.15   2.40
0.25    3.59   62.   10.1  302.5    2.0
 12 01 01   1 16   31.8  0.374  1.123  0.005 1573.  550.   -145.8 0.15   2.40
0.34    3.76   69.   10.1  300.9    2.0
 12 01 01   1 17  -23.3  0.276 -9.000 -9.000 -999.  354.     84.0 0.15   2.40
0.62    3.03   59.   10.1  297.5    2.0
 12 01 01   1 18  -21.5  0.229 -9.000 -9.000 -999.  264.     57.8 0.15   2.40
1.00    2.54   54.   10.1  295.4    2.0
 12 01 01   1 19  -19.3  0.204 -9.000 -9.000 -999.  221.     45.6 0.15   2.40
1.00    2.27   79.   10.1  292.0    2.0
 12 01 01   1 20  -20.7  0.218 -9.000 -9.000 -999.  244.     52.2 0.15   2.40
1.00    2.42   79.   10.1  292.5    2.0
 12 01 01   1 21  -19.7  0.206 -9.000 -9.000 -999.  225.     46.9 0.15   2.40
```

```
1.00    2.30   95.   10.1  290.9    2.0
 12 01 01   1 22 -17.6  0.190 -9.000 -9.000 -999.  199.    39.8  0.15  2.40
1.00    2.13   78.   10.1  290.4    2.0
 12 01 01   1 23 -20.3  0.211 -9.000 -9.000 -999.  233.    49.0  0.15  2.40
1.00    2.35   52.   10.1  289.2    2.0
 12 01 01   1 24 -16.4  0.183 -9.000 -9.000 -999.  189.    37.0  0.15  2.40
1.00    2.06   75.   10.1  288.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1   55.    2.93   288.2   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC                       ***         11/11/21
 *** AERMET - VERSION  16216 ***    ***
                        ***         11:28:21

                        PAGE  12
  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                          *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                              INCLUDING SOURCE(S):    L0000001    , L0000002
 , L0000003     , L0000004    , L0000005    ,
                  L0000006    , L0000007    , L0000008    , L0000009    , L0000010
 , L0000011    , L0000012    , L0000013    ,
                  L0000014    , L0000015    , L0000016    , L0000017    , L0000018
 , L0000019    , L0000020    , L0000021    ,
                  L0000022    , L0000023    , L0000024    , L0000025    , L0000026
 ,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M)  Y-COORD (M)      CONC    (YYMMDDHH)          X-COORD (M)
Y-COORD (M)       CONC    (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - -
        449368.02  3758763.53      0.04629 (13112916)          449371.89
 3758763.53       0.04378 (13062606)
        449375.76  3758763.53      0.04199 (13062606)          449379.63
 3758763.53       0.04034 (13062606)
        449383.50  3758763.53      0.03883 (13062606)          449387.37
 3758763.53       0.03743 (13062606)
        449391.24  3758763.53      0.03611 (13062606)          449395.11
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3758763.53          0.03489  (13062606)
     449398.98   3758763.53         0.03374  (13062606)                  449402.85
3758763.53          0.03266  (13062606)
     449406.72   3758763.53         0.03165  (13062606)                  449410.59
3758763.53          0.03069  (13062606)
     449414.46   3758763.53         0.02980  (13062606)                  449418.33
3758763.53          0.02896  (13062606)
     449422.20   3758763.53         0.02816  (13062606)                  449426.07
3758763.53          0.02740  (13062606)
     449429.94   3758763.53         0.02668  (13062606)                  449433.81
3758763.53          0.02599  (13062606)
     449437.68   3758763.53         0.02534  (13062606)                  449441.55
3758763.53          0.02472  (13062606)
     449445.42   3758763.53         0.02412  (13062606)                  449368.02
3758777.57          0.04633  (13112916)
     449371.89   3758777.57         0.04389  (13062606)                  449375.76
3758777.57          0.04208  (13062606)
     449379.63   3758777.57         0.04041  (13062606)                  449383.50
3758777.57          0.03889  (13062606)
     449387.37   3758777.57         0.03749  (13062606)                  449391.24
3758777.57          0.03618  (13062606)
     449395.11   3758777.57         0.03495  (13062606)                  449398.98
3758777.57          0.03380  (13062606)
     449402.85   3758777.57         0.03272  (13062606)                  449406.72
3758777.57          0.03170  (13062606)
     449410.59   3758777.57         0.03075  (13062606)                  449414.46
3758777.57          0.02986  (13062606)
     449418.33   3758777.57         0.02902  (13062606)                  449422.20
3758777.57          0.02822  (13062606)
     449426.07   3758777.57         0.02746  (13062606)                  449429.94
3758777.57          0.02674  (13062606)
     449433.81   3758777.57         0.02606  (13062606)                  449437.68
3758777.57          0.02540  (13062606)
     449441.55   3758777.57         0.02478  (13062606)                  449445.42
3758777.57          0.02419  (13062606)
     449368.02   3758791.61         0.04652  (13112916)                  449371.89
3758791.61          0.04404  (13062606)
     449375.76   3758791.61         0.04225  (13062606)                  449379.63
3758791.61          0.04060  (13062606)
     449383.50   3758791.61         0.03908  (13062606)                  449387.37
3758791.61          0.03766  (13062606)
     449391.24   3758791.61         0.03635  (13062606)                  449395.11
3758791.61          0.03512  (13062606)
     449398.98   3758791.61         0.03397  (13062606)                  449402.85
3758791.61          0.03288  (13062606)
     449406.72   3758791.61         0.03186  (13062606)                  449410.59
3758791.61          0.03091  (13062606)
     449414.46   3758791.61         0.03001  (13062606)                  449418.33
3758791.61          0.02917  (13062606)
     449422.20   3758791.61         0.02837  (13062606)                  449426.07
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 3758791.61          0.02761 (13062606)
         449429.94  3758791.61       0.02688 (13062606)              449433.81
 3758791.61          0.02619 (13062606)
         449437.68  3758791.61       0.02553 (13062606)              449441.55
 3758791.61          0.02491 (13062606)
         449445.42  3758791.61       0.02431 (13062606)              449368.02
 3758805.65          0.04665 (13112916)
         449371.89  3758805.65       0.04420 (13062606)              449375.76
 3758805.65          0.04242 (13062606)
         449379.63  3758805.65       0.04077 (13062606)              449383.50
 3758805.65          0.03925 (13062606)
         449387.37  3758805.65       0.03783 (13062606)              449391.24
 3758805.65          0.03651 (13062606)
         449395.11  3758805.65       0.03528 (13062606)              449398.98
 3758805.65          0.03412 (13062606)
         449402.85  3758805.65       0.03303 (13062606)              449406.72
 3758805.65          0.03201 (13062606)
         449410.59  3758805.65       0.03105 (13062606)              449414.46
 3758805.65          0.03016 (13062606)
         449418.33  3758805.65       0.02931 (13062606)              449422.20
 3758805.65          0.02850 (13062606)
         449426.07  3758805.65       0.02774 (13062606)              449429.94
 3758805.65          0.02701 (13062606)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   11:28:21

                          PAGE 13
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                            *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                               INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                         *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)

- -
- -
```
     449433.81   3758805.65        0.02632  (13062606)                  449437.68
3758805.65        0.02566  (13062606)
     449441.55   3758805.65        0.02503  (13062606)                  449445.42
3758805.65        0.02442  (13062606)
     449368.02   3758819.69        0.04672  (13112916)                  449371.89
3758819.69        0.04431  (13062606)
     449375.76   3758819.69        0.04252  (13062606)                  449379.63
3758819.69        0.04087  (13062606)
     449383.50   3758819.69        0.03935  (13062606)                  449387.37
3758819.69        0.03793  (13062606)
     449391.24   3758819.69        0.03660  (13062606)                  449395.11
3758819.69        0.03537  (13062606)
     449398.98   3758819.69        0.03421  (13062606)                  449402.85
3758819.69        0.03312  (13062606)
     449406.72   3758819.69        0.03210  (13062606)                  449410.59
3758819.69        0.03114  (13062606)
     449414.46   3758819.69        0.03024  (13062606)                  449418.33
3758819.69        0.02939  (13062606)
     449422.20   3758819.69        0.02858  (13062606)                  449426.07
3758819.69        0.02782  (13062606)
     449429.94   3758819.69        0.02709  (13062606)                  449433.81
3758819.69        0.02639  (13062606)
     449437.68   3758819.69        0.02573  (13062606)                  449441.55
3758819.69        0.02510  (13062606)
     449445.42   3758819.69        0.02450  (13062606)                  449368.02
3758833.73        0.04680  (13112916)
     449371.89   3758833.73        0.04440  (13062606)                  449375.76
3758833.73        0.04262  (13062606)
     449379.63   3758833.73        0.04097  (13062606)                  449383.50
3758833.73        0.03944  (13062606)
     449387.37   3758833.73        0.03801  (13062606)                  449391.24
3758833.73        0.03669  (13062606)
     449395.11   3758833.73        0.03545  (13062606)                  449398.98
3758833.73        0.03429  (13062606)
     449402.85   3758833.73        0.03320  (13062606)                  449406.72
3758833.73        0.03217  (13062606)
     449410.59   3758833.73        0.03121  (13062606)                  449414.46
3758833.73        0.03031  (13062606)
     449418.33   3758833.73        0.02946  (13062606)                  449422.20
3758833.73        0.02865  (13062606)
     449426.07   3758833.73        0.02789  (13062606)                  449429.94
3758833.73        0.02716  (13062606)
     449433.81   3758833.73        0.02646  (13062606)                  449437.68
3758833.73        0.02580  (13062606)
     449441.55   3758833.73        0.02517  (13062606)                  449445.42
3758833.73        0.02456  (13062606)
     449368.02   3758847.77        0.04723  (13112916)                  449371.89
3758847.77        0.04464  (13112916)
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      449375.76   3758847.77        0.04281  (13062606)              449379.63
3758847.77        0.04116  (13062606)
      449383.50   3758847.77        0.03962  (13062606)              449387.37
3758847.77        0.03820  (13062606)
      449391.24   3758847.77        0.03687  (13062606)              449395.11
3758847.77        0.03562  (13062606)
      449398.98   3758847.77        0.03446  (13062606)              449402.85
3758847.77        0.03336  (13062606)
      449406.72   3758847.77        0.03233  (13062606)              449410.59
3758847.77        0.03136  (13062606)
      449414.46   3758847.77        0.03046  (13062606)              449418.33
3758847.77        0.02960  (13062606)
      449422.20   3758847.77        0.02878  (13062606)              449426.07
3758847.77        0.02800  (13062606)
      449429.94   3758847.77        0.02727  (13062606)              449433.81
3758847.77        0.02657  (13062606)
      449437.68   3758847.77        0.02590  (13062606)              449441.55
3758847.77        0.02526  (13062606)
      449445.42   3758847.77        0.02465  (13062606)              449368.02
3758861.81        0.04776  (13112916)
      449371.89   3758861.81        0.04520  (13112916)              449375.76
3758861.81        0.04299  (13062606)
      449379.63   3758861.81        0.04134  (13062606)              449383.50
3758861.81        0.03980  (13062606)
      449387.37   3758861.81        0.03837  (13062606)              449391.24
3758861.81        0.03704  (13062606)
      449395.11   3758861.81        0.03580  (13062606)              449398.98
3758861.81        0.03463  (13062606)
      449402.85   3758861.81        0.03353  (13062606)              449406.72
3758861.81        0.03250  (13062606)
      449410.59   3758861.81        0.03152  (13062606)              449414.46
3758861.81        0.03060  (13062606)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   11:28:21

                       PAGE 14

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                       *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                       INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                L0000022   , L0000023   , L0000024   , L0000025   , L0000026
,

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

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
449418.33	3758861.81	0.02973	(13062606)	449422.20	3758861.81	0.02891	(13062606)
449426.07	3758861.81	0.02813	(13062606)	449429.94	3758861.81	0.02738	(13062606)
449433.81	3758861.81	0.02667	(13062606)	449437.68	3758861.81	0.02600	(13062606)
449441.55	3758861.81	0.02535	(13062606)	449445.42	3758861.81	0.02475	(13062606)
449368.02	3758875.85	0.04796	(13112916)	449371.89	3758875.85	0.04545	(13112916)
449375.76	3758875.85	0.04314	(13112916)	449379.63	3758875.85	0.04146	(13062606)
449383.50	3758875.85	0.03993	(13062606)	449387.37	3758875.85	0.03850	(13062606)
449391.24	3758875.85	0.03717	(13062606)	449395.11	3758875.85	0.03592	(13062606)
449398.98	3758875.85	0.03475	(13062606)	449402.85	3758875.85	0.03365	(13062606)
449406.72	3758875.85	0.03261	(13062606)	449410.59	3758875.85	0.03164	(13062606)
449414.46	3758875.85	0.03071	(13062606)	449418.33	3758875.85	0.02984	(13062606)
449422.20	3758875.85	0.02901	(13062606)	449426.07	3758875.85	0.02822	(13062606)
449429.94	3758875.85	0.02748	(13062606)	449433.81	3758875.85	0.02676	(13062606)
449437.68	3758875.85	0.02608	(13062606)	449441.55	3758875.85	0.02544	(13062606)
449445.42	3758875.85	0.02483	(13062606)	449368.02	3758889.89	0.04802	(13112916)
449371.89	3758889.89	0.04550	(13112916)	449375.76	3758889.89	0.04321	(13112916)
449379.63	3758889.89	0.04156	(13062606)	449383.50	3758889.89	0.04003	(13062606)
449387.37	3758889.89	0.03860	(13062606)	449391.24	3758889.89	0.03726	(13062606)
449395.11	3758889.89	0.03602	(13062606)	449398.98	3758889.89	0.03484	(13062606)
449402.85	3758889.89	0.03374	(13062606)	449406.72			

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3758889.89          0.03271  (13062606)
        449410.59   3758889.89          0.03173  (13062606)                449414.46
3758889.89          0.03080  (13062606)
        449418.33   3758889.89          0.02993  (13062606)                449422.20
3758889.89          0.02910  (13062606)
        449426.07   3758889.89          0.02831  (13062606)                449429.94
3758889.89          0.02756  (13062606)
        449433.81   3758889.89          0.02685  (13062606)                449437.68
3758889.89          0.02616  (13062606)
        449441.55   3758889.89          0.02552  (13062606)                449445.42
3758889.89          0.02491  (13062606)
        449368.02   3758903.93          0.04789  (13112916)                449371.89
3758903.93          0.04540  (13112916)
        449375.76   3758903.93          0.04329  (13062606)                449379.63
3758903.93          0.04164  (13062606)
        449383.50   3758903.93          0.04011  (13062606)                449387.37
3758903.93          0.03869  (13062606)
        449391.24   3758903.93          0.03736  (13062606)                449395.11
3758903.93          0.03611  (13062606)
        449398.98   3758903.93          0.03494  (13062606)                449402.85
3758903.93          0.03384  (13062606)
        449406.72   3758903.93          0.03281  (13062606)                449410.59
3758903.93          0.03183  (13062606)
        449414.46   3758903.93          0.03090  (13062606)                449418.33
3758903.93          0.03002  (13062606)
        449422.20   3758903.93          0.02919  (13062606)                449426.07
3758903.93          0.02840  (13062606)
        449429.94   3758903.93          0.02764  (13062606)                449433.81
3758903.93          0.02692  (13062606)
        449437.68   3758903.93          0.02624  (13062606)                449441.55
3758903.93          0.02559  (13062606)
        449445.42   3758903.93          0.02498  (13062606)                449368.02
3758917.97          0.04776  (13112916)
        449371.89   3758917.97          0.04526  (13112916)                449375.76
3758917.97          0.04334  (13062606)
        449379.63   3758917.97          0.04169  (13062606)                449383.50
3758917.97          0.04017  (13062606)
        449387.37   3758917.97          0.03875  (13062606)                449391.24
3758917.97          0.03743  (13062606)
        449395.11   3758917.97          0.03619  (13062606)                449398.98
3758917.97          0.03503  (13062606)
⬥ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC                      ***         11/11/21
 *** AERMET - VERSION  16216 ***    ***
                       ***          11:28:21


                       PAGE  15
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                            *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
```

                              INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
 Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
       449402.85 3758917.97   0.03393 (13062606)   449406.72
 3758917.97   0.03290 (13062606)
       449410.59 3758917.97   0.03192 (13062606)   449414.46
 3758917.97   0.03099 (13062606)
       449418.33 3758917.97   0.03011 (13062606)   449422.20
 3758917.97   0.02927 (13062606)
       449426.07 3758917.97   0.02848 (13062606)   449429.94
 3758917.97   0.02772 (13062606)
       449433.81 3758917.97   0.02700 (13062606)   449437.68
 3758917.97   0.02631 (13062606)
       449441.55 3758917.97   0.02566 (13062606)   449445.42
 3758917.97   0.02504 (13062606)
       449368.02 3758932.01   0.04771 (13112916)   449371.89
 3758932.01   0.04520 (13112916)
       449375.76 3758932.01   0.04338 (13062606)   449379.63
 3758932.01   0.04173 (13062606)
       449383.50 3758932.01   0.04021 (13062606)   449387.37
 3758932.01   0.03880 (13062606)
       449391.24 3758932.01   0.03748 (13062606)   449395.11
 3758932.01   0.03624 (13062606)
       449398.98 3758932.01   0.03508 (13062606)   449402.85
 3758932.01   0.03399 (13062606)
       449406.72 3758932.01   0.03296 (13062606)   449410.59
 3758932.01   0.03199 (13062606)
       449414.46 3758932.01   0.03106 (13062606)   449418.33
 3758932.01   0.03018 (13062606)
       449422.20 3758932.01   0.02934 (13062606)   449426.07
 3758932.01   0.02855 (13062606)
       449429.94 3758932.01   0.02779 (13062606)   449433.81
 3758932.01   0.02706 (13062606)

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    449437.68   3758932.01        0.02637  (13062606)                      449441.55
3758932.01          0.02571  (13062606)
    449445.42   3758932.01        0.02510  (13062606)                      449368.02
3758946.05          0.04753  (13112916)
    449371.89   3758946.05        0.04522  (13062606)                      449375.76
3758946.05          0.04343  (13062606)
    449379.63   3758946.05        0.04178  (13020301)                      449383.50
3758946.05          0.04026  (13062606)
    449387.37   3758946.05        0.03884  (13062606)                      449391.24
3758946.05          0.03752  (13062606)
    449395.11   3758946.05        0.03629  (13062606)                      449398.98
3758946.05          0.03513  (13062606)
    449402.85   3758946.05        0.03403  (13062606)                      449406.72
3758946.05          0.03301  (13062606)
    449410.59   3758946.05        0.03203  (13062606)                      449414.46
3758946.05          0.03111  (13062606)
    449418.33   3758946.05        0.03023  (13062606)                      449422.20
3758946.05          0.02939  (13062606)
    449426.07   3758946.05        0.02860  (13062606)                      449429.94
3758946.05          0.02784  (13062606)
    449433.81   3758946.05        0.02711  (13062606)                      449437.68
3758946.05          0.02642  (13062606)
    449441.55   3758946.05        0.02576  (13062606)                      449445.42
3758946.05          0.02514  (13062606)
    449368.02   3758960.09        0.04779  (13020301)                      449371.89
3758960.09          0.04640  (13020301)
    449375.76   3758960.09        0.04506  (13020301)                      449379.63
3758960.09          0.04376  (13020301)
    449383.50   3758960.09        0.04038  (13020301)                      449387.37
3758960.09          0.03890  (13020301)
    449391.24   3758960.09        0.03756  (13062606)                      449395.11
3758960.09          0.03632  (13062606)
    449398.98   3758960.09        0.03516  (13062606)                      449402.85
3758960.09          0.03407  (13062606)
    449406.72   3758960.09        0.03304  (13062606)                      449410.59
3758960.09          0.03207  (13062606)
    449414.46   3758960.09        0.03115  (13062606)                      449418.33
3758960.09          0.03027  (13062606)
    449422.20   3758960.09        0.02944  (13062606)                      449426.07
3758960.09          0.02864  (13062606)
    449429.94   3758960.09        0.02788  (13062606)                      449433.81
3758960.09          0.02716  (13062606)
    449437.68   3758960.09        0.02646  (13062606)                      449441.55
3758960.09          0.02581  (13062606)
    449445.42   3758960.09        0.02518  (13062606)                      449368.02
3758974.13          0.04780  (13112916)
    449371.89   3758974.13        0.04583  (13020301)                      449375.76
3758974.13          0.04454  (13020301)
    449379.63   3758974.13        0.04328  (13020301)                      449383.50
3758974.13          0.04035  (13062606)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   11:28:21

                          PAGE 16
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                          *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
 Y-COORD (M)   CONC   (YYMMDDHH)
 -
 -
        449387.37   3758974.13   0.03893 (13062606)   449391.24
 3758974.13   0.03760 (16092620)
        449395.11   3758974.13   0.03636 (13062606)   449398.98
 3758974.13   0.03520 (13062606)
        449402.85   3758974.13   0.03410 (13062606)   449406.72
 3758974.13   0.03307 (13062606)
        449410.59   3758974.13   0.03210 (13062606)   449414.46
 3758974.13   0.03118 (13062606)
        449418.33   3758974.13   0.03030 (13062606)   449422.20
 3758974.13   0.02947 (13062606)
        449426.07   3758974.13   0.02868 (13062606)   449429.94
 3758974.13   0.02792 (13062606)
        449433.81   3758974.13   0.02720 (13062606)   449437.68
 3758974.13   0.02650 (13062606)
        449441.55   3758974.13   0.02584 (13062606)   449445.42
 3758974.13   0.02521 (13062606)
        449368.02   3758988.17   0.04788 (13112916)   449371.89
 3758988.17   0.04541 (13062606)
        449375.76   3758988.17   0.04413 (13020301)   449379.63
 3758988.17   0.04293 (13020301)
        449383.50   3758988.17   0.04040 (13062606)   449387.37

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3758988.17          0.03897  (13062606)
      449391.24   3758988.17       0.03763  (13062606)              449395.11
3758988.17          0.03646  (16092620)
      449398.98   3758988.17       0.03522  (13062606)              449402.85
3758988.17          0.03413  (13062606)
      449406.72   3758988.17       0.03309  (13062606)              449410.59
3758988.17          0.03212  (13062606)
      449414.46   3758988.17       0.03120  (13062606)              449418.33
3758988.17          0.03033  (13062606)
      449422.20   3758988.17       0.02950  (13062606)              449426.07
3758988.17          0.02870  (13062606)
      449429.94   3758988.17       0.02795  (13062606)              449433.81
3758988.17          0.02722  (13062606)
      449437.68   3758988.17       0.02653  (13062606)              449441.55
3758988.17          0.02587  (13062606)
      449445.42   3758988.17       0.02524  (13062606)              449368.02
3759002.21          0.04915  (13020301)
      449371.89   3759002.21       0.04775  (13020301)              449375.76
3759002.21          0.04642  (13020301)
      449379.63   3759002.21       0.04511  (13020301)              449383.50
3759002.21          0.04176  (13020301)
      449387.37   3759002.21       0.04036  (13020301)              449391.24
3759002.21          0.03766  (13062606)
      449395.11   3759002.21       0.03642  (13062606)              449398.98
3759002.21          0.03536  (16092620)
      449402.85   3759002.21       0.03415  (13062606)              449406.72
3759002.21          0.03312  (13062606)
      449410.59   3759002.21       0.03214  (13062606)              449414.46
3759002.21          0.03122  (13062606)
      449418.33   3759002.21       0.03035  (13062606)              449422.20
3759002.21          0.02951  (13062606)
      449426.07   3759002.21       0.02872  (13062606)              449429.94
3759002.21          0.02797  (13062606)
      449433.81   3759002.21       0.02724  (13062606)              449437.68
3759002.21          0.02656  (13062606)
      449441.55   3759002.21       0.02590  (13062606)              449445.42
3759002.21          0.02526  (13062606)
      449368.02   3759016.25       0.04939  (13020301)              449371.89
3759016.25          0.04803  (13020301)
      449375.76   3759016.25       0.04673  (13020301)              449379.63
3759016.25          0.04547  (13020301)
      449383.50   3759016.25       0.04379  (13020301)              449387.37
3759016.25          0.04048  (13020301)
      449391.24   3759016.25       0.03905  (13020301)              449395.11
3759016.25          0.03644  (13062606)
      449398.98   3759016.25       0.03528  (16092620)              449402.85
3759016.25          0.03424  (16092620)
      449406.72   3759016.25       0.03314  (13062606)              449410.59
3759016.25          0.03216  (13062606)
      449414.46   3759016.25       0.03123  (13062606)              449418.33
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3759016.25          0.03036  (13062606)
      449422.20   3759016.25          0.02952  (13062606)             449426.07
3759016.25          0.02873  (13062606)
      449429.94   3759016.25          0.02798  (13062606)             449433.81
3759016.25          0.02726  (13062606)
      449437.68   3759016.25          0.02657  (13062606)             449441.55
3759016.25          0.02591  (13062606)
      449445.42   3759016.25          0.02528  (13062606)             449368.02
3759030.29          0.04817  (13112916)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                              ***   11:28:21

                              PAGE 17
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                            *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                   L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                   L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                   L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
      449371.89   3759030.29   0.04651 (13020301)   449375.76
3759030.29   0.04525 (13020301)
      449379.63   3759030.29   0.04404 (13020301)   449383.50
3759030.29   0.04073 (13020301)
      449387.37   3759030.29   0.03947 (16092620)   449391.24
3759030.29   0.03772 (13062606)
      449395.11   3759030.29   0.03647 (13062606)   449398.98
3759030.29   0.03530 (13062606)
      449402.85   3759030.29   0.03419 (13062606)   449406.72
3759030.29   0.03315 (13062606)
      449410.59   3759030.29   0.03217 (13062606)   449414.46
3759030.29   0.03124 (13062606)
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       449418.33   3759030.29        0.03036  (13062606)                    449422.20
3759030.29         0.02952  (13062606)
       449426.07   3759030.29        0.02873  (13062606)                    449429.94
3759030.29         0.02797  (13062606)
       449433.81   3759030.29        0.02725  (13062606)                    449437.68
3759030.29         0.02657  (13062606)
       449441.55   3759030.29        0.02591  (13062606)                    449445.42
3759030.29         0.02527  (13062606)
       449368.02   3759044.33        0.04856  (13112916)                    449371.89
3759044.33         0.04602  (13112916)
       449375.76   3759044.33        0.04378  (13062606)                    449379.63
3759044.33         0.04210  (13062606)
       449383.50   3759044.33        0.04055  (13062606)                    449387.37
3759044.33         0.03910  (13062606)
       449391.24   3759044.33        0.03775  (13062606)                    449395.11
3759044.33         0.03649  (13062606)
       449398.98   3759044.33        0.03531  (13062606)                    449402.85
3759044.33         0.03420  (13062606)
       449406.72   3759044.33        0.03315  (13062606)                    449410.59
3759044.33         0.03216  (13062606)
       449414.46   3759044.33        0.03123  (13062606)                    449418.33
3759044.33         0.03034  (13062606)
       449422.20   3759044.33        0.02951  (13062606)                    449426.07
3759044.33         0.02871  (13062606)
       449429.94   3759044.33        0.02796  (13062606)                    449433.81
3759044.33         0.02724  (13062606)
       449437.68   3759044.33        0.02655  (13062606)                    449441.55
3759044.33         0.02589  (13062606)
       449445.42   3759044.33        0.02526  (13062606)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   11:28:21

                        PAGE 18
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                         *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                            INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                L0000022   , L0000023   , L0000024   , L0000025   , L0000026
,

                                         *** DISCRETE CARTESIAN RECEPTOR POINTS

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***


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


     X-COORD (M)  Y-COORD (M)      CONC     (YYMMDDHH)              X-COORD (M)
 Y-COORD (M)      CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - -
         449368.02  3758763.53       0.03890c (12121708)              449371.89
 3758763.53      0.03725c (12121708)
         449375.76  3758763.53       0.03573c (12121708)              449379.63
 3758763.53      0.03433c (12121708)
         449383.50  3758763.53       0.03304c (12121708)              449387.37
 3758763.53      0.03185c (12121708)
         449391.24  3758763.53       0.03073c (12121708)              449395.11
 3758763.53      0.02969c (12121708)
         449398.98  3758763.53       0.02871c (12121708)              449402.85
 3758763.53      0.02779c (12121708)
         449406.72  3758763.53       0.02693c (12121708)              449410.59
 3758763.53      0.02612c (12121708)
         449414.46  3758763.53       0.02536c (12121708)              449418.33
 3758763.53      0.02464c (12121708)
         449422.20  3758763.53       0.02396c (12121708)              449426.07
 3758763.53      0.02332c (12121708)
         449429.94  3758763.53       0.02270c (12121708)              449433.81
 3758763.53      0.02212c (12121708)
         449437.68  3758763.53       0.02156c (12121708)              449441.55
 3758763.53      0.02103c (12121708)
         449445.42  3758763.53       0.02053c (12121708)              449368.02
 3758777.57      0.03901c (12121708)
         449371.89  3758777.57       0.03734c (12121708)              449375.76
 3758777.57      0.03580c (12121708)
         449379.63  3758777.57       0.03438c (12121708)              449383.50
 3758777.57      0.03309c (12121708)
         449387.37  3758777.57       0.03189c (12121708)              449391.24
 3758777.57      0.03078c (12121708)
         449395.11  3758777.57       0.02973c (12121708)              449398.98
 3758777.57      0.02876c (12121708)
         449402.85  3758777.57       0.02784c (12121708)              449406.72
 3758777.57      0.02697c (12121708)
         449410.59  3758777.57       0.02616c (12121708)              449414.46
 3758777.57      0.02541c (12121708)
         449418.33  3758777.57       0.02469c (12121708)              449422.20
 3758777.57      0.02401c (12121708)
         449426.07  3758777.57       0.02337c (12121708)              449429.94
 3758777.57      0.02275c (12121708)
         449433.81  3758777.57       0.02217c (12121708)              449437.68
 3758777.57      0.02161c (12121708)
         449441.55  3758777.57       0.02108c (12121708)              449445.42
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3758777.57         0.02059c (12121708)
       449368.02   3758791.61        0.03913c (12121708)                 449371.89
3758791.61         0.03748c (12121708)
       449375.76   3758791.61        0.03595c (12121708)                 449379.63
3758791.61         0.03454c (12121708)
       449383.50   3758791.61        0.03325c (12121708)                 449387.37
3758791.61         0.03205c (12121708)
       449391.24   3758791.61        0.03093c (12121708)                 449395.11
3758791.61         0.02988c (12121708)
       449398.98   3758791.61        0.02890c (12121708)                 449402.85
3758791.61         0.02798c (12121708)
       449406.72   3758791.61        0.02711c (12121708)                 449410.59
3758791.61         0.02630c (12121708)
       449414.46   3758791.61        0.02554c (12121708)                 449418.33
3758791.61         0.02482c (12121708)
       449422.20   3758791.61        0.02414c (12121708)                 449426.07
3758791.61         0.02349c (12121708)
       449429.94   3758791.61        0.02287c (12121708)                 449433.81
3758791.61         0.02229c (12121708)
       449437.68   3758791.61        0.02173c (12121708)                 449441.55
3758791.61         0.02119c (12121708)
       449445.42   3758791.61        0.02069c (12121708)                 449368.02
3758805.65         0.03926c (12121708)
       449371.89   3758805.65        0.03761c (12121708)                 449375.76
3758805.65         0.03610c (12121708)
       449379.63   3758805.65        0.03470c (12121708)                 449383.50
3758805.65         0.03340c (12121708)
       449387.37   3758805.65        0.03219c (12121708)                 449391.24
3758805.65         0.03107c (12121708)
       449395.11   3758805.65        0.03002c (12121708)                 449398.98
3758805.65         0.02904c (12121708)
       449402.85   3758805.65        0.02811c (12121708)                 449406.72
3758805.65         0.02724c (12121708)
       449410.59   3758805.65        0.02642c (12121708)                 449414.46
3758805.65         0.02566c (12121708)
       449418.33   3758805.65        0.02494c (12121708)                 449422.20
3758805.65         0.02425c (12121708)
       449426.07   3758805.65        0.02360c (12121708)                 449429.94
3758805.65         0.02299c (12121708)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                       ***   11:28:21

                              PAGE 19
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                      *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002

```
 , L0000003     , L0000004    , L0000005      ,
                L0000006     , L0000007    , L0000008     , L0000009    , L0000010
 , L0000011     , L0000012    , L0000013      ,
                L0000014     , L0000015    , L0000016     , L0000017    , L0000018
 , L0000019     , L0000020    , L0000021      ,
                L0000022     , L0000023    , L0000024     , L0000025    , L0000026
 ,


                                       *** DISCRETE CARTESIAN RECEPTOR POINTS
***


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


      X-COORD (M)  Y-COORD (M)       CONC      (YYMMDDHH)              X-COORD (M)
Y-COORD (M)       CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - -
         449433.81   3758805.65       0.02240c (12121708)              449437.68
 3758805.65        0.02183c (12121708)
         449441.55   3758805.65       0.02130c (12121708)              449445.42
 3758805.65        0.02078c (12121708)
         449368.02   3758819.69       0.03935c (12121708)              449371.89
 3758819.69        0.03770c (12121708)
         449375.76   3758819.69       0.03618c (12121708)              449379.63
 3758819.69        0.03478c (12121708)
         449383.50   3758819.69       0.03348c (12121708)              449387.37
 3758819.69        0.03228c (12121708)
         449391.24   3758819.69       0.03115c (12121708)              449395.11
 3758819.69        0.03010c (12121708)
         449398.98   3758819.69       0.02911c (12121708)              449402.85
 3758819.69        0.02818c (12121708)
         449406.72   3758819.69       0.02731c (12121708)              449410.59
 3758819.69        0.02649c (12121708)
         449414.46   3758819.69       0.02573c (12121708)              449418.33
 3758819.69        0.02501c (12121708)
         449422.20   3758819.69       0.02432c (12121708)              449426.07
 3758819.69        0.02367c (12121708)
         449429.94   3758819.69       0.02305c (12121708)              449433.81
 3758819.69        0.02246c (12121708)
         449437.68   3758819.69       0.02190c (12121708)              449441.55
 3758819.69        0.02136c (12121708)
         449445.42   3758819.69       0.02085c (12121708)              449368.02
 3758833.73        0.03944c (12121708)
         449371.89   3758833.73       0.03778c (12121708)              449375.76
 3758833.73        0.03626c (12121708)
         449379.63   3758833.73       0.03486c (12121708)              449383.50
 3758833.73        0.03356c (12121708)
         449387.37   3758833.73       0.03235c (12121708)              449391.24
 3758833.73        0.03122c (12121708)
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    449395.11   3758833.73       0.03016c (12121708)              449398.98
3758833.73        0.02918c (12121708)
    449402.85   3758833.73       0.02825c (12121708)              449406.72
3758833.73        0.02737c (12121708)
    449410.59   3758833.73       0.02655c (12121708)              449414.46
3758833.73        0.02579c (12121708)
    449418.33   3758833.73       0.02507c (12121708)              449422.20
3758833.73        0.02438c (12121708)
    449426.07   3758833.73       0.02373c (12121708)              449429.94
3758833.73        0.02311c (12121708)
    449433.81   3758833.73       0.02252c (12121708)              449437.68
3758833.73        0.02195c (12121708)
    449441.55   3758833.73       0.02142c (12121708)              449445.42
3758833.73        0.02090c (12121708)
    449368.02   3758847.77       0.03960c (12121708)              449371.89
3758847.77        0.03795c (12121708)
    449375.76   3758847.77       0.03643c (12121708)              449379.63
3758847.77        0.03503c (12121708)
    449383.50   3758847.77       0.03372c (12121708)              449387.37
3758847.77        0.03251c (12121708)
    449391.24   3758847.77       0.03138c (12121708)              449395.11
3758847.77        0.03032c (12121708)
    449398.98   3758847.77       0.02932c (12121708)              449402.85
3758847.77        0.02839c (12121708)
    449406.72   3758847.77       0.02752c (12121708)              449410.59
3758847.77        0.02669c (12121708)
    449414.46   3758847.77       0.02592c (12121708)              449418.33
3758847.77        0.02519c (12121708)
    449422.20   3758847.77       0.02449c (12121708)              449426.07
3758847.77        0.02383c (12121708)
    449429.94   3758847.77       0.02320c (12121708)              449433.81
3758847.77        0.02261c (12121708)
    449437.68   3758847.77       0.02204c (12121708)              449441.55
3758847.77        0.02150c (12121708)
    449445.42   3758847.77       0.02098c (12121708)              449368.02
3758861.81        0.03975c (12121708)
    449371.89   3758861.81       0.03810c (12121708)              449375.76
3758861.81        0.03659c (12121708)
    449379.63   3758861.81       0.03519c (12121708)              449383.50
3758861.81        0.03388c (12121708)
    449387.37   3758861.81       0.03266c (12121708)              449391.24
3758861.81        0.03153c (12121708)
    449395.11   3758861.81       0.03047c (12121708)              449398.98
3758861.81        0.02948c (12121708)
    449402.85   3758861.81       0.02854c (12121708)              449406.72
3758861.81        0.02766c (12121708)
    449410.59   3758861.81       0.02683c (12121708)              449414.46
3758861.81        0.02605c (12121708)
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                               *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                      L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                      L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                      L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
 Y-COORD (M)   CONC   (YYMMDDHH)
 -
 -
        449418.33   3758861.81   0.02531c (12121708)   449422.20
 3758861.81   0.02461c (12121708)
        449426.07   3758861.81   0.02394c (12121708)   449429.94
 3758861.81   0.02330c (12121708)
        449433.81   3758861.81   0.02270c (12121708)   449437.68
 3758861.81   0.02212c (12121708)
        449441.55   3758861.81   0.02158c (12121708)   449445.42
 3758861.81   0.02106c (12121708)
        449368.02   3758875.85   0.03985c (12121708)   449371.89
 3758875.85   0.03821c (12121708)
        449375.76   3758875.85   0.03669c (12121708)   449379.63
 3758875.85   0.03529c (12121708)
        449383.50   3758875.85   0.03399c (12121708)   449387.37
 3758875.85   0.03277c (12121708)
        449391.24   3758875.85   0.03164c (12121708)   449395.11
 3758875.85   0.03058c (12121708)
        449398.98   3758875.85   0.02958c (12121708)   449402.85
 3758875.85   0.02864c (12121708)
        449406.72   3758875.85   0.02776c (12121708)   449410.59
 3758875.85   0.02693c (12121708)
        449414.46   3758875.85   0.02614c (12121708)   449418.33
 3758875.85   0.02540c (12121708)
        449422.20   3758875.85   0.02470c (12121708)   449426.07

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3758875.85           0.02402c (12121708)
      449429.94   3758875.85           0.02339c (12121708)                 449433.81
3758875.85           0.02278c (12121708)
      449437.68   3758875.85           0.02220c (12121708)                 449441.55
3758875.85           0.02165c (12121708)
      449445.42   3758875.85           0.02113c (12121708)                 449368.02
3758889.89           0.03994c (12121708)
      449371.89   3758889.89           0.03829c (12121708)                 449375.76
3758889.89           0.03677c (12121708)
      449379.63   3758889.89           0.03537c (12121708)                 449383.50
3758889.89           0.03407c (12121708)
      449387.37   3758889.89           0.03286c (12121708)                 449391.24
3758889.89           0.03172c (12121708)
      449395.11   3758889.89           0.03066c (12121708)                 449398.98
3758889.89           0.02966c (12121708)
      449402.85   3758889.89           0.02873c (12121708)                 449406.72
3758889.89           0.02784c (12121708)
      449410.59   3758889.89           0.02701c (12121708)                 449414.46
3758889.89           0.02622c (12121708)
      449418.33   3758889.89           0.02548c (12121708)                 449422.20
3758889.89           0.02477c (12121708)
      449426.07   3758889.89           0.02410c (12121708)                 449429.94
3758889.89           0.02346c (12121708)
      449433.81   3758889.89           0.02285c (12121708)                 449437.68
3758889.89           0.02227c (12121708)
      449441.55   3758889.89           0.02172c (12121708)                 449445.42
3758889.89           0.02120c (12121708)
      449368.02   3758903.93           0.04002c (12121708)                 449371.89
3758903.93           0.03836c (12121708)
      449375.76   3758903.93           0.03685c (12121708)                 449379.63
3758903.93           0.03544c (12121708)
      449383.50   3758903.93           0.03415c (12121708)                 449387.37
3758903.93           0.03294c (12121708)
      449391.24   3758903.93           0.03181c (12121708)                 449395.11
3758903.93           0.03075c (12121708)
      449398.98   3758903.93           0.02975c (12121708)                 449402.85
3758903.93           0.02881c (12121708)
      449406.72   3758903.93           0.02793c (12121708)                 449410.59
3758903.93           0.02710c (12121708)
      449414.46   3758903.93           0.02631c (12121708)                 449418.33
3758903.93           0.02556c (12121708)
      449422.20   3758903.93           0.02485c (12121708)                 449426.07
3758903.93           0.02417c (12121708)
      449429.94   3758903.93           0.02353c (12121708)                 449433.81
3758903.93           0.02292c (12121708)
      449437.68   3758903.93           0.02234c (12121708)                 449441.55
3758903.93           0.02178c (12121708)
      449445.42   3758903.93           0.02126c (12121708)                 449368.02
3758917.97           0.04006c (12121708)
      449371.89   3758917.97           0.03841c (12121708)                 449375.76
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     3758917.97          0.03689c (12121708)
        449379.63   3758917.97          0.03549c (12121708)                    449383.50
     3758917.97          0.03419c (12121708)
        449387.37   3758917.97          0.03299c (12121708)                    449391.24
     3758917.97          0.03187c (12121708)
        449395.11   3758917.97          0.03081c (12121708)                    449398.98
     3758917.97          0.02982c (12121708)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   11:28:21

                              PAGE 21
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                              *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
 -
        449402.85   3758917.97   0.02889c (12121708)   449406.72
     3758917.97   0.02801c (12121708)
        449410.59   3758917.97   0.02718c (12121708)   449414.46
     3758917.97   0.02639c (12121708)
        449418.33   3758917.97   0.02564c (12121708)   449422.20
     3758917.97   0.02493c (12121708)
        449426.07   3758917.97   0.02425c (12121708)   449429.94
     3758917.97   0.02360c (12121708)
        449433.81   3758917.97   0.02298c (12121708)   449437.68
     3758917.97   0.02240c (12121708)
        449441.55   3758917.97   0.02184c (12121708)   449445.42
     3758917.97   0.02132c (12121708)
        449368.02   3758932.01   0.04009c (12121708)   449371.89
     3758932.01   0.03844c (12121708)
```

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     449375.76   3758932.01        0.03692c (12121708)                      449379.63
3758932.01        0.03551c (12121708)
     449383.50   3758932.01        0.03422c (12121708)                      449387.37
3758932.01        0.03303c (12121708)
     449391.24   3758932.01        0.03190c (12121708)                      449395.11
3758932.01        0.03086c (12121708)
     449398.98   3758932.01        0.02987c (12121708)                      449402.85
3758932.01        0.02894c (12121708)
     449406.72   3758932.01        0.02806c (12121708)                      449410.59
3758932.01        0.02724c (12121708)
     449414.46   3758932.01        0.02645c (12121708)                      449418.33
3758932.01        0.02570c (12121708)
     449422.20   3758932.01        0.02499c (12121708)                      449426.07
3758932.01        0.02431c (12121708)
     449429.94   3758932.01        0.02366c (12121708)                      449433.81
3758932.01        0.02304c (12121708)
     449437.68   3758932.01        0.02245c (12121708)                      449441.55
3758932.01        0.02189c (12121708)
     449445.42   3758932.01        0.02137c (12121708)                      449368.02
3758946.05        0.04013c (12121708)
     449371.89   3758946.05        0.03847c (12121708)                      449375.76
3758946.05        0.03695c (12121708)
     449379.63   3758946.05        0.03554c (12121708)                      449383.50
3758946.05        0.03426c (12121708)
     449387.37   3758946.05        0.03306c (12121708)                      449391.24
3758946.05        0.03194c (12121708)
     449395.11   3758946.05        0.03089c (12121708)                      449398.98
3758946.05        0.02991c (12121708)
     449402.85   3758946.05        0.02898c (12121708)                      449406.72
3758946.05        0.02810c (12121708)
     449410.59   3758946.05        0.02727c (12121708)                      449414.46
3758946.05        0.02649c (12121708)
     449418.33   3758946.05        0.02574c (12121708)                      449422.20
3758946.05        0.02503c (12121708)
     449426.07   3758946.05        0.02435c (12121708)                      449429.94
3758946.05        0.02370c (12121708)
     449433.81   3758946.05        0.02309c (12121708)                      449437.68
3758946.05        0.02249c (12121708)
     449441.55   3758946.05        0.02193c (12121708)                      449445.42
3758946.05        0.02140c (12121708)
     449368.02   3758960.09        0.04016c (12121708)                      449371.89
3758960.09        0.03850c (12121708)
     449375.76   3758960.09        0.03698c (12121708)                      449379.63
3758960.09        0.03557c (12121708)
     449383.50   3758960.09        0.03429c (12121708)                      449387.37
3758960.09        0.03309c (12121708)
     449391.24   3758960.09        0.03197c (12121708)                      449395.11
3758960.09        0.03092c (12121708)
     449398.98   3758960.09        0.02994c (12121708)                      449402.85
3758960.09        0.02901c (12121708)
```

```
     449406.72   3758960.09        0.02813c (12121708)              449410.59
3758960.09        0.02731c (12121708)
     449414.46   3758960.09        0.02652c (12121708)              449418.33
3758960.09        0.02578c (12121708)
     449422.20   3758960.09        0.02507c (12121708)              449426.07
3758960.09        0.02439c (12121708)
     449429.94   3758960.09        0.02374c (12121708)              449433.81
3758960.09        0.02312c (12121708)
     449437.68   3758960.09        0.02253c (12121708)              449441.55
3758960.09        0.02197c (12121708)
     449445.42   3758960.09        0.02144c (12121708)              449368.02
3758974.13        0.04024c (12121708)
     449371.89   3758974.13        0.03857c (12121708)              449375.76
3758974.13        0.03704c (12121708)
     449379.63   3758974.13        0.03563c (12121708)              449383.50
3758974.13        0.03433c (12121708)
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                       ***   11:28:21

                              PAGE 22
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                          *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                   L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                   L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                   L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
     449387.37   3758974.13   0.03313c (12121708)   449391.24
3758974.13   0.03200c (12121708)
     449395.11   3758974.13   0.03095c (12121708)   449398.98
3758974.13   0.02996c (12121708)
     449402.85   3758974.13   0.02903c (12121708)   449406.72
```

```
3758974.13          0.02816c (12121708)
      449410.59    3758974.13          0.02733c (12121708)                449414.46
3758974.13          0.02655c (12121708)
      449418.33    3758974.13          0.02581c (12121708)                449422.20
3758974.13          0.02510c (12121708)
      449426.07    3758974.13          0.02442c (12121708)                449429.94
3758974.13          0.02377c (12121708)
      449433.81    3758974.13          0.02316c (12121708)                449437.68
3758974.13          0.02257c (12121708)
      449441.55    3758974.13          0.02200c (12121708)                449445.42
3758974.13          0.02147c (12121708)
      449368.02    3758988.17          0.04030c (12121708)                449371.89
3758988.17          0.03863c (12121708)
      449375.76    3758988.17          0.03709c (12121708)                449379.63
3758988.17          0.03567c (12121708)
      449383.50    3758988.17          0.03437c (12121708)                449387.37
3758988.17          0.03316c (12121708)
      449391.24    3758988.17          0.03203c (12121708)                449395.11
3758988.17          0.03097c (12121708)
      449398.98    3758988.17          0.02998c (12121708)                449402.85
3758988.17          0.02905c (12121708)
      449406.72    3758988.17          0.02817c (12121708)                449410.59
3758988.17          0.02735c (12121708)
      449414.46    3758988.17          0.02657c (12121708)                449418.33
3758988.17          0.02583c (12121708)
      449422.20    3758988.17          0.02512c (12121708)                449426.07
3758988.17          0.02444c (12121708)
      449429.94    3758988.17          0.02380c (12121708)                449433.81
3758988.17          0.02318c (12121708)
      449437.68    3758988.17          0.02259c (12121708)                449441.55
3758988.17          0.02203c (12121708)
      449445.42    3758988.17          0.02149c (12121708)                449368.02
3759002.21          0.04031c (12121708)
      449371.89    3759002.21          0.03863c (12121708)                449375.76
3759002.21          0.03709c (12121708)
      449379.63    3759002.21          0.03568c (12121708)                449383.50
3759002.21          0.03438c (12121708)
      449387.37    3759002.21          0.03317c (12121708)                449391.24
3759002.21          0.03205c (12121708)
      449395.11    3759002.21          0.03099c (12121708)                449398.98
3759002.21          0.03000c (12121708)
      449402.85    3759002.21          0.02907c (12121708)                449406.72
3759002.21          0.02819c (12121708)
      449410.59    3759002.21          0.02737c (12121708)                449414.46
3759002.21          0.02658c (12121708)
      449418.33    3759002.21          0.02584c (12121708)                449422.20
3759002.21          0.02513c (12121708)
      449426.07    3759002.21          0.02446c (12121708)                449429.94
3759002.21          0.02382c (12121708)
      449433.81    3759002.21          0.02320c (12121708)                449437.68
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3759002.21          0.02261c (12121708)
      449441.55   3759002.21          0.02205c (12121708)                449445.42
3759002.21          0.02151c (12121708)
      449368.02   3759016.25          0.04031c (12121708)                449371.89
3759016.25          0.03864c (12121708)
      449375.76   3759016.25          0.03710c (12121708)                449379.63
3759016.25          0.03568c (12121708)
      449383.50   3759016.25          0.03445  (14121224)                449387.37
3759016.25          0.03319c (12121708)
      449391.24   3759016.25          0.03206c (12121708)                449395.11
3759016.25          0.03101c (12121708)
      449398.98   3759016.25          0.03002c (12121708)                449402.85
3759016.25          0.02909c (12121708)
      449406.72   3759016.25          0.02821c (12121708)                449410.59
3759016.25          0.02738c (12121708)
      449414.46   3759016.25          0.02659c (12121708)                449418.33
3759016.25          0.02585c (12121708)
      449422.20   3759016.25          0.02514c (12121708)                449426.07
3759016.25          0.02447c (12121708)
      449429.94   3759016.25          0.02382c (12121708)                449433.81
3759016.25          0.02321c (12121708)
      449437.68   3759016.25          0.02263c (12121708)                449441.55
3759016.25          0.02207c (12121708)
      449445.42   3759016.25          0.02153c (12121708)                449368.02
3759030.29          0.04042c (12121708)
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   11:28:21

                                PAGE 23
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                           *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

```
      X-COORD (M)   Y-COORD (M)       CONC     (YYMMDDHH)              X-COORD (M)
 Y-COORD (M)       CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - - - -
       449371.89   3759030.29       0.03873c (12121708)              449375.76
 3759030.29       0.03718c (12121708)
       449379.63   3759030.29       0.03576c (12121708)              449383.50
 3759030.29       0.03446c (12121708)
       449387.37   3759030.29       0.03324c (12121708)              449391.24
 3759030.29       0.03211c (12121708)
       449395.11   3759030.29       0.03104c (12121708)              449398.98
 3759030.29       0.03005c (12121708)
       449402.85   3759030.29       0.02911c (12121708)              449406.72
 3759030.29       0.02823c (12121708)
       449410.59   3759030.29       0.02739c (12121708)              449414.46
 3759030.29       0.02660c (12121708)
       449418.33   3759030.29       0.02585c (12121708)              449422.20
 3759030.29       0.02514c (12121708)
       449426.07   3759030.29       0.02446c (12121708)              449429.94
 3759030.29       0.02382c (12121708)
       449433.81   3759030.29       0.02321c (12121708)              449437.68
 3759030.29       0.02262c (12121708)
       449441.55   3759030.29       0.02206c (12121708)              449445.42
 3759030.29       0.02152c (12121708)
       449368.02   3759044.33       0.04051c (12121708)              449371.89
 3759044.33       0.03881c (12121708)
       449375.76   3759044.33       0.03725c (12121708)              449379.63
 3759044.33       0.03582c (12121708)
       449383.50   3759044.33       0.03451c (12121708)              449387.37
 3759044.33       0.03328c (12121708)
       449391.24   3759044.33       0.03214c (12121708)              449395.11
 3759044.33       0.03107c (12121708)
       449398.98   3759044.33       0.03006c (12121708)              449402.85
 3759044.33       0.02912c (12121708)
       449406.72   3759044.33       0.02822c (12121708)              449410.59
 3759044.33       0.02738c (12121708)
       449414.46   3759044.33       0.02659c (12121708)              449418.33
 3759044.33       0.02584c (12121708)
       449422.20   3759044.33       0.02513c (12121708)              449426.07
 3759044.33       0.02445c (12121708)
       449429.94   3759044.33       0.02381c (12121708)              449433.81
 3759044.33       0.02319c (12121708)
       449437.68   3759044.33       0.02261c (12121708)              449441.55
 3759044.33       0.02205c (12121708)
       449445.42   3759044.33       0.02151c (12121708)
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

                                  ** CONC OF TOGDSL   IN MICROGRAMS/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   0.04939 ON 13020301: AT (449368.02,
3759016.25,   199.00,   199.00,   0.00) DC

 *** RECEPTOR TYPES: GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:28:21

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

                                  ** CONC OF TOGDSL   IN MICROGRAMS/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   0.04051c ON 12121708: AT (449368.02,
3759044.33,   198.07,   198.07,   0.00) DC

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   *** RECEPTOR TYPES:  GC = GRIDCART
                        GP = GRIDPOLR
                        DC = DISCCART
                        DP = DISCPOLR
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\DSLTOG\DSLTOG.ISC                      ***           11/11/21
 *** AERMET - VERSION  16216 ***   ***
                         ***           11:28:21


                             PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of         1638 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of         1039 Calm Hours Identified

 A Total of          599 Missing Hours Identified (  1.37 Percent)


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


    ********   WARNING MESSAGES   ********
ME W186     130       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
ME W187     130       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


    **********************************
    *** AERMOD Finishes Successfully ***
    **********************************

** Lakes Environmental AERMOD MPI
**
************************************
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 10.0.1
** LAKES ENVIRONMENTAL SOFTWARE INC.
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```
** DATE: 11/11/2021
** FILE: C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ADI
**
***************************************
**
**
***************************************
** AERMOD CONTROL PATHWAY
***************************************
**
**
CO STARTING
   TITLEONE C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
   MODELOPT DFAULT CONC
   AVERTIME 1
   URBANOPT 2189641
   POLLUTID NO2
   RUNORNOT RUN
   ERRORFIL NO2.ERR
CO FINISHED
**
***************************************
** AERMOD SOURCE PATHWAY
***************************************
**
**
SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** ----------------------------------------------------------------
** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC I-15 FREEWAY
** PREFIX
** LENGTH OF SIDE = 46.00
** CONFIGURATION = ADJACENT
** EMISSION RATE = 0.35171
** VERTICAL DIMENSION = 6.99
** SZINIT = 3.25
** NODES = 2
** 449288.372, 3758373.924, 188.51, 3.49, 21.40
** 449298.585, 3759554.578, 201.92, 3.49, 21.40
** ----------------------------------------------------------------
   LOCATION L0000001    VOLUME   449288.571 3758396.923 188.77
   LOCATION L0000002    VOLUME   449288.969 3758442.921 189.29
   LOCATION L0000003    VOLUME   449289.367 3758488.920 189.82
   LOCATION L0000004    VOLUME   449289.765 3758534.918 190.34
   LOCATION L0000005    VOLUME   449290.163 3758580.916 190.86
   LOCATION L0000006    VOLUME   449290.561 3758626.914 191.38
   LOCATION L0000007    VOLUME   449290.958 3758672.913 191.91
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    LOCATION L0000008      VOLUME    449291.356 3758718.911 192.43
    LOCATION L0000009      VOLUME    449291.754 3758764.909 192.95
    LOCATION L0000010      VOLUME    449292.152 3758810.908 193.47
    LOCATION L0000011      VOLUME    449292.550 3758856.906 194.00
    LOCATION L0000012      VOLUME    449292.948 3758902.904 194.52
    LOCATION L0000013      VOLUME    449293.346 3758948.902 195.04
    LOCATION L0000014      VOLUME    449293.744 3758994.901 195.56
    LOCATION L0000015      VOLUME    449294.142 3759040.899 196.09
    LOCATION L0000016      VOLUME    449294.540 3759086.897 196.61
    LOCATION L0000017      VOLUME    449294.938 3759132.895 197.13
    LOCATION L0000018      VOLUME    449295.335 3759178.894 197.65
    LOCATION L0000019      VOLUME    449295.733 3759224.892 198.18
    LOCATION L0000020      VOLUME    449296.131 3759270.890 198.70
    LOCATION L0000021      VOLUME    449296.529 3759316.889 199.22
    LOCATION L0000022      VOLUME    449296.927 3759362.887 199.74
    LOCATION L0000023      VOLUME    449297.325 3759408.885 200.27
    LOCATION L0000024      VOLUME    449297.723 3759454.883 200.79
    LOCATION L0000025      VOLUME    449298.121 3759500.882 201.31
    LOCATION L0000026      VOLUME    449298.519 3759546.880 201.83
** END OF LINE VOLUME SOURCE ID = SLINE1
** SOURCE PARAMETERS **
** LINE VOLUME SOURCE ID = SLINE1
    SRCPARAM L0000001      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000002      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000003      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000004      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000005      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000006      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000007      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000008      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000009      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000010      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000011      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000012      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000013      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000014      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000015      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000016      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000017      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000018      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000019      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000020      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000021      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000022      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000023      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000024      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000025      0.0135273077      3.49      21.40      3.25
    SRCPARAM L0000026      0.0135273077      3.49      21.40      3.25
** -------------------------------------------------------------------
    URBANSRC ALL
```

```
   SRCGROUP ALL
SO FINISHED
**
***************************************
** AERMOD RECEPTOR PATHWAY
***************************************
**
**
RE STARTING
   INCLUDED NO2.ROU
RE FINISHED
**
***************************************
** AERMOD METEOROLOGY PATHWAY
***************************************
**
**
ME STARTING
   SURFFILE ..\KRAL_V9_ADJU\KRAL_V9.SFC
   PROFFILE ..\KRAL_V9_ADJU\KRAL_V9.PFL
   SURFDATA 3171 2012
   UAIRDATA 3190 2012
   PROFBASE 245.0 METERS
ME FINISHED
**
***************************************
** AERMOD OUTPUT PATHWAY
***************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
** AUTO-GENERATED PLOTFILES
   PLOTFILE   1 ALL 1ST NO2.AD\01H1GALL.PLT 31
   SUMMFILE NO2.SUM
OU FINISHED


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

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

 A Total of          0 Fatal Error Message(s)
 A Total of          2 Warning Message(s)
 A Total of          0 Informational Message(s)


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

```
     ********    WARNING MESSAGES    ********
ME W186     130        MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
       0.50
ME W187     130        MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


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

♠ *** AERMOD - VERSION  19191 ***    *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                         ***          11/11/21
 *** AERMET - VERSION  16216 ***    ***
                         ***          12:13:28

                                   PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  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 URBAN Dispersion Algorithm for the SBL for    26 Source(s),
   for Total of    1 Urban Area(s):
   Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m

 **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.
         6. Full Conversion Assumed for NO2.
         7. Urban Roughness Length of 1.0 Meter Assumed.

 **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 Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of: NO2

 **Note that special processing requirements apply for the 1-hour NO2 NAAQS - check available guidance.
   Model will process user-specified ranks of daily maximum 1-hour values averaged across the number of years modeled.
   For annual NO2 NAAQS modeling, the multi-year maximum of PERIOD values can be simulated using the MULTYEAR keyword.
   Multi-year PERIOD and 1-hour values should only be done in a single model run using the MULTYEAR option with a
   single multi-year meteorological data file using STARTEND keyword.

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

 **This Run Includes: 26 Source(s);   1 Source Group(s); and   441 Receptor(s)

                    with: 0 POINT(s), including
                               0 POINTCAP(s) and   0 POINTHOR(s)
                    and: 26 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: 16216

 **Output Options Selected:
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE 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) =   245.00 ; Decay
Coef. =   0.000   ; Rot. Angle =   0.0

```
                    Emission Units = GRAMS/SEC                          ;
Emission Rate Unit Factor =   0.10000E+07
                    Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =      3.6 MB of RAM.

 **Input Runstream File:          aermod.inp

 **Output Print File:             aermod.out


 **Detailed Error/Message File:   NO2.ERR

 **File for Summary of Results:   NO2.SUM

 *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
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 *** AERMET - VERSION  16216 ***   ***
                        ***          12:13:28

                              PAGE   2
 *** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                                            *** VOLUME SOURCE DATA ***

              NUMBER EMISSION RATE                      BASE     RELEASE    INIT.
INIT.   URBAN  EMISSION RATE
   SOURCE      PART.  (GRAMS/SEC)    X        Y      ELEV.   HEIGHT     SY
SZ     SOURCE  SCALAR VARY
     ID         CATS.                (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)            BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -

 L0000001       0   0.13527E-01  449288.6 3758396.9   188.8     3.49     21.40
3.25     YES
 L0000002       0   0.13527E-01  449289.0 3758442.9   189.3     3.49     21.40
3.25     YES
 L0000003       0   0.13527E-01  449289.4 3758488.9   189.8     3.49     21.40
3.25     YES
 L0000004       0   0.13527E-01  449289.8 3758534.9   190.3     3.49     21.40
3.25     YES
 L0000005       0   0.13527E-01  449290.2 3758580.9   190.9     3.49     21.40
3.25     YES
 L0000006       0   0.13527E-01  449290.6 3758626.9   191.4     3.49     21.40
3.25     YES
 L0000007       0   0.13527E-01  449291.0 3758672.9   191.9     3.49     21.40
3.25     YES
 L0000008       0   0.13527E-01  449291.4 3758718.9   192.4     3.49     21.40
```

```
3.25     YES
 L0000009          0   0.13527E-01  449291.8 3758764.9    193.0      3.49      21.40
3.25     YES
 L0000010          0   0.13527E-01  449292.2 3758810.9    193.5      3.49      21.40
3.25     YES
 L0000011          0   0.13527E-01  449292.5 3758856.9    194.0      3.49      21.40
3.25     YES
 L0000012          0   0.13527E-01  449292.9 3758902.9    194.5      3.49      21.40
3.25     YES
 L0000013          0   0.13527E-01  449293.3 3758948.9    195.0      3.49      21.40
3.25     YES
 L0000014          0   0.13527E-01  449293.7 3758994.9    195.6      3.49      21.40
3.25     YES
 L0000015          0   0.13527E-01  449294.1 3759040.9    196.1      3.49      21.40
3.25     YES
 L0000016          0   0.13527E-01  449294.5 3759086.9    196.6      3.49      21.40
3.25     YES
 L0000017          0   0.13527E-01  449294.9 3759132.9    197.1      3.49      21.40
3.25     YES
 L0000018          0   0.13527E-01  449295.3 3759178.9    197.7      3.49      21.40
3.25     YES
 L0000019          0   0.13527E-01  449295.7 3759224.9    198.2      3.49      21.40
3.25     YES
 L0000020          0   0.13527E-01  449296.1 3759270.9    198.7      3.49      21.40
3.25     YES
 L0000021          0   0.13527E-01  449296.5 3759316.9    199.2      3.49      21.40
3.25     YES
 L0000022          0   0.13527E-01  449296.9 3759362.9    199.7      3.49      21.40
3.25     YES
 L0000023          0   0.13527E-01  449297.3 3759408.9    200.3      3.49      21.40
3.25     YES
 L0000024          0   0.13527E-01  449297.7 3759454.9    200.8      3.49      21.40
3.25     YES
 L0000025          0   0.13527E-01  449298.1 3759500.9    201.3      3.49      21.40
3.25     YES
 L0000026          0   0.13527E-01  449298.5 3759546.9    201.8      3.49      21.40
3.25     YES
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
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 *** AERMET - VERSION 16216 ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

                                   *** SOURCE IDs DEFINING SOURCE GROUPS
***

 SRCGROUP ID   SOURCE IDs

```
      ----------                                        ----------


   ALL        L0000001    , L0000002    , L0000003    , L0000004    , L0000005    ,
L0000006    , L0000007    , L0000008    ,

              L0000009    , L0000010    , L0000011    , L0000012    , L0000013    ,
L0000014    , L0000015    , L0000016    ,

              L0000017    , L0000018    , L0000019    , L0000020    , L0000021    ,
L0000022    , L0000023    , L0000024    ,

              L0000025    , L0000026    ,
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                           ***   11/11/21
  *** AERMET - VERSION 16216 ***   ***
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  *** MODELOPTs: RegDFAULT CONC   ELEV   URBAN   ADJ_U*

                                         *** SOURCE IDs DEFINED AS URBAN SOURCES
***

   URBAN ID   URBAN POP   SOURCE IDs
   --------   ---------   ----------

```
              2189641.   L0000001    , L0000002    , L0000003    , L0000004    ,
L0000005    , L0000006    , L0000007    ,
 L0000008    ,

              L0000009    , L0000010    , L0000011    , L0000012    , L0000013    ,
L0000014    , L0000015    , L0000016    ,

              L0000017    , L0000018    , L0000019    , L0000020    , L0000021    ,
L0000022    , L0000023    , L0000024    ,

              L0000025    , L0000026    ,
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
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  *** AERMET - VERSION 16216 ***   ***
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  *** MODELOPTs: RegDFAULT CONC   ELEV   URBAN   ADJ_U*

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

(449368.0, 3758763.5,   192.6,   195.0,   0.0);   (449371.9,
3758763.5,   192.2,   195.0,   0.0);
(449375.8, 3758763.5,   191.8,   195.0,   0.0);   (449379.6,
3758763.5,   191.4,   195.0,   0.0);
(449383.5, 3758763.5,   191.2,   195.0,   0.0);   (449387.4,
3758763.5,   190.9,   195.0,   0.0);
(449391.2, 3758763.5,   190.6,   190.6,   0.0);   (449395.1,
3758763.5,   190.4,   190.4,   0.0);
(449399.0, 3758763.5,   190.1,   190.1,   0.0);   (449402.8,
3758763.5,   189.9,   189.9,   0.0);
(449406.7, 3758763.5,   189.6,   189.6,   0.0);   (449410.6,
3758763.5,   189.4,   189.4,   0.0);
(449414.5, 3758763.5,   189.3,   189.3,   0.0);   (449418.3,
3758763.5,   189.1,   189.1,   0.0);
(449422.2, 3758763.5,   189.0,   189.0,   0.0);   (449426.1,
3758763.5,   188.9,   188.9,   0.0);
(449429.9, 3758763.5,   188.7,   188.7,   0.0);   (449433.8,
3758763.5,   188.6,   188.6,   0.0);
(449437.7, 3758763.5,   188.5,   188.5,   0.0);   (449441.5,
3758763.5,   188.4,   188.4,   0.0);
(449445.4, 3758763.5,   188.3,   188.3,   0.0);   (449368.0,
3758777.6,   192.5,   195.0,   0.0);
(449371.9, 3758777.6,   192.0,   195.0,   0.0);   (449375.8,
3758777.6,   191.5,   195.0,   0.0);
(449379.6, 3758777.6,   191.0,   195.0,   0.0);   (449383.5,
3758777.6,   190.8,   195.0,   0.0);
(449387.4, 3758777.6,   190.5,   195.0,   0.0);   (449391.2,
3758777.6,   190.3,   195.0,   0.0);
(449395.1, 3758777.6,   190.0,   195.0,   0.0);   (449399.0,
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(449402.8, 3758777.6,   189.5,   195.0,   0.0);   (449406.7,
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(449410.6, 3758777.6,   189.0,   189.0,   0.0);   (449414.5,
3758777.6,   188.9,   188.9,   0.0);
(449418.3, 3758777.6,   188.8,   188.8,   0.0);   (449422.2,
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(449426.1, 3758777.6,   188.5,   188.5,   0.0);   (449429.9,
3758777.6,   188.4,   188.4,   0.0);
(449433.8, 3758777.6,   188.2,   188.2,   0.0);   (449437.7,
3758777.6,   188.1,   188.1,   0.0);
(449441.5, 3758777.6,   188.0,   188.0,   0.0);   (449445.4,
3758777.6,   188.0,   188.0,   0.0);
(449368.0, 3758791.6,   192.6,   192.6,   0.0);   (449371.9,
3758791.6,   192.3,   195.0,   0.0);
(449375.8, 3758791.6,   191.9,   195.0,   0.0);   (449379.6,
3758791.6,   191.5,   195.0,   0.0);
(449383.5, 3758791.6,   191.2,   195.0,   0.0);   (449387.4,
3758791.6,   191.0,   191.0,   0.0);

```
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3758791.6,      190.5,      190.5,        0.0);
    ( 449399.0, 3758791.6,     190.2,      190.2,        0.0);         ( 449402.8,
3758791.6,      190.0,      190.0,        0.0);
    ( 449406.7, 3758791.6,     189.7,      189.7,        0.0);         ( 449410.6,
3758791.6,      189.5,      189.5,        0.0);
    ( 449414.5, 3758791.6,     189.3,      189.3,        0.0);         ( 449418.3,
3758791.6,      189.2,      189.2,        0.0);
    ( 449422.2, 3758791.6,     189.1,      189.1,        0.0);         ( 449426.1,
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    ( 449429.9, 3758791.6,     188.8,      188.8,        0.0);         ( 449433.8,
3758791.6,      188.7,      188.7,        0.0);
    ( 449437.7, 3758791.6,     188.6,      188.6,        0.0);         ( 449441.5,
3758791.6,      188.5,      188.5,        0.0);
    ( 449445.4, 3758791.6,     188.4,      188.4,        0.0);         ( 449368.0,
3758805.6,      192.8,      192.8,        0.0);
    ( 449371.9, 3758805.6,     192.5,      192.5,        0.0);         ( 449375.8,
3758805.6,      192.2,      192.2,        0.0);
    ( 449379.6, 3758805.6,     192.0,      192.0,        0.0);         ( 449383.5,
3758805.6,      191.7,      191.7,        0.0);
    ( 449387.4, 3758805.6,     191.5,      191.5,        0.0);         ( 449391.2,
3758805.6,      191.2,      191.2,        0.0);
    ( 449395.1, 3758805.6,     190.9,      190.9,        0.0);         ( 449399.0,
3758805.6,      190.7,      190.7,        0.0);
    ( 449402.8, 3758805.6,     190.4,      190.4,        0.0);         ( 449406.7,
3758805.6,      190.2,      190.2,        0.0);
    ( 449410.6, 3758805.6,     189.9,      189.9,        0.0);         ( 449414.5,
3758805.6,      189.8,      189.8,        0.0);
    ( 449418.3, 3758805.6,     189.7,      189.7,        0.0);         ( 449422.2,
3758805.6,      189.6,      189.6,        0.0);
    ( 449426.1, 3758805.6,     189.4,      189.4,        0.0);         ( 449429.9,
3758805.6,      189.3,      189.3,        0.0);
    ( 449433.8, 3758805.6,     189.2,      189.2,        0.0);         ( 449437.7,
3758805.6,      189.0,      189.0,        0.0);
    ( 449441.5, 3758805.6,     188.9,      188.9,        0.0);         ( 449445.4,
3758805.6,      188.8,      188.8,        0.0);
    ( 449368.0, 3758819.7,     192.8,      192.8,        0.0);         ( 449371.9,
3758819.7,      192.5,      192.5,        0.0);
    ( 449375.8, 3758819.7,     192.2,      192.2,        0.0);         ( 449379.6,
3758819.7,      192.0,      192.0,        0.0);
    ( 449383.5, 3758819.7,     191.7,      191.7,        0.0);         ( 449387.4,
3758819.7,      191.5,      191.5,        0.0);
```

⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                       ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
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 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

```
      ( 449391.2, 3758819.7,     191.2,     191.2,      0.0);         ( 449395.1,
3758819.7,     191.0,     191.0,      0.0);
      ( 449399.0, 3758819.7,     190.7,     190.7,      0.0);         ( 449402.8,
3758819.7,     190.4,     190.4,      0.0);
      ( 449406.7, 3758819.7,     190.2,     190.2,      0.0);         ( 449410.6,
3758819.7,     190.0,     190.0,      0.0);
      ( 449414.5, 3758819.7,     189.8,     189.8,      0.0);         ( 449418.3,
3758819.7,     189.7,     189.7,      0.0);
      ( 449422.2, 3758819.7,     189.6,     189.6,      0.0);         ( 449426.1,
3758819.7,     189.5,     189.5,      0.0);
      ( 449429.9, 3758819.7,     189.3,     189.3,      0.0);         ( 449433.8,
3758819.7,     189.2,     189.2,      0.0);
      ( 449437.7, 3758819.7,     189.1,     189.1,      0.0);         ( 449441.5,
3758819.7,     188.9,     188.9,      0.0);
      ( 449445.4, 3758819.7,     188.8,     188.8,      0.0);         ( 449368.0,
3758833.7,     192.8,     192.8,      0.0);
      ( 449371.9, 3758833.7,     192.5,     192.5,      0.0);         ( 449375.8,
3758833.7,     192.2,     192.2,      0.0);
      ( 449379.6, 3758833.7,     192.0,     192.0,      0.0);         ( 449383.5,
3758833.7,     191.7,     191.7,      0.0);
      ( 449387.4, 3758833.7,     191.5,     191.5,      0.0);         ( 449391.2,
3758833.7,     191.2,     191.2,      0.0);
      ( 449395.1, 3758833.7,     191.0,     191.0,      0.0);         ( 449399.0,
3758833.7,     190.7,     190.7,      0.0);
      ( 449402.8, 3758833.7,     190.4,     190.4,      0.0);         ( 449406.7,
3758833.7,     190.2,     190.2,      0.0);
      ( 449410.6, 3758833.7,     190.0,     190.0,      0.0);         ( 449414.5,
3758833.7,     189.8,     189.8,      0.0);
      ( 449418.3, 3758833.7,     189.7,     189.7,      0.0);         ( 449422.2,
3758833.7,     189.6,     189.6,      0.0);
      ( 449426.1, 3758833.7,     189.5,     189.5,      0.0);         ( 449429.9,
3758833.7,     189.3,     189.3,      0.0);
      ( 449433.8, 3758833.7,     189.2,     189.2,      0.0);         ( 449437.7,
3758833.7,     189.1,     189.1,      0.0);
      ( 449441.5, 3758833.7,     188.9,     188.9,      0.0);         ( 449445.4,
3758833.7,     188.8,     188.8,      0.0);
      ( 449368.0, 3758847.8,     193.4,     193.4,      0.0);         ( 449371.9,
3758847.8,     193.2,     193.2,      0.0);
      ( 449375.8, 3758847.8,     193.0,     193.0,      0.0);         ( 449379.6,
3758847.8,     192.8,     192.8,      0.0);
      ( 449383.5, 3758847.8,     192.5,     192.5,      0.0);         ( 449387.4,
3758847.8,     192.2,     192.2,      0.0);
      ( 449391.2, 3758847.8,     192.0,     192.0,      0.0);         ( 449395.1,
3758847.8,     191.7,     191.7,      0.0);
      ( 449399.0, 3758847.8,     191.5,     191.5,      0.0);         ( 449402.8,
3758847.8,     191.2,     191.2,      0.0);
```

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    ( 449406.7, 3758847.8,    191.0,    191.0,      0.0);     ( 449410.6,
3758847.8,    190.7,    190.7,      0.0);
    ( 449414.5, 3758847.8,    190.5,    190.5,      0.0);     ( 449418.3,
3758847.8,    190.4,    190.4,      0.0);
    ( 449422.2, 3758847.8,    190.2,    190.2,      0.0);     ( 449426.1,
3758847.8,    190.0,    190.0,      0.0);
    ( 449429.9, 3758847.8,    189.8,    189.8,      0.0);     ( 449433.8,
3758847.8,    189.6,    189.6,      0.0);
    ( 449437.7, 3758847.8,    189.5,    189.5,      0.0);     ( 449441.5,
3758847.8,    189.3,    189.3,      0.0);
    ( 449445.4, 3758847.8,    189.2,    189.2,      0.0);     ( 449368.0,
3758861.8,    194.1,    194.1,      0.0);
    ( 449371.9, 3758861.8,    194.0,    194.0,      0.0);     ( 449375.8,
3758861.8,    193.8,    193.8,      0.0);
    ( 449379.6, 3758861.8,    193.7,    193.7,      0.0);     ( 449383.5,
3758861.8,    193.4,    193.4,      0.0);
    ( 449387.4, 3758861.8,    193.2,    193.2,      0.0);     ( 449391.2,
3758861.8,    192.9,    192.9,      0.0);
    ( 449395.1, 3758861.8,    192.7,    192.7,      0.0);     ( 449399.0,
3758861.8,    192.4,    192.4,      0.0);
    ( 449402.8, 3758861.8,    192.1,    192.1,      0.0);     ( 449406.7,
3758861.8,    191.9,    191.9,      0.0);
    ( 449410.6, 3758861.8,    191.6,    191.6,      0.0);     ( 449414.5,
3758861.8,    191.4,    191.4,      0.0);
    ( 449418.3, 3758861.8,    191.2,    191.2,      0.0);     ( 449422.2,
3758861.8,    190.9,    190.9,      0.0);
    ( 449426.1, 3758861.8,    190.7,    190.7,      0.0);     ( 449429.9,
3758861.8,    190.4,    190.4,      0.0);
    ( 449433.8, 3758861.8,    190.2,    190.2,      0.0);     ( 449437.7,
3758861.8,    190.0,    190.0,      0.0);
    ( 449441.5, 3758861.8,    189.8,    189.8,      0.0);     ( 449445.4,
3758861.8,    189.7,    189.7,      0.0);
    ( 449368.0, 3758875.8,    194.7,    194.7,      0.0);     ( 449371.9,
3758875.8,    194.6,    194.6,      0.0);
    ( 449375.8, 3758875.8,    194.4,    194.4,      0.0);     ( 449379.6,
3758875.8,    194.3,    194.3,      0.0);
    ( 449383.5, 3758875.8,    194.1,    194.1,      0.0);     ( 449387.4,
3758875.8,    193.8,    193.8,      0.0);
    ( 449391.2, 3758875.8,    193.5,    193.5,      0.0);     ( 449395.1,
3758875.8,    193.3,    193.3,      0.0);
    ( 449399.0, 3758875.8,    193.0,    193.0,      0.0);     ( 449402.8,
3758875.8,    192.8,    192.8,      0.0);
    ( 449406.7, 3758875.8,    192.5,    192.5,      0.0);     ( 449410.6,
3758875.8,    192.2,    192.2,      0.0);
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⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:13:28

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   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

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


      ( 449414.5, 3758875.8,     192.0,     192.0,      0.0);        ( 449418.3,
3758875.8,      191.7,     191.7,      0.0);
      ( 449422.2, 3758875.8,     191.5,     191.5,      0.0);        ( 449426.1,
3758875.8,      191.2,     191.2,      0.0);
      ( 449429.9, 3758875.8,     191.0,     191.0,      0.0);        ( 449433.8,
3758875.8,      190.7,     190.7,      0.0);
      ( 449437.7, 3758875.8,     190.4,     190.4,      0.0);        ( 449441.5,
3758875.8,      190.2,     190.2,      0.0);
      ( 449445.4, 3758875.8,     190.1,     190.1,      0.0);        ( 449368.0,
3758889.9,      195.2,     195.2,      0.0);
      ( 449371.9, 3758889.9,     195.0,     195.0,      0.0);        ( 449375.8,
3758889.9,      194.9,     194.9,      0.0);
      ( 449379.6, 3758889.9,     194.8,     194.8,      0.0);        ( 449383.5,
3758889.9,      194.5,     194.5,      0.0);
      ( 449387.4, 3758889.9,     194.3,     194.3,      0.0);        ( 449391.2,
3758889.9,      194.0,     194.0,      0.0);
      ( 449395.1, 3758889.9,     193.7,     193.7,      0.0);        ( 449399.0,
3758889.9,      193.5,     193.5,      0.0);
      ( 449402.8, 3758889.9,     193.2,     193.2,      0.0);        ( 449406.7,
3758889.9,      193.0,     193.0,      0.0);
      ( 449410.6, 3758889.9,     192.7,     192.7,      0.0);        ( 449414.5,
3758889.9,      192.5,     192.5,      0.0);
      ( 449418.3, 3758889.9,     192.2,     192.2,      0.0);        ( 449422.2,
3758889.9,      191.9,     191.9,      0.0);
      ( 449426.1, 3758889.9,     191.7,     191.7,      0.0);        ( 449429.9,
3758889.9,      191.4,     191.4,      0.0);
      ( 449433.8, 3758889.9,     191.2,     191.2,      0.0);        ( 449437.7,
3758889.9,      190.9,     190.9,      0.0);
      ( 449441.5, 3758889.9,     190.7,     190.7,      0.0);        ( 449445.4,
3758889.9,      190.6,     190.6,      0.0);
      ( 449368.0, 3758903.9,     195.8,     195.8,      0.0);        ( 449371.9,
3758903.9,      195.7,     195.7,      0.0);
      ( 449375.8, 3758903.9,     195.6,     195.6,      0.0);        ( 449379.6,
3758903.9,      195.5,     195.5,      0.0);
      ( 449383.5, 3758903.9,     195.2,     195.2,      0.0);        ( 449387.4,
3758903.9,      195.0,     195.0,      0.0);
      ( 449391.2, 3758903.9,     194.7,     194.7,      0.0);        ( 449395.1,
3758903.9,      194.5,     194.5,      0.0);
      ( 449399.0, 3758903.9,     194.2,     194.2,      0.0);        ( 449402.8,
3758903.9,      194.0,     194.0,      0.0);
      ( 449406.7, 3758903.9,     193.7,     193.7,      0.0);        ( 449410.6,
3758903.9,      193.4,     193.4,      0.0);
      ( 449414.5, 3758903.9,     193.1,     193.1,      0.0);        ( 449418.3,
3758903.9,      192.8,     192.8,      0.0);
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    ( 449422.2, 3758903.9,     192.6,     192.6,       0.0);      ( 449426.1,
3758903.9,     192.3,     192.3,       0.0);
    ( 449429.9, 3758903.9,     192.0,     192.0,       0.0);      ( 449433.8,
3758903.9,     191.7,     195.0,       0.0);
    ( 449437.7, 3758903.9,     191.4,     195.0,       0.0);      ( 449441.5,
3758903.9,     191.2,     191.2,       0.0);
    ( 449445.4, 3758903.9,     191.1,     191.1,       0.0);      ( 449368.0,
3758918.0,     196.6,     196.6,       0.0);
    ( 449371.9, 3758918.0,     196.5,     196.5,       0.0);      ( 449375.8,
3758918.0,     196.5,     196.5,       0.0);
    ( 449379.6, 3758918.0,     196.4,     196.4,       0.0);      ( 449383.5,
3758918.0,     196.2,     196.2,       0.0);
    ( 449387.4, 3758918.0,     195.9,     195.9,       0.0);      ( 449391.2,
3758918.0,     195.7,     195.7,       0.0);
    ( 449395.1, 3758918.0,     195.4,     195.4,       0.0);      ( 449399.0,
3758918.0,     195.1,     195.1,       0.0);
    ( 449402.8, 3758918.0,     194.9,     194.9,       0.0);      ( 449406.7,
3758918.0,     194.6,     194.6,       0.0);
    ( 449410.6, 3758918.0,     194.3,     194.3,       0.0);      ( 449414.5,
3758918.0,     194.0,     195.0,       0.0);
    ( 449418.3, 3758918.0,     193.6,     195.0,       0.0);      ( 449422.2,
3758918.0,     193.3,     195.0,       0.0);
    ( 449426.1, 3758918.0,     192.9,     195.0,       0.0);      ( 449429.9,
3758918.0,     192.6,     195.0,       0.0);
    ( 449433.8, 3758918.0,     192.2,     195.0,       0.0);      ( 449437.7,
3758918.0,     191.9,     195.0,       0.0);
    ( 449441.5, 3758918.0,     191.7,     195.0,       0.0);      ( 449445.4,
3758918.0,     191.5,     191.5,       0.0);
    ( 449368.0, 3758932.0,     197.2,     197.2,       0.0);      ( 449371.9,
3758932.0,     197.2,     197.2,       0.0);
    ( 449375.8, 3758932.0,     197.2,     197.2,       0.0);      ( 449379.6,
3758932.0,     197.2,     197.2,       0.0);
    ( 449383.5, 3758932.0,     196.9,     196.9,       0.0);      ( 449387.4,
3758932.0,     196.7,     196.7,       0.0);
    ( 449391.2, 3758932.0,     196.4,     196.4,       0.0);      ( 449395.1,
3758932.0,     196.2,     196.2,       0.0);
    ( 449399.0, 3758932.0,     195.9,     195.9,       0.0);      ( 449402.8,
3758932.0,     195.6,     195.6,       0.0);
    ( 449406.7, 3758932.0,     195.4,     195.4,       0.0);      ( 449410.6,
3758932.0,     195.1,     195.1,       0.0);
    ( 449414.5, 3758932.0,     194.7,     194.7,       0.0);      ( 449418.3,
3758932.0,     194.3,     194.3,       0.0);
    ( 449422.2, 3758932.0,     193.9,     193.9,       0.0);      ( 449426.1,
3758932.0,     193.5,     193.5,       0.0);
    ( 449429.9, 3758932.0,     193.1,     193.1,       0.0);      ( 449433.8,
3758932.0,     192.8,     192.8,       0.0);
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⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                          ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                    ***   12:13:28

*** MODELOPTs: RegDFAULT CONC   ELEV   URBAN   ADJ_U*

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

     (449437.7, 3758932.0,   192.4,   192.4,   0.0);   (449441.5,
3758932.0,   192.1,   192.1,   0.0);
     (449445.4, 3758932.0,   192.0,   192.0,   0.0);   (449368.0,
3758946.0,   197.7,   197.7,   0.0);
     (449371.9, 3758946.0,   197.7,   197.7,   0.0);   (449375.8,
3758946.0,   197.7,   197.7,   0.0);
     (449379.6, 3758946.0,   197.7,   197.7,   0.0);   (449383.5,
3758946.0,   197.4,   197.4,   0.0);
     (449387.4, 3758946.0,   197.1,   197.1,   0.0);   (449391.2,
3758946.0,   196.9,   196.9,   0.0);
     (449395.1, 3758946.0,   196.6,   196.6,   0.0);   (449399.0,
3758946.0,   196.4,   196.4,   0.0);
     (449402.8, 3758946.0,   196.1,   196.1,   0.0);   (449406.7,
3758946.0,   195.8,   195.8,   0.0);
     (449410.6, 3758946.0,   195.5,   195.5,   0.0);   (449414.5,
3758946.0,   195.2,   195.2,   0.0);
     (449418.3, 3758946.0,   194.8,   194.8,   0.0);   (449422.2,
3758946.0,   194.4,   194.4,   0.0);
     (449426.1, 3758946.0,   194.0,   196.0,   0.0);   (449429.9,
3758946.0,   193.6,   196.0,   0.0);
     (449433.8, 3758946.0,   193.2,   196.0,   0.0);   (449437.7,
3758946.0,   192.8,   196.0,   0.0);
     (449441.5, 3758946.0,   192.5,   196.0,   0.0);   (449445.4,
3758946.0,   192.3,   192.3,   0.0);
     (449368.0, 3758960.1,   198.0,   198.0,   0.0);   (449371.9,
3758960.1,   198.0,   198.0,   0.0);
     (449375.8, 3758960.1,   198.0,   198.0,   0.0);   (449379.6,
3758960.1,   198.0,   198.0,   0.0);
     (449383.5, 3758960.1,   197.8,   197.8,   0.0);   (449387.4,
3758960.1,   197.5,   197.5,   0.0);
     (449391.2, 3758960.1,   197.3,   197.3,   0.0);   (449395.1,
3758960.1,   197.0,   197.0,   0.0);
     (449399.0, 3758960.1,   196.8,   196.8,   0.0);   (449402.8,
3758960.1,   196.5,   196.5,   0.0);
     (449406.7, 3758960.1,   196.3,   196.3,   0.0);   (449410.6,
3758960.1,   196.0,   196.0,   0.0);
     (449414.5, 3758960.1,   195.6,   195.6,   0.0);   (449418.3,
3758960.1,   195.2,   195.2,   0.0);
     (449422.2, 3758960.1,   194.9,   194.9,   0.0);   (449426.1,
3758960.1,   194.5,   194.5,   0.0);
     (449429.9, 3758960.1,   194.1,   194.1,   0.0);   (449433.8,
3758960.1,   193.7,   193.7,   0.0);

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( 449437.7, 3758960.1,      193.3,      193.3,       0.0);        ( 449441.5,
3758960.1,       193.0,       193.0,       0.0);
( 449445.4, 3758960.1,      192.7,      192.7,       0.0);        ( 449368.0,
3758974.1,       198.0,       198.0,       0.0);
( 449371.9, 3758974.1,      198.0,      198.0,       0.0);        ( 449375.8,
3758974.1,       198.0,       198.0,       0.0);
( 449379.6, 3758974.1,      198.0,      198.0,       0.0);        ( 449383.5,
3758974.1,       197.8,       197.8,       0.0);
( 449387.4, 3758974.1,      197.6,      197.6,       0.0);        ( 449391.2,
3758974.1,       197.5,       197.5,       0.0);
( 449395.1, 3758974.1,      197.3,      197.3,       0.0);        ( 449399.0,
3758974.1,       197.1,       197.1,       0.0);
( 449402.8, 3758974.1,      196.9,      196.9,       0.0);        ( 449406.7,
3758974.1,       196.7,       196.7,       0.0);
( 449410.6, 3758974.1,      196.5,      196.5,       0.0);        ( 449414.5,
3758974.1,       196.1,       196.1,       0.0);
( 449418.3, 3758974.1,      195.7,      195.7,       0.0);        ( 449422.2,
3758974.1,       195.3,       195.3,       0.0);
( 449426.1, 3758974.1,      194.9,      197.0,       0.0);        ( 449429.9,
3758974.1,       194.5,       197.0,       0.0);
( 449433.8, 3758974.1,      194.2,      197.0,       0.0);        ( 449437.7,
3758974.1,       193.8,       197.0,       0.0);
( 449441.5, 3758974.1,      193.4,      197.0,       0.0);        ( 449445.4,
3758974.1,       193.1,       197.0,       0.0);
( 449368.0, 3758988.2,      198.1,      198.1,       0.0);        ( 449371.9,
3758988.2,       198.1,       198.1,       0.0);
( 449375.8, 3758988.2,      198.1,      198.1,       0.0);        ( 449379.6,
3758988.2,       198.1,       198.1,       0.0);
( 449383.5, 3758988.2,      197.9,      197.9,       0.0);        ( 449387.4,
3758988.2,       197.8,       197.8,       0.0);
( 449391.2, 3758988.2,      197.6,      197.6,       0.0);        ( 449395.1,
3758988.2,       197.5,       197.5,       0.0);
( 449399.0, 3758988.2,      197.4,      197.4,       0.0);        ( 449402.8,
3758988.2,       197.2,       197.2,       0.0);
( 449406.7, 3758988.2,      197.1,      197.1,       0.0);        ( 449410.6,
3758988.2,       196.9,       196.9,       0.0);
( 449414.5, 3758988.2,      196.5,      196.5,       0.0);        ( 449418.3,
3758988.2,       196.1,       196.1,       0.0);
( 449422.2, 3758988.2,      195.8,      195.8,       0.0);        ( 449426.1,
3758988.2,       195.4,       195.4,       0.0);
( 449429.9, 3758988.2,      195.0,      195.0,       0.0);        ( 449433.8,
3758988.2,       194.6,       194.6,       0.0);
( 449437.7, 3758988.2,      194.2,      194.2,       0.0);        ( 449441.5,
3758988.2,       193.9,       193.9,       0.0);
( 449445.4, 3758988.2,      193.5,      193.5,       0.0);        ( 449368.0,
3759002.2,       198.5,       198.5,       0.0);
( 449371.9, 3759002.2,      198.5,      198.5,       0.0);        ( 449375.8,
3759002.2,       198.5,       198.5,       0.0);
```

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

      (449379.6, 3759002.2,   198.5,   198.5,   0.0);   (449383.5,
3759002.2,   198.3,   198.3,   0.0);
      (449387.4, 3759002.2,   198.1,   198.1,   0.0);   (449391.2,
3759002.2,   197.9,   197.9,   0.0);
      (449395.1, 3759002.2,   197.7,   197.7,   0.0);   (449399.0,
3759002.2,   197.5,   197.5,   0.0);
      (449402.8, 3759002.2,   197.3,   197.3,   0.0);   (449406.7,
3759002.2,   197.1,   197.1,   0.0);
      (449410.6, 3759002.2,   196.9,   196.9,   0.0);   (449414.5,
3759002.2,   196.6,   196.6,   0.0);
      (449418.3, 3759002.2,   196.3,   196.3,   0.0);   (449422.2,
3759002.2,   196.0,   196.0,   0.0);
      (449426.1, 3759002.2,   195.6,   195.6,   0.0);   (449429.9,
3759002.2,   195.3,   195.3,   0.0);
      (449433.8, 3759002.2,   195.0,   195.0,   0.0);   (449437.7,
3759002.2,   194.7,   194.7,   0.0);
      (449441.5, 3759002.2,   194.3,   194.3,   0.0);   (449445.4,
3759002.2,   193.9,   193.9,   0.0);
      (449368.0, 3759016.2,   199.0,   199.0,   0.0);   (449371.9,
3759016.2,   199.0,   199.0,   0.0);
      (449375.8, 3759016.2,   199.0,   199.0,   0.0);   (449379.6,
3759016.2,   199.0,   199.0,   0.0);
      (449383.5, 3759016.2,   198.7,   198.7,   0.0);   (449387.4,
3759016.2,   198.5,   198.5,   0.0);
      (449391.2, 3759016.2,   198.2,   198.2,   0.0);   (449395.1,
3759016.2,   198.0,   198.0,   0.0);
      (449399.0, 3759016.2,   197.7,   197.7,   0.0);   (449402.8,
3759016.2,   197.4,   197.4,   0.0);
      (449406.7, 3759016.2,   197.2,   197.2,   0.0);   (449410.6,
3759016.2,   196.9,   196.9,   0.0);
      (449414.5, 3759016.2,   196.7,   196.7,   0.0);   (449418.3,
3759016.2,   196.4,   196.4,   0.0);
      (449422.2, 3759016.2,   196.2,   196.2,   0.0);   (449426.1,
3759016.2,   195.9,   195.9,   0.0);
      (449429.9, 3759016.2,   195.6,   195.6,   0.0);   (449433.8,
3759016.2,   195.4,   195.4,   0.0);
      (449437.7, 3759016.2,   195.1,   195.1,   0.0);   (449441.5,
3759016.2,   194.8,   195.0,   0.0);
      (449445.4, 3759016.2,   194.4,   195.0,   0.0);   (449368.0,
3759030.3,   198.5,   198.5,   0.0);

```
    ( 449371.9, 3759030.3,     198.5,     198.5,      0.0);          ( 449375.8,
3759030.3,     198.5,     198.5,      0.0);
    ( 449379.6, 3759030.3,     198.5,     198.5,      0.0);          ( 449383.5,
3759030.3,     198.3,     198.3,      0.0);
    ( 449387.4, 3759030.3,     198.0,     198.0,      0.0);          ( 449391.2,
3759030.3,     197.8,     197.8,      0.0);
    ( 449395.1, 3759030.3,     197.5,     197.5,      0.0);          ( 449399.0,
3759030.3,     197.2,     197.2,      0.0);
    ( 449402.8, 3759030.3,     197.0,     197.0,      0.0);          ( 449406.7,
3759030.3,     196.7,     196.7,      0.0);
    ( 449410.6, 3759030.3,     196.5,     196.5,      0.0);          ( 449414.5,
3759030.3,     196.3,     196.3,      0.0);
    ( 449418.3, 3759030.3,     196.1,     196.1,      0.0);          ( 449422.2,
3759030.3,     195.9,     195.9,      0.0);
    ( 449426.1, 3759030.3,     195.7,     195.7,      0.0);          ( 449429.9,
3759030.3,     195.5,     195.5,      0.0);
    ( 449433.8, 3759030.3,     195.3,     195.3,      0.0);          ( 449437.7,
3759030.3,     195.1,     195.1,      0.0);
    ( 449441.5, 3759030.3,     194.8,     194.8,      0.0);          ( 449445.4,
3759030.3,     194.4,     194.4,      0.0);
    ( 449368.0, 3759044.3,     198.1,     198.1,      0.0);          ( 449371.9,
3759044.3,     198.1,     198.1,      0.0);
    ( 449375.8, 3759044.3,     198.1,     198.1,      0.0);          ( 449379.6,
3759044.3,     198.1,     198.1,      0.0);
    ( 449383.5, 3759044.3,     197.8,     197.8,      0.0);          ( 449387.4,
3759044.3,     197.5,     197.5,      0.0);
    ( 449391.2, 3759044.3,     197.3,     197.3,      0.0);          ( 449395.1,
3759044.3,     197.0,     197.0,      0.0);
    ( 449399.0, 3759044.3,     196.8,     196.8,      0.0);          ( 449402.8,
3759044.3,     196.5,     196.5,      0.0);
    ( 449406.7, 3759044.3,     196.2,     196.2,      0.0);          ( 449410.6,
3759044.3,     196.0,     196.0,      0.0);
    ( 449414.5, 3759044.3,     195.9,     195.9,      0.0);          ( 449418.3,
3759044.3,     195.8,     195.8,      0.0);
    ( 449422.2, 3759044.3,     195.6,     195.6,      0.0);          ( 449426.1,
3759044.3,     195.5,     195.5,      0.0);
    ( 449429.9, 3759044.3,     195.3,     195.3,      0.0);          ( 449433.8,
3759044.3,     195.2,     195.2,      0.0);
    ( 449437.7, 3759044.3,     195.1,     195.1,      0.0);          ( 449441.5,
3759044.3,     194.8,     194.8,      0.0);
    ( 449445.4, 3759044.3,     194.4,     194.4,      0.0);
```

↟ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:13:28

                        PAGE 10
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN 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 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                        ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:13:28

                                        PAGE 11
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

   Surface file: ..\KRAL_V9_ADJU\KRAL_V9.SFC
               Met Version: 16216
   Profile file: ..\KRAL_V9_ADJU\KRAL_V9.PFL

   Surface format: FREE

   Profile format: FREE

```
     Surface station no.:     3171                Upper air station no.:      3190
                 Name: UNKNOWN                                Name: UNKNOWN

                 Year:   2012                                Year:    2012

  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
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
 12 01 01   1 01  -25.6  0.266 -9.000 -9.000 -999.   330.     77.9 0.15   2.40
1.00    2.93   55.   10.1  288.1    2.0
 12 01 01   1 02  -26.8  0.277 -9.000 -9.000 -999.   351.     84.7 0.15   2.40
1.00    3.05   55.   10.1  287.0    2.0
 12 01 01   1 03  -21.5  0.221 -9.000 -9.000 -999.   250.     53.5 0.15   2.40
1.00    2.45   74.   10.1  284.2    2.0
 12 01 01   1 04  -22.0  0.227 -9.000 -9.000 -999.   260.     56.8 0.15   2.40
1.00    2.52   77.   10.1  285.9    2.0
 12 01 01   1 05  -20.0  0.206 -9.000 -9.000 -999.   225.     46.8 0.15   2.40
1.00    2.30   80.   10.1  285.4    2.0
 12 01 01   1 06  -14.4  0.171 -9.000 -9.000 -999.   170.     32.1 0.15   2.40
1.00    1.93   79.   10.1  287.0    2.0
 12 01 01   1 07  -14.9  0.174 -9.000 -9.000 -999.   174.     33.2 0.15   2.40
1.00    1.96   77.   10.1  284.2    2.0
 12 01 01   1 08  -11.9  0.169 -9.000 -9.000 -999.   167.     36.1 0.15   2.40
0.53    1.89   77.   10.1  288.1    2.0
 12 01 01   1 09   40.4  0.234  0.359  0.006   40.   272.    -28.1 0.15   2.40
0.31    2.10   81.   10.1  289.2    2.0
 12 01 01   1 10  112.6  0.246  0.742  0.005  129.   293.    -11.8 0.15   2.40
0.24    1.99  101.   10.1  296.4    2.0
 12 01 01   1 11  161.0  0.402  1.188  0.005  369.   611.    -35.6 0.15   2.40
0.21    3.68   78.   10.1  298.8    2.0
 12 01 01   1 12  184.7  0.337  1.516  0.005  668.   473.    -18.4 0.15   2.40
0.20    2.89   68.   10.1  300.4    2.0
 12 01 01   1 13  183.9  0.310  1.809  0.005 1139.   414.    -14.2 0.15   2.40
0.20    2.57   64.   10.1  302.5    2.0
 12 01 01   1 14  156.6  0.374  1.852  0.005 1434.   549.    -29.5 0.15   2.40
0.22    3.37   63.   10.1  303.1    2.0
 12 01 01   1 15  104.3  0.382  1.658  0.005 1546.   567.    -47.2 0.15   2.40
0.25    3.59   62.   10.1  302.5    2.0
 12 01 01   1 16   31.8  0.374  1.123  0.005 1573.   550.   -145.8 0.15   2.40
0.34    3.76   69.   10.1  300.9    2.0
 12 01 01   1 17  -23.3  0.276 -9.000 -9.000 -999.   354.     84.0 0.15   2.40
0.62    3.03   59.   10.1  297.5    2.0
 12 01 01   1 18  -21.5  0.229 -9.000 -9.000 -999.   264.     57.8 0.15   2.40
1.00    2.54   54.   10.1  295.4    2.0
 12 01 01   1 19  -19.3  0.204 -9.000 -9.000 -999.   221.     45.6 0.15   2.40
1.00    2.27   79.   10.1  292.0    2.0
 12 01 01   1 20  -20.7  0.218 -9.000 -9.000 -999.   244.     52.2 0.15   2.40
1.00    2.42   79.   10.1  292.5    2.0
```

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 12 01 01   1 21  -19.7  0.206 -9.000 -9.000 -999.  225.     46.9  0.15   2.40
1.00    2.30   95.   10.1 290.9    2.0
 12 01 01   1 22  -17.6  0.190 -9.000 -9.000 -999.  199.     39.8  0.15   2.40
1.00    2.13   78.   10.1 290.4    2.0
 12 01 01   1 23  -20.3  0.211 -9.000 -9.000 -999.  233.     49.0  0.15   2.40
1.00    2.35   52.   10.1 289.2    2.0
 12 01 01   1 24  -16.4  0.183 -9.000 -9.000 -999.  189.     37.0  0.15   2.40
1.00    2.06   75.   10.1 288.8    2.0


 First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1   55.    2.93   288.2   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                          ***         11/11/21
 *** AERMET - VERSION  16216 ***   ***
                          ***         12:13:28


                          PAGE  12
 *** MODELOPTs:    RegDFAULT  CONC   ELEV   URBAN   ADJ_U*

    *** THE   1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION    VALUES AVERAGED
OVER   5 YEARS FOR SOURCE GROUP: ALL       ***
                                INCLUDING SOURCE(S):    L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                  ** CONC OF NO2      IN MICROGRAMS/M**3
              **

      X-COORD (M)   Y-COORD (M)      CONC                    X-COORD (M)
Y-COORD (M)      CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
        449368.02   3758763.53      19.88545                    449371.89
3758763.53      18.97873
        449375.76   3758763.53      18.18844                    449379.63
3758763.53      17.45416
        449383.50   3758763.53      16.78344                    449387.37
3758763.53      16.16123
```

```
     449391.24     3758763.53        15.58080                         449395.11
3758763.53        15.03878
     449398.98     3758763.53        14.53135                         449402.85
3758763.53        14.05530
     449406.72     3758763.53        13.60839                         449410.59
3758763.53        13.18938
     449414.46     3758763.53        12.79959                         449418.33
3758763.53        12.43087
     449422.20     3758763.53        12.08155                         449426.07
3758763.53        11.75009
     449429.94     3758763.53        11.43514                         449433.81
3758763.53        11.13545
     449437.68     3758763.53        10.84992                         449441.55
3758763.53        10.57976
     449445.42     3758763.53        10.32530                         449368.02
3758777.57        19.92745
     449371.89     3758777.57        19.01536                         449375.76
3758777.57        18.20893
     449379.63     3758777.57        17.46202                         449383.50
3758777.57        16.79096
     449387.37     3758777.57        16.16765                         449391.24
3758777.57        15.58809
     449395.11     3758777.57        15.04606                         449398.98
3758777.57        14.53877
     449402.85     3758777.57        14.06288                         449406.72
3758777.57        13.61552
     449410.59     3758777.57        13.19708                         449414.46
3758777.57        12.80917
     449418.33     3758777.57        12.44151                         449422.20
3758777.57        12.09311
     449426.07     3758777.57        11.76248                         449429.94
3758777.57        11.44825
     449433.81     3758777.57        11.15004                         449437.68
3758777.57        10.86965
     449441.55     3758777.57        10.60487                         449445.42
3758777.57        10.35365
     449368.02     3758791.61        19.98398                         449371.89
3758791.61        19.07556
     449375.76     3758791.61        18.28005                         449379.63
3758791.61        17.54250
     449383.50     3758791.61        16.86932                         449387.37
3758791.61        16.24388
     449391.24     3758791.61        15.66139                         449395.11
3758791.61        15.11824
     449398.98     3758791.61        14.60909                         449402.85
3758791.61        14.13142
     449406.72     3758791.61        13.68236                         449410.59
3758791.61        13.26214
     449414.46     3758791.61        12.87151                         449418.33
3758791.61        12.50199
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        449422.20    3758791.61        12.15245                        449426.07
3758791.61       11.82018
        449429.94    3758791.61        11.50442                        449433.81
3758791.61       11.20907
        449437.68    3758791.61        10.92750                        449441.55
3758791.61       10.65985
        449445.42    3758791.61        10.40553                        449368.02
3758805.65       20.04236
        449371.89    3758805.65        19.13840                        449375.76
3758805.65       18.34895
        449379.63    3758805.65        17.61973                        449383.50
3758805.65       16.94409
        449387.37    3758805.65        16.31641                        449391.24
3758805.65       15.73174
        449395.11    3758805.65        15.18578                        449398.98
3758805.65       14.67544
        449402.85    3758805.65        14.19599                        449406.72
3758805.65       13.74525
        449410.59    3758805.65        13.32328                        449414.46
3758805.65       12.93067
        449418.33    3758805.65        12.55930                        449422.20
3758805.65       12.20748
        449426.07    3758805.65        11.87367                        449429.94
3758805.65       11.56060
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                            ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   12:13:28

                            PAGE 13
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

    *** THE   1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION   VALUES AVERAGED
OVER   5 YEARS FOR SOURCE GROUP: ALL   ***
                            INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                    ** CONC OF NO2   IN MICROGRAMS/M**3
            **

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)

```
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - -
        449433.81    3758805.65        11.26419                    449437.68
3758805.65        10.98150
        449441.55    3758805.65        10.71158                    449445.42
3758805.65        10.45354
        449368.02    3758819.69        20.08166                    449371.89
3758819.69        19.17893
        449375.76    3758819.69        18.38783                    449379.63
3758819.69        17.65644
        449383.50    3758819.69        16.97916                    449387.37
3758819.69        16.35002
        449391.24    3758819.69        15.76413                    449395.11
3758819.69        15.21784
        449398.98    3758819.69        14.70583                    449402.85
3758819.69        14.22554
        449406.72    3758819.69        13.77406                    449410.59
3758819.69        13.35152
        449414.46    3758819.69        12.95856                    449418.33
3758819.69        12.58687
        449422.20    3758819.69        12.23473                    449426.07
3758819.69        11.90518
        449429.94    3758819.69        11.59357                    449433.81
3758819.69        11.29676
        449437.68    3758819.69        11.01369                    449441.55
3758819.69        10.74339
        449445.42    3758819.69        10.48499                    449368.02
3758833.73        20.11286
        449371.89    3758833.73        19.21035                    449375.76
3758833.73        18.41803
        449379.63    3758833.73        17.68554                    449383.50
3758833.73        17.00726
        449387.37    3758833.73        16.37725                    449391.24
3758833.73        15.79058
        449395.11    3758833.73        15.24364                    449398.98
3758833.73        14.73101
        449402.85    3758833.73        14.25016                    449406.72
3758833.73        13.79816
        449410.59    3758833.73        13.37523                    449414.46
3758833.73        12.98211
        449418.33    3758833.73        12.61025                    449422.20
3758833.73        12.26185
        449426.07    3758833.73        11.93439                    449429.94
3758833.73        11.62243
        449433.81    3758833.73        11.32529                    449437.68
3758833.73        11.04189
        449441.55    3758833.73        10.77128                    449445.42
3758833.73        10.51258
        449368.02    3758847.77        20.21774                    449371.89
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3758847.77        19.29921
         449375.76     3758847.77        18.50535                           449379.63
3758847.77        17.77408
         449383.50     3758847.77        17.09420                           449387.37
3758847.77        16.46282
         449391.24     3758847.77        15.87394                           449395.11
3758847.77        15.32399
         449398.98     3758847.77        14.80917                           449402.85
3758847.77        14.32620
         449406.72     3758847.77        13.87278                           449410.59
3758847.77        13.44630
         449414.46     3758847.77        13.04739                           449418.33
3758847.77        12.67082
         449422.20     3758847.77        12.31800                           449426.07
3758847.77        11.98630
         449429.94     3758847.77        11.67086                           449433.81
3758847.77        11.37045
         449437.68     3758847.77        11.08399                           449441.55
3758847.77        10.81171
         449445.42     3758847.77        10.55219                           449368.02
3758861.81        20.32777
         449371.89     3758861.81        19.40373                           449375.76
3758861.81        18.57417
         449379.63     3758861.81        17.84676                           449383.50
3758861.81        17.16982
         449387.37     3758861.81        16.53913                           449391.24
3758861.81        15.95237
         449395.11     3758861.81        15.40204                           449398.98
3758861.81        14.88694
         449402.85     3758861.81        14.40252                           449406.72
3758861.81        13.94727
         449410.59     3758861.81        13.51851                           449414.46
3758861.81        13.11442
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↟ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                            ***   11/11/21
  *** AERMET - VERSION 16216 ***   ***
                            ***   12:13:28

                                 PAGE 14
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

    *** THE   1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION   VALUES AVERAGED
OVER   5 YEARS FOR SOURCE GROUP: ALL   ***
                               INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026

*** DISCRETE CARTESIAN RECEPTOR POINTS ***

** CONC OF NO2   IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
449418.33	3758861.81	12.73230	449422.20	3758861.81	12.37488
449426.07	3758861.81	12.03975	449429.94	3758861.81	11.72064
449433.81	3758861.81	11.41674	449437.68	3758861.81	11.12695
449441.55	3758861.81	10.85258	449445.42	3758861.81	10.59217
449368.02	3758875.85	20.39402	449371.89	3758875.85	19.47642
449375.76	3758875.85	18.63437	449379.63	3758875.85	17.90050
449383.50	3758875.85	17.21589	449387.37	3758875.85	16.58350
449391.24	3758875.85	15.99821	449395.11	3758875.85	15.44913
449398.98	3758875.85	14.93531	449402.85	3758875.85	14.45158
449406.72	3758875.85	13.99614	449410.59	3758875.85	13.56658
449414.46	3758875.85	13.16087	449418.33	3758875.85	12.77754
449422.20	3758875.85	12.41997	449426.07	3758875.85	12.08281
449429.94	3758875.85	11.76213	449433.81	3758875.85	11.45671
449437.68	3758875.85	11.16582	449441.55	3758875.85	10.89028
449445.42	3758875.85	10.62902	449368.02	3758889.89	20.44410
449371.89	3758889.89	19.53366	449375.76	3758889.89	18.69120
449379.63	3758889.89	17.95301	449383.50	3758889.89	17.25869
449387.37	3758889.89	16.62573	449391.24	3758889.89	16.03395
449395.11	3758889.89	15.48500	449398.98	3758889.89	14.97206

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       449402.85     3758889.89        14.48846                         449406.72
3758889.89        14.03379
       449410.59     3758889.89        13.60387                         449414.46
3758889.89        13.19802
       449418.33     3758889.89        12.81368                         449422.20
3758889.89        12.45790
       449426.07     3758889.89        12.12005                         449429.94
3758889.89        11.79872
       449433.81     3758889.89        11.49265                         449437.68
3758889.89        11.20077
       449441.55     3758889.89        10.92485                         449445.42
3758889.89        10.66280
       449368.02     3758903.93        20.45482                         449371.89
3758903.93        19.54730
       449375.76     3758903.93        18.72815                         449379.63
3758903.93        17.99785
       449383.50     3758903.93        17.31880                         449387.37
3758903.93        16.68431
       449391.24     3758903.93        16.08532                         449395.11
3758903.93        15.52319
       449398.98     3758903.93        15.00874                         449402.85
3758903.93        14.52363
       449406.72     3758903.93        14.07022                         449410.59
3758903.93        13.64266
       449414.46     3758903.93        13.23647                         449418.33
3758903.93        12.85420
       449422.20     3758903.93        12.49701                         449426.07
3758903.93        12.15763
       449429.94     3758903.93        11.83473                         449433.81
3758903.93        11.52709
       449437.68     3758903.93        11.23365                         449441.55
3758903.93        10.95603
       449445.42     3758903.93        10.69356                         449368.02
3758917.97        20.43635
       449371.89     3758917.97        19.52910                         449375.76
3758917.97        18.75192
       449379.63     3758917.97        18.04707                         449383.50
3758917.97        17.33505
       449387.37     3758917.97        16.71228                         449391.24
3758917.97        16.13086
       449395.11     3758917.97        15.58097                         449398.98
3758917.97        15.06045
```
⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                           ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                           ***   12:13:28

                        PAGE 15
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

```
     *** THE   1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION   VALUES AVERAGED
OVER   5 YEARS FOR SOURCE GROUP: ALL      ***
                                 INCLUDING SOURCE(S):    L0000001   , L0000002
 , L0000003    , L0000004    , L0000005    ,
                   L0000006    , L0000007    , L0000008   , L0000009   , L0000010
 , L0000011    , L0000012    , L0000013    ,
                   L0000014    , L0000015    , L0000016   , L0000017   , L0000018
 , L0000019    , L0000020    , L0000021    ,
                   L0000022    , L0000023    , L0000024   , L0000025   , L0000026
 ,

                                           *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                 ** CONC OF NO2      IN MICROGRAMS/M**3
            **


     X-COORD (M)   Y-COORD (M)        CONC                      X-COORD (M)
Y-COORD (M)        CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
        449402.85   3758917.97     14.57025                      449406.72
3758917.97       14.10738
        449410.59   3758917.97     13.67345                      449414.46
3758917.97       13.27144
        449418.33   3758917.97     12.89406                      449422.20
3758917.97       12.53535
        449426.07   3758917.97     12.19416                      449429.94
3758917.97       11.86889
        449433.81   3758917.97     11.55907                      449437.68
3758917.97       11.26337
        449441.55   3758917.97     10.98454                      449445.42
3758917.97       10.72104
        449368.02   3758932.01     20.61749                      449371.89
3758932.01       19.78024
        449375.76   3758932.01     19.05139                      449379.63
3758932.01       18.37452
        449383.50   3758932.01     17.74079                      449387.37
3758932.01       16.84125
        449391.24   3758932.01     16.28629                      449395.11
3758932.01       15.61218
        449398.98   3758932.01     15.11834                      449402.85
3758932.01       14.60832
        449406.72   3758932.01     14.14963                      449410.59
3758932.01       13.71117
        449414.46   3758932.01     13.30075                      449418.33
3758932.01       12.92365
        449422.20   3758932.01     12.56508                      449426.07
3758932.01       12.22365
        449429.94   3758932.01     11.89769                      449433.81
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3758932.01       11.58669
        449437.68     3758932.01         11.28995                449441.55
3758932.01       11.00976
        449445.42     3758932.01         10.74477                449368.02
3758946.05       20.92981
        449371.89     3758946.05         20.17273                449375.76
3758946.05       19.51588
        449379.63     3758946.05         18.90834                449383.50
3758946.05       17.76856
        449387.37     3758946.05         17.18534                449391.24
3758946.05       16.30124
        449395.11     3758946.05         15.77743                449398.98
3758946.05       15.12647
        449402.85     3758946.05         14.66375                449406.72
3758946.05       14.17128
        449410.59     3758946.05         13.74191                449414.46
3758946.05       13.32304
        449418.33     3758946.05         12.94565                449422.20
3758946.05       12.58730
        449426.07     3758946.05         12.24629                449429.94
3758946.05       11.92067
        449433.81     3758946.05         11.60968                449437.68
3758946.05       11.31260
        449441.55     3758946.05         11.03124                449445.42
3758946.05       10.76436
        449368.02     3758960.09         21.55934                449371.89
3758960.09       20.95648
        449375.76     3758960.09         20.38496                449379.63
3758960.09       19.83383
        449383.50     3758960.09         18.27346                449387.37
3758960.09       17.68168
        449391.24     3758960.09         16.64625                449395.11
3758960.09       16.12664
        449398.98     3758960.09         15.29454                449402.85
3758960.09       14.83112
        449406.72     3758960.09         14.23197                449410.59
3758960.09       13.83522
        449414.46     3758960.09         13.34864                449418.33
3758960.09       12.96355
        449422.20     3758960.09         12.60590                449426.07
3758960.09       12.26524
        449429.94     3758960.09         11.94018                449433.81
3758960.09       11.62955
        449437.68     3758960.09         11.33249                449441.55
3758960.09       11.05076
        449445.42     3758960.09         10.78776                449368.02
3758974.13       21.36812
        449371.89     3758974.13         20.69089                449375.76
3758974.13       20.13184
        449379.63     3758974.13         19.59497                449383.50
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3758974.13        18.17693
♠ *** AERMOD - VERSION  19191 ***    *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                              ***         11/11/21
  *** AERMET - VERSION  16216 ***    ***
                              ***         12:13:28


                                    PAGE  16
   *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

      *** THE    1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION    VALUES AVERAGED
OVER    5 YEARS FOR SOURCE GROUP: ALL       ***
                                        INCLUDING SOURCE(S):    L0000001     , L0000002
 , L0000003     , L0000004     , L0000005     ,
                    L0000006     , L0000007     , L0000008    , L0000009     , L0000010
 , L0000011     , L0000012     , L0000013     ,
                    L0000014     , L0000015     , L0000016    , L0000017     , L0000018
 , L0000019     , L0000020     , L0000021     ,
                    L0000022     , L0000023     , L0000024    , L0000025     , L0000026
 ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                        ** CONC OF NO2      IN MICROGRAMS/M**3
                  **


       X-COORD (M)   Y-COORD (M)        CONC                          X-COORD (M)
Y-COORD (M)        CONC
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
         449387.37    3758974.13     17.60350                       449391.24
3758974.13        17.06292
         449395.11    3758974.13     16.11786                       449398.98
3758974.13        15.63584
         449402.85    3758974.13     14.83591                       449406.72
3758974.13        14.40918
         449410.59    3758974.13     14.00618                       449414.46
3758974.13        13.45620
         449418.33    3758974.13     12.99397                       449422.20
3758974.13        12.62124
         449426.07    3758974.13     12.28220                       449429.94
3758974.13        11.95620
         449433.81    3758974.13     11.64602                       449437.68
3758974.13        11.35177
         449441.55    3758974.13     11.07543                       449445.42
3758974.13        10.81238
         449368.02    3758988.17     21.26148                       449371.89
3758988.17        20.49453
         449375.76    3758988.17     19.91967                       449379.63
3758988.17        19.40200
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        449383.50     3758988.17        18.11041                    449387.37
3758988.17        17.55246
        449391.24     3758988.17        17.02208                    449395.11
3758988.17        16.52419
        449398.98     3758988.17        15.63702                    449402.85
3758988.17        15.19186
        449406.72     3758988.17        14.77813                    449410.59
3758988.17        14.02218
        449414.46     3758988.17        13.62211                    449418.33
3758988.17        13.09691
        449422.20     3758988.17        12.66922                    449426.07
3758988.17        12.34596
        449429.94     3758988.17        11.97954                    449433.81
3758988.17        11.65913
        449437.68     3758988.17        11.36640                    449441.55
3758988.17        11.09110
        449445.42     3758988.17        10.83863                    449368.02
3759002.21        22.17049
        449371.89     3759002.21        21.52616                    449375.76
3759002.21        20.95238
        449379.63     3759002.21        20.40091                    449383.50
3759002.21        18.83645
        449387.37     3759002.21        18.27354                    449391.24
3759002.21        17.00066
        449395.11     3759002.21        16.49102                    449398.98
3759002.21        16.00166
        449402.85     3759002.21        15.15820                    449406.72
3759002.21        14.72473
        449410.59     3759002.21        13.97807                    449414.46
3759002.21        13.58628
        449418.33     3759002.21        13.09422                    449422.20
3759002.21        12.75677
        449426.07     3759002.21        12.35492                    449429.94
3759002.21        11.98844
        449433.81     3759002.21        11.68737                    449437.68
3759002.21        11.38246
        449441.55     3759002.21        11.10420                    449445.42
3759002.21        10.85513
        449368.02     3759016.25        22.24676                    449371.89
3759016.25        21.60528
        449375.76     3759016.25        21.01474                    449379.63
3759016.25        20.45799
        449383.50     3759016.25        19.77062                    449387.37
3759016.25        18.24498
        449391.24     3759016.25        17.68502                    449395.11
3759016.25        16.45706
        449398.98     3759016.25        15.96545                    449402.85
3759016.25        15.48820
        449406.72     3759016.25        14.68020                    449410.59
3759016.25        14.25418
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        449414.46    3759016.25        13.56371                        449418.33
3759016.25        13.19866
        449422.20    3759016.25        12.75543                        449426.07
3759016.25        12.43701
        449429.94    3759016.25        12.05506                        449433.81
3759016.25        11.76096
        449437.68    3759016.25        11.41763                        449441.55
3759016.25        11.12131
        449445.42    3759016.25        10.86571                        449368.02
3759030.29        21.68765
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                              ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   12:13:28

                              PAGE 17
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

    *** THE   1ST-HIGHEST MAX DAILY 1-HR AVERAGE CONCENTRATION   VALUES AVERAGED
OVER   5 YEARS FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                    ** CONC OF NO2   IN MICROGRAMS/M**3
              **

       X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
        449371.89   3759030.29   21.01284   449375.76
3759030.29   20.42097
        449379.63   3759030.29   19.87525   449383.50
3759030.29   18.39819
        449387.37   3759030.29   17.80914   449391.24
3759030.29   16.80667
        449395.11   3759030.29   16.28880   449398.98
3759030.29   15.47985
        449402.85   3759030.29   14.99446   449406.72
3759030.29   14.34597
        449410.59   3759030.29   13.91207   449414.46
```

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3759030.29      13.44103
        449418.33    3759030.29      13.07844                        449422.20
3759030.29      12.74353
        449426.07    3759030.29      12.35706                        449429.94
3759030.29      12.05063
        449433.81    3759030.29      11.70258                        449437.68
3759030.29      11.42016
        449441.55    3759030.29      11.12653                        449445.42
3759030.29      10.86896
        449368.02    3759044.33      21.09154                        449371.89
3759044.33      20.23573
        449375.76    3759044.33      19.46344                        449379.63
3759044.33      18.79338
        449383.50    3759044.33      17.87145                        449387.37
3759044.33      17.26092
        449391.24    3759044.33      16.46980                        449395.11
3759044.33      15.92717
        449398.98    3759044.33      15.24170                        449402.85
3759044.33      14.74960
        449406.72    3759044.33      14.24110                        449410.59
3759044.33      13.81077
        449414.46    3759044.33      13.41712                        449418.33
3759044.33      13.00922
        449422.20    3759044.33      12.67038                        449426.07
3759044.33      12.34892
        449429.94    3759044.33      11.99562                        449433.81
3759044.33      11.70136
        449437.68    3759044.33      11.42015                        449441.55
3759044.33      11.12878
        449445.42    3759044.33      10.86986
```

⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                      ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   12:13:28

                              PAGE 18
 *** MODELOPTs: RegDFAULT CONC   ELEV   URBAN   ADJ_U*

                  *** THE SUMMARY OF MAXIMUM   1ST-HIGHEST MAX DAILY 1-HR
RESULTS AVERAGED OVER   5 YEARS ***

                              ** CONC OF NO2   IN MICROGRAMS/M**3
            **

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

```
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - -

ALL      1ST HIGHEST VALUE IS      22.24676 AT (  449368.02,  3759016.25,
199.00,   199.00,    0.00)  DC
         2ND HIGHEST VALUE IS      22.17049 AT (  449368.02,  3759002.21,
198.53,   198.53,    0.00)  DC
         3RD HIGHEST VALUE IS      21.68765 AT (  449368.02,  3759030.29,
198.53,   198.53,    0.00)  DC
         4TH HIGHEST VALUE IS      21.60528 AT (  449371.89,  3759016.25,
199.00,   199.00,    0.00)  DC
         5TH HIGHEST VALUE IS      21.55934 AT (  449368.02,  3758960.09,
198.00,   198.00,    0.00)  DC
         6TH HIGHEST VALUE IS      21.52616 AT (  449371.89,  3759002.21,
198.53,   198.53,    0.00)  DC
         7TH HIGHEST VALUE IS      21.36812 AT (  449368.02,  3758974.13,
198.00,   198.00,    0.00)  DC
         8TH HIGHEST VALUE IS      21.26148 AT (  449368.02,  3758988.17,
198.06,   198.06,    0.00)  DC
         9TH HIGHEST VALUE IS      21.09154 AT (  449368.02,  3759044.33,
198.07,   198.07,    0.00)  DC
        10TH HIGHEST VALUE IS      21.01474 AT (  449375.76,  3759016.25,
199.00,   199.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172 HRA\NO2\NO2.ISC
                       ***           11/11/21
 *** AERMET - VERSION  16216 ***    ***
                       ***           12:13:28

                              PAGE  19
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

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

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

 A Total of            0 Fatal Error Message(s)
 A Total of            2 Warning Message(s)
 A Total of         1638 Informational Message(s)

 A Total of        43848 Hours Were Processed

 A Total of         1039 Calm Hours Identified

 A Total of          599 Missing Hours Identified (  1.37 Percent)
```

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


     ********   WARNING MESSAGES   ********
  ME W186      130        MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
        0.50
  ME W187      130        MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


     ************************************
     *** AERMOD Finishes Successfully ***
     ************************************

** Lakes Environmental AERMOD MPI
**
*************************************
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 10.0.1
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 11/11/2021
** FILE: C:\LAKES\AERMOD VIEW\14172 HRA\PM10\PM10.ADI
**
*************************************
**
**
*************************************
** AERMOD CONTROL PATHWAY
*************************************
**
**
CO STARTING
   TITLEONE C:\LAKES\AERMOD VIEW\14172 HRA\PM10\PM10.ISC
   MODELOPT DFAULT CONC
   AVERTIME 24 ANNUAL
   URBANOPT 2189641
   POLLUTID PM_10
   RUNORNOT RUN
   ERRORFIL PM10.ERR
CO FINISHED
**
*************************************
** AERMOD SOURCE PATHWAY
*************************************
**
**
SO STARTING
```

```
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** ----------------------------------------------------------------------
** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC I-15 FREEWAY
** PREFIX
** LENGTH OF SIDE = 46.00
** CONFIGURATION = ADJACENT
** EMISSION RATE = 0.193726
** VERTICAL DIMENSION = 6.99
** SZINIT = 3.25
** NODES = 2
** 449288.372, 3758373.924, 188.51, 3.49, 21.40
** 449298.585, 3759554.578, 201.92, 3.49, 21.40
** ----------------------------------------------------------------------
   LOCATION L0000001    VOLUME   449288.571 3758396.923 188.77
   LOCATION L0000002    VOLUME   449288.969 3758442.921 189.29
   LOCATION L0000003    VOLUME   449289.367 3758488.920 189.82
   LOCATION L0000004    VOLUME   449289.765 3758534.918 190.34
   LOCATION L0000005    VOLUME   449290.163 3758580.916 190.86
   LOCATION L0000006    VOLUME   449290.561 3758626.914 191.38
   LOCATION L0000007    VOLUME   449290.958 3758672.913 191.91
   LOCATION L0000008    VOLUME   449291.356 3758718.911 192.43
   LOCATION L0000009    VOLUME   449291.754 3758764.909 192.95
   LOCATION L0000010    VOLUME   449292.152 3758810.908 193.47
   LOCATION L0000011    VOLUME   449292.550 3758856.906 194.00
   LOCATION L0000012    VOLUME   449292.948 3758902.904 194.52
   LOCATION L0000013    VOLUME   449293.346 3758948.902 195.04
   LOCATION L0000014    VOLUME   449293.744 3758994.901 195.56
   LOCATION L0000015    VOLUME   449294.142 3759040.899 196.09
   LOCATION L0000016    VOLUME   449294.540 3759086.897 196.61
   LOCATION L0000017    VOLUME   449294.938 3759132.895 197.13
   LOCATION L0000018    VOLUME   449295.335 3759178.894 197.65
   LOCATION L0000019    VOLUME   449295.733 3759224.892 198.18
   LOCATION L0000020    VOLUME   449296.131 3759270.890 198.70
   LOCATION L0000021    VOLUME   449296.529 3759316.889 199.22
   LOCATION L0000022    VOLUME   449296.927 3759362.887 199.74
   LOCATION L0000023    VOLUME   449297.325 3759408.885 200.27
   LOCATION L0000024    VOLUME   449297.723 3759454.883 200.79
   LOCATION L0000025    VOLUME   449298.121 3759500.882 201.31
   LOCATION L0000026    VOLUME   449298.519 3759546.880 201.83
** END OF LINE VOLUME SOURCE ID = SLINE1
** SOURCE PARAMETERS **
** LINE VOLUME SOURCE ID = SLINE1
   SRCPARAM L0000001    0.007451    3.49    21.40    3.25
   SRCPARAM L0000002    0.007451    3.49    21.40    3.25
   SRCPARAM L0000003    0.007451    3.49    21.40    3.25
   SRCPARAM L0000004    0.007451    3.49    21.40    3.25
   SRCPARAM L0000005    0.007451    3.49    21.40    3.25
```

```
    SRCPARAM L0000006      0.007451      3.49      21.40      3.25
    SRCPARAM L0000007      0.007451      3.49      21.40      3.25
    SRCPARAM L0000008      0.007451      3.49      21.40      3.25
    SRCPARAM L0000009      0.007451      3.49      21.40      3.25
    SRCPARAM L0000010      0.007451      3.49      21.40      3.25
    SRCPARAM L0000011      0.007451      3.49      21.40      3.25
    SRCPARAM L0000012      0.007451      3.49      21.40      3.25
    SRCPARAM L0000013      0.007451      3.49      21.40      3.25
    SRCPARAM L0000014      0.007451      3.49      21.40      3.25
    SRCPARAM L0000015      0.007451      3.49      21.40      3.25
    SRCPARAM L0000016      0.007451      3.49      21.40      3.25
    SRCPARAM L0000017      0.007451      3.49      21.40      3.25
    SRCPARAM L0000018      0.007451      3.49      21.40      3.25
    SRCPARAM L0000019      0.007451      3.49      21.40      3.25
    SRCPARAM L0000020      0.007451      3.49      21.40      3.25
    SRCPARAM L0000021      0.007451      3.49      21.40      3.25
    SRCPARAM L0000022      0.007451      3.49      21.40      3.25
    SRCPARAM L0000023      0.007451      3.49      21.40      3.25
    SRCPARAM L0000024      0.007451      3.49      21.40      3.25
    SRCPARAM L0000025      0.007451      3.49      21.40      3.25
    SRCPARAM L0000026      0.007451      3.49      21.40      3.25
** -------------------------------------------------------------------
    URBANSRC ALL
    SRCGROUP ALL
SO FINISHED
**
***************************************
** AERMOD RECEPTOR PATHWAY
***************************************
**
**
RE STARTING
    INCLUDED PM10.ROU
RE FINISHED
**
***************************************
** AERMOD METEOROLOGY PATHWAY
***************************************
**
**
ME STARTING
    SURFFILE ..\KRAL_V9_ADJU\KRAL_V9.SFC
    PROFFILE ..\KRAL_V9_ADJU\KRAL_V9.PFL
    SURFDATA 3171 2012
    UAIRDATA 3190 2012
    PROFBASE 245.0 METERS
ME FINISHED
**
***************************************
** AERMOD OUTPUT PATHWAY
```

```
*************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** AUTO-GENERATED PLOTFILES
   PLOTFILE   24 ALL 1ST PM10.AD\24H1GALL.PLT 31
   PLOTFILE   ANNUAL ALL PM10.AD\AN00GALL.PLT 32
   SUMMFILE PM10.SUM
OU FINISHED


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

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

 A Total of           0 Fatal Error Message(s)
 A Total of           2 Warning Message(s)
 A Total of           0 Informational Message(s)


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


    ********   WARNING MESSAGES   ********
 ME W186     130        MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187     130        MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


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

♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC                          ***           11/11/21
 *** AERMET - VERSION  16216 ***    ***
                        ***           11:46:36

                              PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  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 URBAN Dispersion Algorithm for the SBL for    26 Source(s),
   for Total of    1 Urban Area(s):
   Urban Population =   2189641.0 ;  Urban Roughness Length =  1.000 m

**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.
         6. Urban Roughness Length of 1.0 Meter Assumed.

**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 Assumes No FLAGPOLE Receptor Heights.

**The User Specified a Pollutant Type of:  PM_10

**Model Calculates  1 Short Term Average(s) of:  24-HR
     and Calculates ANNUAL Averages

 **This Run Includes:     26 Source(s);       1 Source Group(s); and     441
Receptor(s)

                 with:       0 POINT(s), including
                             0 POINTCAP(s) and      0 POINTHOR(s)
                  and:      26 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:  16216

**Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
```

Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
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) =   245.00 ; Decay
Coef. =   0.000   ; Rot. Angle =   0.0
                  Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =   3.6 MB of RAM.

 **Input Runstream File: aermod.inp

 **Output Print File: aermod.out

 **Detailed Error/Message File: PM10.ERR

 **File for Summary of Results: PM10.SUM

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   11:46:36

                              PAGE   2
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                          *** VOLUME SOURCE DATA ***

            NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE
   SOURCE   PART. (GRAMS/SEC)   X   Y   ELEV.   HEIGHT   SY
SZ   SOURCE SCALAR VARY
    ID   CATS.   (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)   BY
 -
- -

```
L0000001        0   0.74510E-02   449288.6 3758396.9   188.8    3.49    21.40
3.25     YES
L0000002        0   0.74510E-02   449289.0 3758442.9   189.3    3.49    21.40
3.25     YES
L0000003        0   0.74510E-02   449289.4 3758488.9   189.8    3.49    21.40
3.25     YES
L0000004        0   0.74510E-02   449289.8 3758534.9   190.3    3.49    21.40
3.25     YES
L0000005        0   0.74510E-02   449290.2 3758580.9   190.9    3.49    21.40
3.25     YES
L0000006        0   0.74510E-02   449290.6 3758626.9   191.4    3.49    21.40
3.25     YES
L0000007        0   0.74510E-02   449291.0 3758672.9   191.9    3.49    21.40
3.25     YES
L0000008        0   0.74510E-02   449291.4 3758718.9   192.4    3.49    21.40
3.25     YES
L0000009        0   0.74510E-02   449291.8 3758764.9   193.0    3.49    21.40
3.25     YES
L0000010        0   0.74510E-02   449292.2 3758810.9   193.5    3.49    21.40
3.25     YES
L0000011        0   0.74510E-02   449292.5 3758856.9   194.0    3.49    21.40
3.25     YES
L0000012        0   0.74510E-02   449292.9 3758902.9   194.5    3.49    21.40
3.25     YES
L0000013        0   0.74510E-02   449293.3 3758948.9   195.0    3.49    21.40
3.25     YES
L0000014        0   0.74510E-02   449293.7 3758994.9   195.6    3.49    21.40
3.25     YES
L0000015        0   0.74510E-02   449294.1 3759040.9   196.1    3.49    21.40
3.25     YES
L0000016        0   0.74510E-02   449294.5 3759086.9   196.6    3.49    21.40
3.25     YES
L0000017        0   0.74510E-02   449294.9 3759132.9   197.1    3.49    21.40
3.25     YES
L0000018        0   0.74510E-02   449295.3 3759178.9   197.7    3.49    21.40
3.25     YES
L0000019        0   0.74510E-02   449295.7 3759224.9   198.2    3.49    21.40
3.25     YES
L0000020        0   0.74510E-02   449296.1 3759270.9   198.7    3.49    21.40
3.25     YES
L0000021        0   0.74510E-02   449296.5 3759316.9   199.2    3.49    21.40
3.25     YES
L0000022        0   0.74510E-02   449296.9 3759362.9   199.7    3.49    21.40
3.25     YES
L0000023        0   0.74510E-02   449297.3 3759408.9   200.3    3.49    21.40
3.25     YES
L0000024        0   0.74510E-02   449297.7 3759454.9   200.8    3.49    21.40
3.25     YES
L0000025        0   0.74510E-02   449298.1 3759500.9   201.3    3.49    21.40
3.25     YES
```

```
 L0000026         0   0.74510E-02  449298.5 3759546.9   201.8     3.49    21.40
3.25     YES
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                             ***   11:46:36

                             PAGE   3
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                  *** SOURCE IDs DEFINING SOURCE GROUPS
***

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

  ALL   L0000001   , L0000002   , L0000003   , L0000004   , L0000005   ,
L0000006   , L0000007   , L0000008   ,

             L0000009   , L0000010   , L0000011   , L0000012   , L0000013   ,
L0000014   , L0000015   , L0000016   ,

             L0000017   , L0000018   , L0000019   , L0000020   , L0000021   ,
L0000022   , L0000023   , L0000024   ,

             L0000025   , L0000026   ,

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                             ***   11:46:36

                             PAGE   4
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                  *** SOURCE IDs DEFINED AS URBAN SOURCES
***

 URBAN ID   URBAN POP   SOURCE IDs
 --------   ---------   ----------

            2189641.   L0000001   , L0000002   , L0000003   , L0000004   ,
L0000005   , L0000006   , L0000007   ,
 L0000008   ,

             L0000009   , L0000010   , L0000011   , L0000012   , L0000013   ,
L0000014   , L0000015   , L0000016   ,

```
            L0000017    , L0000018    , L0000019    , L0000020    , L0000021    ,
   L0000022    , L0000023    , L0000024    ,

            L0000025    , L0000026    ,
 ♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
 HRA\PM10\PM10.ISC                        ***           11/11/21
  *** AERMET - VERSION  16216 ***    ***
                      ***          11:46:36


                      PAGE   5
  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


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


     ( 449368.0, 3758763.5,    192.6,    195.0,      0.0);       ( 449371.9,
 3758763.5,    192.2,    195.0,      0.0);
     ( 449375.8, 3758763.5,    191.8,    195.0,      0.0);       ( 449379.6,
 3758763.5,    191.4,    195.0,      0.0);
     ( 449383.5, 3758763.5,    191.2,    195.0,      0.0);       ( 449387.4,
 3758763.5,    190.9,    195.0,      0.0);
     ( 449391.2, 3758763.5,    190.6,    190.6,      0.0);       ( 449395.1,
 3758763.5,    190.4,    190.4,      0.0);
     ( 449399.0, 3758763.5,    190.1,    190.1,      0.0);       ( 449402.8,
 3758763.5,    189.9,    189.9,      0.0);
     ( 449406.7, 3758763.5,    189.6,    189.6,      0.0);       ( 449410.6,
 3758763.5,    189.4,    189.4,      0.0);
     ( 449414.5, 3758763.5,    189.3,    189.3,      0.0);       ( 449418.3,
 3758763.5,    189.1,    189.1,      0.0);
     ( 449422.2, 3758763.5,    189.0,    189.0,      0.0);       ( 449426.1,
 3758763.5,    188.9,    188.9,      0.0);
     ( 449429.9, 3758763.5,    188.7,    188.7,      0.0);       ( 449433.8,
 3758763.5,    188.6,    188.6,      0.0);
     ( 449437.7, 3758763.5,    188.5,    188.5,      0.0);       ( 449441.5,
 3758763.5,    188.4,    188.4,      0.0);
     ( 449445.4, 3758763.5,    188.3,    188.3,      0.0);       ( 449368.0,
 3758777.6,    192.5,    195.0,      0.0);
     ( 449371.9, 3758777.6,    192.0,    195.0,      0.0);       ( 449375.8,
 3758777.6,    191.5,    195.0,      0.0);
     ( 449379.6, 3758777.6,    191.0,    195.0,      0.0);       ( 449383.5,
 3758777.6,    190.8,    195.0,      0.0);
     ( 449387.4, 3758777.6,    190.5,    195.0,      0.0);       ( 449391.2,
 3758777.6,    190.3,    195.0,      0.0);
     ( 449395.1, 3758777.6,    190.0,    195.0,      0.0);       ( 449399.0,
 3758777.6,    189.7,    195.0,      0.0);
     ( 449402.8, 3758777.6,    189.5,    195.0,      0.0);       ( 449406.7,
 3758777.6,    189.2,    195.0,      0.0);
     ( 449410.6, 3758777.6,    189.0,    189.0,      0.0);       ( 449414.5,
```

3758777.6,   188.9,   188.9,   0.0);
     (449418.3, 3758777.6,   188.8,   188.8,   0.0);   (449422.2,
3758777.6,   188.6,   188.6,   0.0);
     (449426.1, 3758777.6,   188.5,   188.5,   0.0);   (449429.9,
3758777.6,   188.4,   188.4,   0.0);
     (449433.8, 3758777.6,   188.2,   188.2,   0.0);   (449437.7,
3758777.6,   188.1,   188.1,   0.0);
     (449441.5, 3758777.6,   188.0,   188.0,   0.0);   (449445.4,
3758777.6,   188.0,   188.0,   0.0);
     (449368.0, 3758791.6,   192.6,   192.6,   0.0);   (449371.9,
3758791.6,   192.3,   195.0,   0.0);
     (449375.8, 3758791.6,   191.9,   195.0,   0.0);   (449379.6,
3758791.6,   191.5,   195.0,   0.0);
     (449383.5, 3758791.6,   191.2,   195.0,   0.0);   (449387.4,
3758791.6,   191.0,   191.0,   0.0);
     (449391.2, 3758791.6,   190.7,   190.7,   0.0);   (449395.1,
3758791.6,   190.5,   190.5,   0.0);
     (449399.0, 3758791.6,   190.2,   190.2,   0.0);   (449402.8,
3758791.6,   190.0,   190.0,   0.0);
     (449406.7, 3758791.6,   189.7,   189.7,   0.0);   (449410.6,
3758791.6,   189.5,   189.5,   0.0);
     (449414.5, 3758791.6,   189.3,   189.3,   0.0);   (449418.3,
3758791.6,   189.2,   189.2,   0.0);
     (449422.2, 3758791.6,   189.1,   189.1,   0.0);   (449426.1,
3758791.6,   189.0,   189.0,   0.0);
     (449429.9, 3758791.6,   188.8,   188.8,   0.0);   (449433.8,
3758791.6,   188.7,   188.7,   0.0);
     (449437.7, 3758791.6,   188.6,   188.6,   0.0);   (449441.5,
3758791.6,   188.5,   188.5,   0.0);
     (449445.4, 3758791.6,   188.4,   188.4,   0.0);   (449368.0,
3758805.6,   192.8,   192.8,   0.0);
     (449371.9, 3758805.6,   192.5,   192.5,   0.0);   (449375.8,
3758805.6,   192.2,   192.2,   0.0);
     (449379.6, 3758805.6,   192.0,   192.0,   0.0);   (449383.5,
3758805.6,   191.7,   191.7,   0.0);
     (449387.4, 3758805.6,   191.5,   191.5,   0.0);   (449391.2,
3758805.6,   191.2,   191.2,   0.0);
     (449395.1, 3758805.6,   190.9,   190.9,   0.0);   (449399.0,
3758805.6,   190.7,   190.7,   0.0);
     (449402.8, 3758805.6,   190.4,   190.4,   0.0);   (449406.7,
3758805.6,   190.2,   190.2,   0.0);
     (449410.6, 3758805.6,   189.9,   189.9,   0.0);   (449414.5,
3758805.6,   189.8,   189.8,   0.0);
     (449418.3, 3758805.6,   189.7,   189.7,   0.0);   (449422.2,
3758805.6,   189.6,   189.6,   0.0);
     (449426.1, 3758805.6,   189.4,   189.4,   0.0);   (449429.9,
3758805.6,   189.3,   189.3,   0.0);
     (449433.8, 3758805.6,   189.2,   189.2,   0.0);   (449437.7,
3758805.6,   189.0,   189.0,   0.0);
     (449441.5, 3758805.6,   188.9,   188.9,   0.0);   (449445.4,

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3758805.6,      188.8,      188.8,        0.0);
    ( 449368.0, 3758819.7,      192.8,      192.8,        0.0);              ( 449371.9,
3758819.7,      192.5,      192.5,        0.0);
    ( 449375.8, 3758819.7,      192.2,      192.2,        0.0);              ( 449379.6,
3758819.7,      192.0,      192.0,        0.0);
    ( 449383.5, 3758819.7,      191.7,      191.7,        0.0);              ( 449387.4,
3758819.7,      191.5,      191.5,        0.0);
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   11:46:36

                          PAGE   6
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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

```
    ( 449391.2, 3758819.7,      191.2,      191.2,        0.0);              ( 449395.1,
3758819.7,      191.0,      191.0,        0.0);
    ( 449399.0, 3758819.7,      190.7,      190.7,        0.0);              ( 449402.8,
3758819.7,      190.4,      190.4,        0.0);
    ( 449406.7, 3758819.7,      190.2,      190.2,        0.0);              ( 449410.6,
3758819.7,      190.0,      190.0,        0.0);
    ( 449414.5, 3758819.7,      189.8,      189.8,        0.0);              ( 449418.3,
3758819.7,      189.7,      189.7,        0.0);
    ( 449422.2, 3758819.7,      189.6,      189.6,        0.0);              ( 449426.1,
3758819.7,      189.5,      189.5,        0.0);
    ( 449429.9, 3758819.7,      189.3,      189.3,        0.0);              ( 449433.8,
3758819.7,      189.2,      189.2,        0.0);
    ( 449437.7, 3758819.7,      189.1,      189.1,        0.0);              ( 449441.5,
3758819.7,      188.9,      188.9,        0.0);
    ( 449445.4, 3758819.7,      188.8,      188.8,        0.0);              ( 449368.0,
3758833.7,      192.8,      192.8,        0.0);
    ( 449371.9, 3758833.7,      192.5,      192.5,        0.0);              ( 449375.8,
3758833.7,      192.2,      192.2,        0.0);
    ( 449379.6, 3758833.7,      192.0,      192.0,        0.0);              ( 449383.5,
3758833.7,      191.7,      191.7,        0.0);
    ( 449387.4, 3758833.7,      191.5,      191.5,        0.0);              ( 449391.2,
3758833.7,      191.2,      191.2,        0.0);
    ( 449395.1, 3758833.7,      191.0,      191.0,        0.0);              ( 449399.0,
3758833.7,      190.7,      190.7,        0.0);
    ( 449402.8, 3758833.7,      190.4,      190.4,        0.0);              ( 449406.7,
3758833.7,      190.2,      190.2,        0.0);
    ( 449410.6, 3758833.7,      190.0,      190.0,        0.0);              ( 449414.5,
3758833.7,      189.8,      189.8,        0.0);
    ( 449418.3, 3758833.7,      189.7,      189.7,        0.0);              ( 449422.2,
3758833.7,      189.6,      189.6,        0.0);
    ( 449426.1, 3758833.7,      189.5,      189.5,        0.0);              ( 449429.9,
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3758833.7,   189.3,   189.3,   0.0);
      (449433.8, 3758833.7,   189.2,   189.2,   0.0);   (449437.7,
3758833.7,   189.1,   189.1,   0.0);
      (449441.5, 3758833.7,   188.9,   188.9,   0.0);   (449445.4,
3758833.7,   188.8,   188.8,   0.0);
      (449368.0, 3758847.8,   193.4,   193.4,   0.0);   (449371.9,
3758847.8,   193.2,   193.2,   0.0);
      (449375.8, 3758847.8,   193.0,   193.0,   0.0);   (449379.6,
3758847.8,   192.8,   192.8,   0.0);
      (449383.5, 3758847.8,   192.5,   192.5,   0.0);   (449387.4,
3758847.8,   192.2,   192.2,   0.0);
      (449391.2, 3758847.8,   192.0,   192.0,   0.0);   (449395.1,
3758847.8,   191.7,   191.7,   0.0);
      (449399.0, 3758847.8,   191.5,   191.5,   0.0);   (449402.8,
3758847.8,   191.2,   191.2,   0.0);
      (449406.7, 3758847.8,   191.0,   191.0,   0.0);   (449410.6,
3758847.8,   190.7,   190.7,   0.0);
      (449414.5, 3758847.8,   190.5,   190.5,   0.0);   (449418.3,
3758847.8,   190.4,   190.4,   0.0);
      (449422.2, 3758847.8,   190.2,   190.2,   0.0);   (449426.1,
3758847.8,   190.0,   190.0,   0.0);
      (449429.9, 3758847.8,   189.8,   189.8,   0.0);   (449433.8,
3758847.8,   189.6,   189.6,   0.0);
      (449437.7, 3758847.8,   189.5,   189.5,   0.0);   (449441.5,
3758847.8,   189.3,   189.3,   0.0);
      (449445.4, 3758847.8,   189.2,   189.2,   0.0);   (449368.0,
3758861.8,   194.1,   194.1,   0.0);
      (449371.9, 3758861.8,   194.0,   194.0,   0.0);   (449375.8,
3758861.8,   193.8,   193.8,   0.0);
      (449379.6, 3758861.8,   193.7,   193.7,   0.0);   (449383.5,
3758861.8,   193.4,   193.4,   0.0);
      (449387.4, 3758861.8,   193.2,   193.2,   0.0);   (449391.2,
3758861.8,   192.9,   192.9,   0.0);
      (449395.1, 3758861.8,   192.7,   192.7,   0.0);   (449399.0,
3758861.8,   192.4,   192.4,   0.0);
      (449402.8, 3758861.8,   192.1,   192.1,   0.0);   (449406.7,
3758861.8,   191.9,   191.9,   0.0);
      (449410.6, 3758861.8,   191.6,   191.6,   0.0);   (449414.5,
3758861.8,   191.4,   191.4,   0.0);
      (449418.3, 3758861.8,   191.2,   191.2,   0.0);   (449422.2,
3758861.8,   190.9,   190.9,   0.0);
      (449426.1, 3758861.8,   190.7,   190.7,   0.0);   (449429.9,
3758861.8,   190.4,   190.4,   0.0);
      (449433.8, 3758861.8,   190.2,   190.2,   0.0);   (449437.7,
3758861.8,   190.0,   190.0,   0.0);
      (449441.5, 3758861.8,   189.8,   189.8,   0.0);   (449445.4,
3758861.8,   189.7,   189.7,   0.0);
      (449368.0, 3758875.8,   194.7,   194.7,   0.0);   (449371.9,
3758875.8,   194.6,   194.6,   0.0);
      (449375.8, 3758875.8,   194.4,   194.4,   0.0);   (449379.6,

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3758875.8,     194.3,     194.3,     0.0);
    ( 449383.5, 3758875.8,     194.1,     194.1,     0.0);     ( 449387.4,
3758875.8,     193.8,     193.8,     0.0);
    ( 449391.2, 3758875.8,     193.5,     193.5,     0.0);     ( 449395.1,
3758875.8,     193.3,     193.3,     0.0);
    ( 449399.0, 3758875.8,     193.0,     193.0,     0.0);     ( 449402.8,
3758875.8,     192.8,     192.8,     0.0);
    ( 449406.7, 3758875.8,     192.5,     192.5,     0.0);     ( 449410.6,
3758875.8,     192.2,     192.2,     0.0);
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   11:46:36

                        PAGE   7
 *** MODELOPTs: RegDFAULT CONC   ELEV   URBAN   ADJ_U*

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

```
    ( 449414.5, 3758875.8,     192.0,     192.0,     0.0);     ( 449418.3,
3758875.8,     191.7,     191.7,     0.0);
    ( 449422.2, 3758875.8,     191.5,     191.5,     0.0);     ( 449426.1,
3758875.8,     191.2,     191.2,     0.0);
    ( 449429.9, 3758875.8,     191.0,     191.0,     0.0);     ( 449433.8,
3758875.8,     190.7,     190.7,     0.0);
    ( 449437.7, 3758875.8,     190.4,     190.4,     0.0);     ( 449441.5,
3758875.8,     190.2,     190.2,     0.0);
    ( 449445.4, 3758875.8,     190.1,     190.1,     0.0);     ( 449368.0,
3758889.9,     195.2,     195.2,     0.0);
    ( 449371.9, 3758889.9,     195.0,     195.0,     0.0);     ( 449375.8,
3758889.9,     194.9,     194.9,     0.0);
    ( 449379.6, 3758889.9,     194.8,     194.8,     0.0);     ( 449383.5,
3758889.9,     194.5,     194.5,     0.0);
    ( 449387.4, 3758889.9,     194.3,     194.3,     0.0);     ( 449391.2,
3758889.9,     194.0,     194.0,     0.0);
    ( 449395.1, 3758889.9,     193.7,     193.7,     0.0);     ( 449399.0,
3758889.9,     193.5,     193.5,     0.0);
    ( 449402.8, 3758889.9,     193.2,     193.2,     0.0);     ( 449406.7,
3758889.9,     193.0,     193.0,     0.0);
    ( 449410.6, 3758889.9,     192.7,     192.7,     0.0);     ( 449414.5,
3758889.9,     192.5,     192.5,     0.0);
    ( 449418.3, 3758889.9,     192.2,     192.2,     0.0);     ( 449422.2,
3758889.9,     191.9,     191.9,     0.0);
    ( 449426.1, 3758889.9,     191.7,     191.7,     0.0);     ( 449429.9,
3758889.9,     191.4,     191.4,     0.0);
    ( 449433.8, 3758889.9,     191.2,     191.2,     0.0);     ( 449437.7,
3758889.9,     190.9,     190.9,     0.0);
    ( 449441.5, 3758889.9,     190.7,     190.7,     0.0);     ( 449445.4,
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3758889.9,   190.6,   190.6,   0.0);
    (449368.0, 3758903.9,   195.8,   195.8,   0.0);   (449371.9,
3758903.9,   195.7,   195.7,   0.0);
    (449375.8, 3758903.9,   195.6,   195.6,   0.0);   (449379.6,
3758903.9,   195.5,   195.5,   0.0);
    (449383.5, 3758903.9,   195.2,   195.2,   0.0);   (449387.4,
3758903.9,   195.0,   195.0,   0.0);
    (449391.2, 3758903.9,   194.7,   194.7,   0.0);   (449395.1,
3758903.9,   194.5,   194.5,   0.0);
    (449399.0, 3758903.9,   194.2,   194.2,   0.0);   (449402.8,
3758903.9,   194.0,   194.0,   0.0);
    (449406.7, 3758903.9,   193.7,   193.7,   0.0);   (449410.6,
3758903.9,   193.4,   193.4,   0.0);
    (449414.5, 3758903.9,   193.1,   193.1,   0.0);   (449418.3,
3758903.9,   192.8,   192.8,   0.0);
    (449422.2, 3758903.9,   192.6,   192.6,   0.0);   (449426.1,
3758903.9,   192.3,   192.3,   0.0);
    (449429.9, 3758903.9,   192.0,   192.0,   0.0);   (449433.8,
3758903.9,   191.7,   195.0,   0.0);
    (449437.7, 3758903.9,   191.4,   195.0,   0.0);   (449441.5,
3758903.9,   191.2,   191.2,   0.0);
    (449445.4, 3758903.9,   191.1,   191.1,   0.0);   (449368.0,
3758918.0,   196.6,   196.6,   0.0);
    (449371.9, 3758918.0,   196.5,   196.5,   0.0);   (449375.8,
3758918.0,   196.5,   196.5,   0.0);
    (449379.6, 3758918.0,   196.4,   196.4,   0.0);   (449383.5,
3758918.0,   196.2,   196.2,   0.0);
    (449387.4, 3758918.0,   195.9,   195.9,   0.0);   (449391.2,
3758918.0,   195.7,   195.7,   0.0);
    (449395.1, 3758918.0,   195.4,   195.4,   0.0);   (449399.0,
3758918.0,   195.1,   195.1,   0.0);
    (449402.8, 3758918.0,   194.9,   194.9,   0.0);   (449406.7,
3758918.0,   194.6,   194.6,   0.0);
    (449410.6, 3758918.0,   194.3,   194.3,   0.0);   (449414.5,
3758918.0,   194.0,   195.0,   0.0);
    (449418.3, 3758918.0,   193.6,   195.0,   0.0);   (449422.2,
3758918.0,   193.3,   195.0,   0.0);
    (449426.1, 3758918.0,   192.9,   195.0,   0.0);   (449429.9,
3758918.0,   192.6,   195.0,   0.0);
    (449433.8, 3758918.0,   192.2,   195.0,   0.0);   (449437.7,
3758918.0,   191.9,   195.0,   0.0);
    (449441.5, 3758918.0,   191.7,   195.0,   0.0);   (449445.4,
3758918.0,   191.5,   191.5,   0.0);
    (449368.0, 3758932.0,   197.2,   197.2,   0.0);   (449371.9,
3758932.0,   197.2,   197.2,   0.0);
    (449375.8, 3758932.0,   197.2,   197.2,   0.0);   (449379.6,
3758932.0,   197.2,   197.2,   0.0);
    (449383.5, 3758932.0,   196.9,   196.9,   0.0);   (449387.4,
3758932.0,   196.7,   196.7,   0.0);
    (449391.2, 3758932.0,   196.4,   196.4,   0.0);   (449395.1,

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3758932.0,      196.2,      196.2,        0.0);
    ( 449399.0, 3758932.0,      195.9,      195.9,        0.0);          ( 449402.8,
3758932.0,      195.6,      195.6,        0.0);
    ( 449406.7, 3758932.0,      195.4,      195.4,        0.0);          ( 449410.6,
3758932.0,      195.1,      195.1,        0.0);
    ( 449414.5, 3758932.0,      194.7,      194.7,        0.0);          ( 449418.3,
3758932.0,      194.3,      194.3,        0.0);
    ( 449422.2, 3758932.0,      193.9,      193.9,        0.0);          ( 449426.1,
3758932.0,      193.5,      193.5,        0.0);
    ( 449429.9, 3758932.0,      193.1,      193.1,        0.0);          ( 449433.8,
3758932.0,      192.8,      192.8,        0.0);
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC                              ***       11/11/21
 *** AERMET - VERSION  16216 ***   ***
                       ***       11:46:36

                         PAGE   8
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


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


    ( 449437.7, 3758932.0,      192.4,      192.4,        0.0);          ( 449441.5,
3758932.0,      192.1,      192.1,        0.0);
    ( 449445.4, 3758932.0,      192.0,      192.0,        0.0);          ( 449368.0,
3758946.0,      197.7,      197.7,        0.0);
    ( 449371.9, 3758946.0,      197.7,      197.7,        0.0);          ( 449375.8,
3758946.0,      197.7,      197.7,        0.0);
    ( 449379.6, 3758946.0,      197.7,      197.7,        0.0);          ( 449383.5,
3758946.0,      197.4,      197.4,        0.0);
    ( 449387.4, 3758946.0,      197.1,      197.1,        0.0);          ( 449391.2,
3758946.0,      196.9,      196.9,        0.0);
    ( 449395.1, 3758946.0,      196.6,      196.6,        0.0);          ( 449399.0,
3758946.0,      196.4,      196.4,        0.0);
    ( 449402.8, 3758946.0,      196.1,      196.1,        0.0);          ( 449406.7,
3758946.0,      195.8,      195.8,        0.0);
    ( 449410.6, 3758946.0,      195.5,      195.5,        0.0);          ( 449414.5,
3758946.0,      195.2,      195.2,        0.0);
    ( 449418.3, 3758946.0,      194.8,      194.8,        0.0);          ( 449422.2,
3758946.0,      194.4,      194.4,        0.0);
    ( 449426.1, 3758946.0,      194.0,      196.0,        0.0);          ( 449429.9,
3758946.0,      193.6,      196.0,        0.0);
    ( 449433.8, 3758946.0,      193.2,      196.0,        0.0);          ( 449437.7,
3758946.0,      192.8,      196.0,        0.0);
    ( 449441.5, 3758946.0,      192.5,      196.0,        0.0);          ( 449445.4,
3758946.0,      192.3,      192.3,        0.0);
    ( 449368.0, 3758960.1,      198.0,      198.0,        0.0);          ( 449371.9,
3758960.1,      198.0,      198.0,        0.0);
    ( 449375.8, 3758960.1,      198.0,      198.0,        0.0);          ( 449379.6,
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3758960.1,   198.0,   198.0,   0.0);
(449383.5, 3758960.1,   197.8,   197.8,   0.0);   (449387.4,
3758960.1,   197.5,   197.5,   0.0);
(449391.2, 3758960.1,   197.3,   197.3,   0.0);   (449395.1,
3758960.1,   197.0,   197.0,   0.0);
(449399.0, 3758960.1,   196.8,   196.8,   0.0);   (449402.8,
3758960.1,   196.5,   196.5,   0.0);
(449406.7, 3758960.1,   196.3,   196.3,   0.0);   (449410.6,
3758960.1,   196.0,   196.0,   0.0);
(449414.5, 3758960.1,   195.6,   195.6,   0.0);   (449418.3,
3758960.1,   195.2,   195.2,   0.0);
(449422.2, 3758960.1,   194.9,   194.9,   0.0);   (449426.1,
3758960.1,   194.5,   194.5,   0.0);
(449429.9, 3758960.1,   194.1,   194.1,   0.0);   (449433.8,
3758960.1,   193.7,   193.7,   0.0);
(449437.7, 3758960.1,   193.3,   193.3,   0.0);   (449441.5,
3758960.1,   193.0,   193.0,   0.0);
(449445.4, 3758960.1,   192.7,   192.7,   0.0);   (449368.0,
3758974.1,   198.0,   198.0,   0.0);
(449371.9, 3758974.1,   198.0,   198.0,   0.0);   (449375.8,
3758974.1,   198.0,   198.0,   0.0);
(449379.6, 3758974.1,   198.0,   198.0,   0.0);   (449383.5,
3758974.1,   197.8,   197.8,   0.0);
(449387.4, 3758974.1,   197.6,   197.6,   0.0);   (449391.2,
3758974.1,   197.5,   197.5,   0.0);
(449395.1, 3758974.1,   197.3,   197.3,   0.0);   (449399.0,
3758974.1,   197.1,   197.1,   0.0);
(449402.8, 3758974.1,   196.9,   196.9,   0.0);   (449406.7,
3758974.1,   196.7,   196.7,   0.0);
(449410.6, 3758974.1,   196.5,   196.5,   0.0);   (449414.5,
3758974.1,   196.1,   196.1,   0.0);
(449418.3, 3758974.1,   195.7,   195.7,   0.0);   (449422.2,
3758974.1,   195.3,   195.3,   0.0);
(449426.1, 3758974.1,   194.9,   197.0,   0.0);   (449429.9,
3758974.1,   194.5,   197.0,   0.0);
(449433.8, 3758974.1,   194.2,   197.0,   0.0);   (449437.7,
3758974.1,   193.8,   197.0,   0.0);
(449441.5, 3758974.1,   193.4,   197.0,   0.0);   (449445.4,
3758974.1,   193.1,   197.0,   0.0);
(449368.0, 3758988.2,   198.1,   198.1,   0.0);   (449371.9,
3758988.2,   198.1,   198.1,   0.0);
(449375.8, 3758988.2,   198.1,   198.1,   0.0);   (449379.6,
3758988.2,   198.1,   198.1,   0.0);
(449383.5, 3758988.2,   197.9,   197.9,   0.0);   (449387.4,
3758988.2,   197.8,   197.8,   0.0);
(449391.2, 3758988.2,   197.6,   197.6,   0.0);   (449395.1,
3758988.2,   197.5,   197.5,   0.0);
(449399.0, 3758988.2,   197.4,   197.4,   0.0);   (449402.8,
3758988.2,   197.2,   197.2,   0.0);
(449406.7, 3758988.2,   197.1,   197.1,   0.0);   (449410.6,

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    ( 449414.5, 3758988.2,     196.5,     196.5,        0.0);              ( 449418.3,
3758988.2,      196.1,     196.1,        0.0);
    ( 449422.2, 3758988.2,     195.8,     195.8,        0.0);              ( 449426.1,
3758988.2,      195.4,     195.4,        0.0);
    ( 449429.9, 3758988.2,     195.0,     195.0,        0.0);              ( 449433.8,
3758988.2,      194.6,     194.6,        0.0);
    ( 449437.7, 3758988.2,     194.2,     194.2,        0.0);              ( 449441.5,
3758988.2,      193.9,     193.9,        0.0);
    ( 449445.4, 3758988.2,     193.5,     193.5,        0.0);              ( 449368.0,
3759002.2,      198.5,     198.5,        0.0);
    ( 449371.9, 3759002.2,     198.5,     198.5,        0.0);              ( 449375.8,
3759002.2,      198.5,     198.5,        0.0);
```
⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   11:46:36

                            PAGE   9
 *** MODELOPTs: RegDFAULT CONC   ELEV   URBAN   ADJ_U*

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

```
    ( 449379.6, 3759002.2,     198.5,     198.5,        0.0);              ( 449383.5,
3759002.2,      198.3,     198.3,        0.0);
    ( 449387.4, 3759002.2,     198.1,     198.1,        0.0);              ( 449391.2,
3759002.2,      197.9,     197.9,        0.0);
    ( 449395.1, 3759002.2,     197.7,     197.7,        0.0);              ( 449399.0,
3759002.2,      197.5,     197.5,        0.0);
    ( 449402.8, 3759002.2,     197.3,     197.3,        0.0);              ( 449406.7,
3759002.2,      197.1,     197.1,        0.0);
    ( 449410.6, 3759002.2,     196.9,     196.9,        0.0);              ( 449414.5,
3759002.2,      196.6,     196.6,        0.0);
    ( 449418.3, 3759002.2,     196.3,     196.3,        0.0);              ( 449422.2,
3759002.2,      196.0,     196.0,        0.0);
    ( 449426.1, 3759002.2,     195.6,     195.6,        0.0);              ( 449429.9,
3759002.2,      195.3,     195.3,        0.0);
    ( 449433.8, 3759002.2,     195.0,     195.0,        0.0);              ( 449437.7,
3759002.2,      194.7,     194.7,        0.0);
    ( 449441.5, 3759002.2,     194.3,     194.3,        0.0);              ( 449445.4,
3759002.2,      193.9,     193.9,        0.0);
    ( 449368.0, 3759016.2,     199.0,     199.0,        0.0);              ( 449371.9,
3759016.2,      199.0,     199.0,        0.0);
    ( 449375.8, 3759016.2,     199.0,     199.0,        0.0);              ( 449379.6,
3759016.2,      199.0,     199.0,        0.0);
    ( 449383.5, 3759016.2,     198.7,     198.7,        0.0);              ( 449387.4,
3759016.2,      198.5,     198.5,        0.0);
    ( 449391.2, 3759016.2,     198.2,     198.2,        0.0);              ( 449395.1,
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3759016.2,   198.0,   198.0,   0.0);
    (449399.0, 3759016.2,   197.7,   197.7,   0.0);   (449402.8,
3759016.2,   197.4,   197.4,   0.0);
    (449406.7, 3759016.2,   197.2,   197.2,   0.0);   (449410.6,
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    (449414.5, 3759016.2,   196.7,   196.7,   0.0);   (449418.3,
3759016.2,   196.4,   196.4,   0.0);
    (449422.2, 3759016.2,   196.2,   196.2,   0.0);   (449426.1,
3759016.2,   195.9,   195.9,   0.0);
    (449429.9, 3759016.2,   195.6,   195.6,   0.0);   (449433.8,
3759016.2,   195.4,   195.4,   0.0);
    (449437.7, 3759016.2,   195.1,   195.1,   0.0);   (449441.5,
3759016.2,   194.8,   195.0,   0.0);
    (449445.4, 3759016.2,   194.4,   195.0,   0.0);   (449368.0,
3759030.3,   198.5,   198.5,   0.0);
    (449371.9, 3759030.3,   198.5,   198.5,   0.0);   (449375.8,
3759030.3,   198.5,   198.5,   0.0);
    (449379.6, 3759030.3,   198.5,   198.5,   0.0);   (449383.5,
3759030.3,   198.3,   198.3,   0.0);
    (449387.4, 3759030.3,   198.0,   198.0,   0.0);   (449391.2,
3759030.3,   197.8,   197.8,   0.0);
    (449395.1, 3759030.3,   197.5,   197.5,   0.0);   (449399.0,
3759030.3,   197.2,   197.2,   0.0);
    (449402.8, 3759030.3,   197.0,   197.0,   0.0);   (449406.7,
3759030.3,   196.7,   196.7,   0.0);
    (449410.6, 3759030.3,   196.5,   196.5,   0.0);   (449414.5,
3759030.3,   196.3,   196.3,   0.0);
    (449418.3, 3759030.3,   196.1,   196.1,   0.0);   (449422.2,
3759030.3,   195.9,   195.9,   0.0);
    (449426.1, 3759030.3,   195.7,   195.7,   0.0);   (449429.9,
3759030.3,   195.5,   195.5,   0.0);
    (449433.8, 3759030.3,   195.3,   195.3,   0.0);   (449437.7,
3759030.3,   195.1,   195.1,   0.0);
    (449441.5, 3759030.3,   194.8,   194.8,   0.0);   (449445.4,
3759030.3,   194.4,   194.4,   0.0);
    (449368.0, 3759044.3,   198.1,   198.1,   0.0);   (449371.9,
3759044.3,   198.1,   198.1,   0.0);
    (449375.8, 3759044.3,   198.1,   198.1,   0.0);   (449379.6,
3759044.3,   198.1,   198.1,   0.0);
    (449383.5, 3759044.3,   197.8,   197.8,   0.0);   (449387.4,
3759044.3,   197.5,   197.5,   0.0);
    (449391.2, 3759044.3,   197.3,   197.3,   0.0);   (449395.1,
3759044.3,   197.0,   197.0,   0.0);
    (449399.0, 3759044.3,   196.8,   196.8,   0.0);   (449402.8,
3759044.3,   196.5,   196.5,   0.0);
    (449406.7, 3759044.3,   196.2,   196.2,   0.0);   (449410.6,
3759044.3,   196.0,   196.0,   0.0);
    (449414.5, 3759044.3,   195.9,   195.9,   0.0);   (449418.3,
3759044.3,   195.8,   195.8,   0.0);
    (449422.2, 3759044.3,   195.6,   195.6,   0.0);   (449426.1,

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3759044.3,      195.5,     195.5,       0.0);
   ( 449429.9, 3759044.3,     195.3,     195.3,       0.0);          ( 449433.8,
3759044.3,      195.2,     195.2,       0.0);
   ( 449437.7, 3759044.3,     195.1,     195.1,       0.0);          ( 449441.5,
3759044.3,      194.8,     194.8,       0.0);
   ( 449445.4, 3759044.3,     194.4,     194.4,       0.0);
```

                              PAGE 10
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN   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 URBAN ADJ_U*

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

   Surface file: ..\KRAL_V9_ADJU\KRAL_V9.SFC
                 Met Version: 16216
   Profile file: ..\KRAL_V9_ADJU\KRAL_V9.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:   3171   Upper air station no.:   3190
                 Name: UNKNOWN   Name: UNKNOWN

                 Year: 2012   Year: 2012

 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
- -
- - - - - - - - - - - - - - - - - - - -
 12 01 01   1 01 -25.6 0.266 -9.000 -9.000 -999. 330.   77.9 0.15   2.40
1.00   2.93   55.   10.1 288.1   2.0
 12 01 01   1 02 -26.8 0.277 -9.000 -9.000 -999. 351.   84.7 0.15   2.40
1.00   3.05   55.   10.1 287.0   2.0
 12 01 01   1 03 -21.5 0.221 -9.000 -9.000 -999. 250.   53.5 0.15   2.40
1.00   2.45   74.   10.1 284.2   2.0
 12 01 01   1 04 -22.0 0.227 -9.000 -9.000 -999. 260.   56.8 0.15   2.40
1.00   2.52   77.   10.1 285.9   2.0
 12 01 01   1 05 -20.0 0.206 -9.000 -9.000 -999. 225.   46.8 0.15   2.40
1.00   2.30   80.   10.1 285.4   2.0
 12 01 01   1 06 -14.4 0.171 -9.000 -9.000 -999. 170.   32.1 0.15   2.40
1.00   1.93   79.   10.1 287.0   2.0
 12 01 01   1 07 -14.9 0.174 -9.000 -9.000 -999. 174.   33.2 0.15   2.40
1.00   1.96   77.   10.1 284.2   2.0
 12 01 01   1 08 -11.9 0.169 -9.000 -9.000 -999. 167.   36.1 0.15   2.40
0.53   1.89   77.   10.1 288.1   2.0
 12 01 01   1 09   40.4 0.234 0.359 0.006   40. 272.   -28.1 0.15   2.40
0.31   2.10   81.   10.1 289.2   2.0
 12 01 01   1 10 112.6 0.246 0.742 0.005 129. 293.   -11.8 0.15   2.40
0.24   1.99 101.   10.1 296.4   2.0
 12 01 01   1 11 161.0 0.402 1.188 0.005 369. 611.   -35.6 0.15   2.40
0.21   3.68   78.   10.1 298.8   2.0
 12 01 01   1 12 184.7 0.337 1.516 0.005 668. 473.   -18.4 0.15   2.40
0.20   2.89   68.   10.1 300.4   2.0
 12 01 01   1 13 183.9 0.310 1.809 0.005 1139. 414.   -14.2 0.15   2.40

```
 0.20    2.57   64.    10.1  302.5    2.0
  12 01 01   1 14  156.6  0.374  1.852  0.005 1434.  549.    -29.5  0.15   2.40
 0.22    3.37   63.    10.1  303.1    2.0
  12 01 01   1 15  104.3  0.382  1.658  0.005 1546.  567.    -47.2  0.15   2.40
 0.25    3.59   62.    10.1  302.5    2.0
  12 01 01   1 16   31.8  0.374  1.123  0.005 1573.  550.   -145.8  0.15   2.40
 0.34    3.76   69.    10.1  300.9    2.0
  12 01 01   1 17  -23.3  0.276 -9.000 -9.000 -999.  354.     84.0  0.15   2.40
 0.62    3.03   59.    10.1  297.5    2.0
  12 01 01   1 18  -21.5  0.229 -9.000 -9.000 -999.  264.     57.8  0.15   2.40
 1.00    2.54   54.    10.1  295.4    2.0
  12 01 01   1 19  -19.3  0.204 -9.000 -9.000 -999.  221.     45.6  0.15   2.40
 1.00    2.27   79.    10.1  292.0    2.0
  12 01 01   1 20  -20.7  0.218 -9.000 -9.000 -999.  244.     52.2  0.15   2.40
 1.00    2.42   79.    10.1  292.5    2.0
  12 01 01   1 21  -19.7  0.206 -9.000 -9.000 -999.  225.     46.9  0.15   2.40
 1.00    2.30   95.    10.1  290.9    2.0
  12 01 01   1 22  -17.6  0.190 -9.000 -9.000 -999.  199.     39.8  0.15   2.40
 1.00    2.13   78.    10.1  290.4    2.0
  12 01 01   1 23  -20.3  0.211 -9.000 -9.000 -999.  233.     49.0  0.15   2.40
 1.00    2.35   52.    10.1  289.2    2.0
  12 01 01   1 24  -16.4  0.183 -9.000 -9.000 -999.  189.     37.0  0.15   2.40
 1.00    2.06   75.    10.1  288.8    2.0


  First hour of profile data
  YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
  12 01 01 01   10.1 1   55.    2.93   288.2   99.0  -99.00  -99.00


  F indicates top of profile (=1) or below (=0)
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC                       ***          11/11/21
 *** AERMET - VERSION  16216 ***   ***
                       ***          11:46:36
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                              PAGE 12
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                              *** DISCRETE CARTESIAN RECEPTOR POINTS

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***

                                             ** CONC OF PM_10    IN MICROGRAMS/M**3
                        **

        X-COORD (M)    Y-COORD (M)        CONC                        X-COORD (M)
Y-COORD (M)        CONC
  - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -
         449368.02    3758763.53        4.80220                        449371.89
3758763.53       4.59459
         449375.76    3758763.53        4.39916                        449379.63
3758763.53       4.21727
         449383.50    3758763.53        4.05619                        449387.37
3758763.53       3.90684
         449391.24    3758763.53        3.76682                        449395.11
3758763.53       3.63587
         449398.98    3758763.53        3.51309                        449402.85
3758763.53       3.39778
         449406.72    3758763.53        3.28975                        449410.59
3758763.53       3.18932
         449414.46    3758763.53        3.09856                        449418.33
3758763.53       3.01255
         449422.20    3758763.53        2.93096                        449426.07
3758763.53       2.85343
         449429.94    3758763.53        2.77966                        449433.81
3758763.53       2.70939
         449437.68    3758763.53        2.64236                        449441.55
3758763.53       2.58006
         449445.42    3758763.53        2.52111                        449368.02
3758777.57       4.80431
         449371.89    3758777.57        4.58733                        449375.76
3758777.57       4.38346
         449379.63    3758777.57        4.19473                        449383.50
3758777.57       4.03445
         449387.37    3758777.57        3.88529                        449391.24
3758777.57       3.74679
         449395.11    3758777.57        3.61670                        449398.98
3758777.57       3.49482
         449402.85    3758777.57        3.38037                        449406.72
3758777.57       3.27271
         449410.59    3758777.57        3.17320                        449414.46
3758777.57       3.08391
         449418.33    3758777.57        2.99882                        449422.20
3758777.57       2.91807
         449426.07    3758777.57        2.84132                        449429.94
3758777.57       2.76828
         449433.81    3758777.57        2.69868                        449437.68
3758777.57       2.63228
         449441.55    3758777.57        2.57131                        449445.42
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3758777.57        2.51462
        449368.02    3758791.61        4.81468                    449371.89
3758791.61        4.60458
        449375.76    3758791.61        4.40913                    449379.63
3758791.61        4.22735
        449383.50    3758791.61        4.06598                    449387.37
3758791.61        3.91577
        449391.24    3758791.61        3.77563                    449395.11
3758791.61        3.64514
        449398.98    3758791.61        3.52231                    449402.85
3758791.61        3.40696
        449406.72    3758791.61        3.29844                    449410.59
3758791.61        3.19808
        449414.46    3758791.61        3.10745                    449418.33
3758791.61        3.02158
        449422.20    3758791.61        2.94052                    449426.07
3758791.61        2.86307
        449429.94    3758791.61        2.78937                    449433.81
3758791.61        2.71916
        449437.68    3758791.61        2.65218                    449441.55
3758791.61        2.58925
        449445.42    3758791.61        2.53039                    449368.02
3758805.65        4.82553
        449371.89    3758805.65        4.62130                    449375.76
3758805.65        4.43280
        449379.63    3758805.65        4.25817                    449383.50
3758805.65        4.09588
        449387.37    3758805.65        3.94479                    449391.24
3758805.65        3.80374
        449395.11    3758805.65        3.67182                    449398.98
3758805.65        3.54867
        449402.85    3758805.65        3.43251                    449406.72
3758805.65        3.32318
        449410.59    3758805.65        3.22203                    449414.46
3758805.65        3.13057
        449418.33    3758805.65        3.04391                    449422.20
3758805.65        2.96170
        449426.07    3758805.65        2.88359                    449429.94
3758805.65        2.80967
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   11:46:36

                        PAGE 13
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                        INCLUDING SOURCE(S):   L0000001   , L0000002

```
 , L0000003     , L0000004     , L0000005     ,
               L0000006     , L0000007     , L0000008     , L0000009     , L0000010
 , L0000011     , L0000012     , L0000013     ,
               L0000014     , L0000015     , L0000016     , L0000017     , L0000018
 , L0000019     , L0000020     , L0000021     ,
               L0000022     , L0000023     , L0000024     , L0000025     , L0000026
 ,
```

                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                    ** CONC OF PM_10   IN MICROGRAMS/M**3
               **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
449433.81	3758805.65	2.73885	449437.68	3758805.65	2.67131
449441.55	3758805.65	2.60682	449445.42	3758805.65	2.54517
449368.02	3758819.69	4.82773	449371.89	3758819.69	4.62335
449375.76	3758819.69	4.43509	449379.63	3758819.69	4.26016
449383.50	3758819.69	4.09771	449387.37	3758819.69	3.94651
449391.24	3758819.69	3.80541	449395.11	3758819.69	3.67402
449398.98	3758819.69	3.55035	449402.85	3758819.69	3.43421
449406.72	3758819.69	3.32493	449410.59	3758819.69	3.22385
449414.46	3758819.69	3.13251	449418.33	3758819.69	3.04597
449422.20	3758819.69	2.96386	449426.07	3758819.69	2.88625
449429.94	3758819.69	2.81201	449433.81	3758819.69	2.74127
449437.68	3758819.69	2.67380	449441.55	3758819.69	2.60938
449445.42	3758819.69	2.54778	449368.02	3758833.73	4.82819
449371.89	3758833.73	4.62339	449375.76	3758833.73	4.43493
449379.63	3758833.73	4.25987	449383.50	3758833.73	4.09737
449387.37	3758833.73	3.94616	449391.24	3758833.73	3.80510

```
        449395.11     3758833.73         3.67378                              449398.98
3758833.73         3.55019
        449402.85     3758833.73         3.43414                              449406.72
3758833.73         3.32497
        449410.59     3758833.73         3.22403                              449414.46
3758833.73         3.13286
        449418.33     3758833.73         3.04649                              449422.20
3758833.73         2.96453
        449426.07     3758833.73         2.88706                              449429.94
3758833.73         2.81295
        449433.81     3758833.73         2.74233                              449437.68
3758833.73         2.67497
        449441.55     3758833.73         2.61064                              449445.42
3758833.73         2.54914
        449368.02     3758847.77         4.86790                              449371.89
3758847.77         4.66553
        449375.76     3758847.77         4.47900                              449379.63
3758847.77         4.30572
        449383.50     3758847.77         4.14218                              449387.37
3758847.77         3.99027
        449391.24     3758847.77         3.84793                              449395.11
3758847.77         3.71472
        449398.98     3758847.77         3.58983                              449402.85
3758847.77         3.47250
        449406.72     3758847.77         3.36255                              449410.59
3758847.77         3.25935
        449414.46     3758847.77         3.16456                              449418.33
3758847.77         3.07528
        449422.20     3758847.77         2.99021                              449426.07
3758847.77         2.90945
        449429.94     3758847.77         2.83269                              449433.81
3758847.77         2.75960
        449437.68     3758847.77         2.68994                              449441.55
3758847.77         2.62451
        449445.42     3758847.77         2.56263                              449368.02
3758861.81         4.89493
        449371.89     3758861.81         4.69885                              449375.76
3758861.81         4.51522
        449379.63     3758861.81         4.35029                              449383.50
3758861.81         4.18851
        449387.37     3758861.81         4.03601                              449391.24
3758861.81         3.89351
        449395.11     3758861.81         3.76001                              449398.98
3758861.81         3.63436
        449402.85     3758861.81         3.51602                              449406.72
3758861.81         3.40460
        449410.59     3758861.81         3.29981                              449414.46
3758861.81         3.20123
```

                 *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                   INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                  ** CONC OF PM_10   IN MICROGRAMS/M**3
               **

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
 -
         449418.33   3758861.81   3.10789   449422.20
3758861.81   3.01944
         449426.07   3758861.81   2.93586   449429.94
3758861.81   2.85607
         449433.81   3758861.81   2.78013   449437.68
3758861.81   2.70779
         449441.55   3758861.81   2.64082   449445.42
3758861.81   2.57847
         449368.02   3758875.85   4.90328   449371.89
3758875.85   4.70799
         449375.76   3758875.85   4.52677   449379.63
3758875.85   4.35875
         449383.50   3758875.85   4.20611   449387.37
3758875.85   4.05566
         449391.24   3758875.85   3.91895   449395.11
3758875.85   3.78541
         449398.98   3758875.85   3.66012   449402.85
3758875.85   3.54164
         449406.72   3758875.85   3.42990   449410.59
3758875.85   3.32431
         449414.46   3758875.85   3.22445   449418.33
3758875.85   3.13024
         449422.20   3758875.85   3.04053   449426.07

	3758875.85	2.95535	
449429.94	3758875.85	2.87437	449433.81
3758875.85	2.79729		
449437.68	3758875.85	2.72419	449441.55
3758875.85	2.65643		
449445.42	3758875.85	2.59363	449368.02
3758889.89	4.90619		
449371.89	3758889.89	4.71095	449375.76
3758889.89	4.53076		
449379.63	3758889.89	4.37013	449383.50
3758889.89	4.21368		
449387.37	3758889.89	4.07034	449391.24
3758889.89	3.93098		
449395.11	3758889.89	3.80256	449398.98
3758889.89	3.67743		
449402.85	3758889.89	3.55926	449406.72
3758889.89	3.44751		
449410.59	3758889.89	3.34172	449414.46
3758889.89	3.24166		
449418.33	3758889.89	3.14678	449422.20
3758889.89	3.05715		
449426.07	3758889.89	2.97164	449429.94
3758889.89	2.89035		
449433.81	3758889.89	2.81292	449437.68
3758889.89	2.73915		
449441.55	3758889.89	2.67132	449445.42
3758889.89	2.60808		
449368.02	3758903.93	4.90405	449371.89
3758903.93	4.71017		
449375.76	3758903.93	4.53093	449379.63
3758903.93	4.36450		
449383.50	3758903.93	4.21714	449387.37
3758903.93	4.07139		
449391.24	3758903.93	3.94108	449395.11
3758903.93	3.81206		
449398.98	3758903.93	3.69413	449402.85
3758903.93	3.57770		
449406.72	3758903.93	3.47086	449410.59
3758903.93	3.36531		
449414.46	3758903.93	3.26431	449418.33
3758903.93	3.16846		
449422.20	3758903.93	3.07729	449426.07
3758903.93	2.99058		
449429.94	3758903.93	2.90802	449433.81
3758903.93	2.82933		
449437.68	3758903.93	2.75430	449441.55
3758903.93	2.68514		
449445.42	3758903.93	2.62181	449368.02
3758917.97	4.87708		
449371.89	3758917.97	4.68432	449375.76

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3758917.97       4.50583
         449379.63    3758917.97       4.34085                      449383.50
3758917.97       4.20226
         449387.37    3758917.97       4.06108                      449391.24
3758917.97       3.93583
         449395.11    3758917.97       3.80964                      449398.98
3758917.97       3.69710
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   11:46:36

                         PAGE 15
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                  *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                  ** CONC OF PM_10   IN MICROGRAMS/M**3
                 **

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
         449402.85   3758917.97   3.58380   449406.72
3758917.97   3.48222
         449410.59   3758917.97   3.37903   449414.46
3758917.97   3.28385
         449418.33   3758917.97   3.19146   449422.20
3758917.97   3.09914
         449426.07   3758917.97   3.01089   449429.94
3758917.97   2.92620
         449433.81   3758917.97   2.84559   449437.68
3758917.97   2.76856
         449441.55   3758917.97   2.69849   449445.42
3758917.97   2.63447
         449368.02   3758932.01   4.85351   449371.89
3758932.01   4.66065

449375.76	3758932.01	4.48242	449379.63
3758932.01	4.31757		
449383.50	3758932.01	4.17247	449387.37
3758932.01	4.04804		
449391.24	3758932.01	3.91826	449395.11
3758932.01	3.80471		
449398.98	3758932.01	3.68768	449402.85
3758932.01	3.58390		
449406.72	3758932.01	3.47830	449410.59
3758932.01	3.38421		
449414.46	3758932.01	3.29221	449418.33
3758932.01	3.19781		
449422.20	3758932.01	3.11074	449426.07
3758932.01	3.02638		
449429.94	3758932.01	2.94129	449433.81
3758932.01	2.85973		
449437.68	3758932.01	2.78187	449441.55
3758932.01	2.71072		
449445.42	3758932.01	2.64554	449368.02
3758946.05	4.83206		
449371.89	3758946.05	4.63983	449375.76
3758946.05	4.46221		
449379.63	3758946.05	4.29799	449383.50
3758946.05	4.17036		
449387.37	3758946.05	4.03501	449391.24
3758946.05	3.91866		
449395.11	3758946.05	3.79726	449398.98
3758946.05	3.69060		
449402.85	3758946.05	3.58055	449406.72
3758946.05	3.48308		
449410.59	3758946.05	3.38293	449414.46
3758946.05	3.29368		
449418.33	3758946.05	3.20607	449422.20
3758946.05	3.11613		
449426.07	3758946.05	3.03331	449429.94
3758946.05	2.95258		
449433.81	3758946.05	2.87133	449437.68
3758946.05	2.79336		
449441.55	3758946.05	2.72130	449445.42
3758946.05	2.65451		
449368.02	3758960.09	4.81206	449371.89
3758960.09	4.62035		
449375.76	3758960.09	4.44319	449379.63
3758960.09	4.27944		
449383.50	3758960.09	4.15579	449387.37
3758960.09	4.02139		
449391.24	3758960.09	3.90793	449395.11
3758960.09	3.78732		
449398.98	3758960.09	3.68341	449402.85
3758960.09	3.57456		

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        449406.72    3758960.09        3.47903                              449410.59
3758960.09        3.38013
        449414.46    3758960.09        3.29252                              449418.33
3758960.09        3.20726
        449422.20    3758960.09        3.11907                              449426.07
3758960.09        3.03802
        449429.94    3758960.09        2.95883                              449433.81
3758960.09        2.88182
        449437.68    3758960.09        2.80415                              449441.55
3758960.09        2.73134
        449445.42    3758960.09        2.66257                              449368.02
3758974.13        4.83210
        449371.89    3758974.13        4.63930                              449375.76
3758974.13        4.46112
        449379.63    3758974.13        4.29641                              449383.50
3758974.13        4.16733
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   11:46:36

                             PAGE 16
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                  *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                  ** CONC OF PM_10   IN MICROGRAMS/M**3
             **

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
        449387.37   3758974.13   4.02972   449391.24
3758974.13   3.90037
        449395.11   3758974.13   3.79102   449398.98
3758974.13   3.67596
        449402.85   3758974.13   3.57654   449406.72
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| | | | |
|---|---|---|---|
| 3758974.13 | 3.47286 | | |
| 449410.59 | 3758974.13 | 3.37494 | 449414.46 |
| 3758974.13 | 3.28932 | | |
| 449418.33 | 3758974.13 | 3.20610 | 449422.20 |
| 3758974.13 | 3.12475 | | |
| 449426.07 | 3758974.13 | 3.04064 | 449429.94 |
| 3758974.13 | 2.96310 | | |
| 449433.81 | 3758974.13 | 2.88743 | 449437.68 |
| 3758974.13 | 2.81387 | | |
| 449441.55 | 3758974.13 | 2.74025 | 449445.42 |
| 3758974.13 | 2.67025 | | |
| 449368.02 | 3758988.17 | 4.84819 | 449371.89 |
| 3758988.17 | 4.65427 | | |
| 449375.76 | 3758988.17 | 4.47514 | 449379.63 |
| 3758988.17 | 4.30915 | | |
| 449383.50 | 3758988.17 | 4.17628 | 449387.37 |
| 3758988.17 | 4.03665 | | |
| 449391.24 | 3758988.17 | 3.90580 | 449395.11 |
| 3758988.17 | 3.78248 | | |
| 449398.98 | 3758988.17 | 3.67818 | 449402.85 |
| 3758988.17 | 3.56858 | | |
| 449406.72 | 3758988.17 | 3.46485 | 449410.59 |
| 3758988.17 | 3.37640 | | |
| 449414.46 | 3758988.17 | 3.28451 | 449418.33 |
| 3758988.17 | 3.20279 | | |
| 449422.20 | 3758988.17 | 3.12332 | 449426.07 |
| 3758988.17 | 3.04053 | | |
| 449429.94 | 3758988.17 | 2.96520 | 449433.81 |
| 3758988.17 | 2.89096 | | |
| 449437.68 | 3758988.17 | 2.81866 | 449441.55 |
| 3758988.17 | 2.74515 | | |
| 449445.42 | 3758988.17 | 2.67726 | 449368.02 |
| 3759002.21 | 4.81935 | | |
| 449371.89 | 3759002.21 | 4.62639 | 449375.76 |
| 3759002.21 | 4.44815 | | |
| 449379.63 | 3759002.21 | 4.28348 | 449383.50 |
| 3759002.21 | 4.15831 | | |
| 449387.37 | 3759002.21 | 4.02154 | 449391.24 |
| 3759002.21 | 3.90754 | | |
| 449395.11 | 3759002.21 | 3.78620 | 449398.98 |
| 3759002.21 | 3.67161 | | |
| 449402.85 | 3759002.21 | 3.57351 | 449406.72 |
| 3759002.21 | 3.47043 | | |
| 449410.59 | 3759002.21 | 3.38098 | 449414.46 |
| 3759002.21 | 3.28778 | | |
| 449418.33 | 3759002.21 | 3.20548 | 449422.20 |
| 3759002.21 | 3.11972 | | |
| 449426.07 | 3759002.21 | 3.04339 | 449429.94 |
| 3759002.21 | 2.96862 | | |
| 449433.81 | 3759002.21 | 2.89185 | 449437.68 |

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3759002.21        2.82169
         449441.55    3759002.21        2.74927                    449445.42
3759002.21        2.68226
         449368.02    3759016.25        4.81006                    449371.89
3759016.25        4.61807
         449375.76    3759016.25        4.44062                    449379.63
3759016.25        4.27661
         449383.50    3759016.25        4.13586                    449387.37
3759016.25        4.02113
         449391.24    3759016.25        3.89526                    449395.11
3759016.25        3.78927
         449398.98    3759016.25        3.67574                    449402.85
3759016.25        3.56805
         449406.72    3759016.25        3.47513                    449410.59
3759016.25        3.37686
         449414.46    3759016.25        3.29057                    449418.33
3759016.25        3.20102
         449422.20    3759016.25        3.12190                    449426.07
3759016.25        3.03988
         449429.94    3759016.25        2.96680                    449433.81
3759016.25        2.89107
         449437.68    3759016.25        2.82294                    449441.55
3759016.25        2.75569
         449445.42    3759016.25        2.68580                    449368.02
3759030.29        4.85692
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                            ***   11:46:36

                              PAGE 17

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                   *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                  *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                  ** CONC OF PM_10   IN MICROGRAMS/M**3
                  **

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
449371.89	3759030.29	4.66157	449375.76	3759030.29	4.48118
449379.63	3759030.29	4.31450	449383.50	3759030.29	4.18531
449387.37	3759030.29	4.04803	449391.24	3759030.29	3.93006
449395.11	3759030.29	3.80697	449398.98	3759030.29	3.69928
449402.85	3759030.29	3.58796	449406.72	3759030.29	3.48931
449410.59	3759030.29	3.38853	449414.46	3759030.29	3.29925
449418.33	3759030.29	3.20843	449422.20	3759030.29	3.12154
449426.07	3759030.29	3.04396	449429.94	3759030.29	2.96499
449433.81	3759030.29	2.89347	449437.68	3759030.29	2.82096
449441.55	3759030.29	2.75352	449445.42	3759030.29	2.68322
449368.02	3759044.33	4.91002	449371.89	3759044.33	4.71168
449375.76	3759044.33	4.52866	449379.63	3759044.33	4.35984
449383.50	3759044.33	4.22072	449387.37	3759044.33	4.07853
449391.24	3759044.33	3.95294	449395.11	3759044.33	3.82574
449398.98	3759044.33	3.71244	449402.85	3759044.33	3.59825
449406.72	3759044.33	3.49637	449410.59	3759044.33	3.39383
449414.46	3759044.33	3.29701	449418.33	3759044.33	3.21013
449422.20	3759044.33	3.12306	449426.07	3759044.33	3.04007
449429.94	3759044.33	2.96534	449433.81	3759044.33	2.88996
449437.68	3759044.33	2.81812	449441.55	3759044.33	2.75068
449445.42	3759044.33	2.68000			

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                         *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                 ** CONC OF PM_10   IN MICROGRAMS/M**3
                **

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
 -
        449368.02 3758763.53   8.04254b (16120624)   449371.89
 3758763.53   7.70065b (16120624)
        449375.76 3758763.53   7.38099b (16120624)   449379.63
 3758763.53   7.08413b (16120624)
        449383.50 3758763.53   6.81963b (16120624)   449387.37
 3758763.53   6.57411b (16120624)
        449391.24 3758763.53   6.34394b (16120624)   449395.11
 3758763.53   6.12850b (16120624)
        449398.98 3758763.53   5.92633b (16120624)   449402.85
 3758763.53   5.73628b (16120624)
        449406.72 3758763.53   5.55794b (16120624)   449410.59
 3758763.53   5.39166b (16120624)
        449414.46 3758763.53   5.24025b (16120624)   449418.33
 3758763.53   5.09669b (16120624)
        449422.20 3758763.53   4.96038b (16120624)   449426.07
 3758763.53   4.83075b (16120624)
        449429.94 3758763.53   4.70733b (16120624)   449433.81
 3758763.53   4.58965b (16120624)
        449437.68 3758763.53   4.47731b (16120624)   449441.55
 3758763.53   4.37240b (16120624)
        449445.42 3758763.53   4.27291b (16120624)   449368.02
 3758777.57   8.04837b (16120624)
        449371.89 3758777.57   7.69425b (16120624)   449375.76
 3758777.57   7.36311b (16120624)
        449379.63 3758777.57   7.05674b (16120624)   449383.50

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3758777.57          6.79334b (16120624)
     449387.37   3758777.57          6.54806b (16120624)                    449391.24
3758777.57          6.31996b (16120624)
     449395.11   3758777.57          6.10563b (16120624)                    449398.98
3758777.57          5.90462b (16120624)
     449402.85   3758777.57          5.71566b (16120624)                    449406.72
3758777.57          5.53771b (16120624)
     449410.59   3758777.57          5.37259b (16120624)                    449414.46
3758777.57          5.22318b (16120624)
     449418.33   3758777.57          5.08081b (16120624)                    449422.20
3758777.57          4.94559b (16120624)
     449426.07   3758777.57          4.81698b (16120624)                    449429.94
3758777.57          4.69449b (16120624)
     449433.81   3758777.57          4.57769b (16120624)                    449437.68
3758777.57          4.46617b (16120624)
     449441.55   3758777.57          4.36310b (16120624)                    449445.42
3758777.57          4.26678b (16120624)
     449368.02   3758791.61          8.06750b (16120624)                    449371.89
3758791.61          7.72332b (16120624)
     449375.76   3758791.61          7.40401b (16120624)                    449379.63
3758791.61          7.10736b (16120624)
     449383.50   3758791.61          6.84232b (16120624)                    449387.37
3758791.61          6.59544b (16120624)
     449391.24   3758791.61          6.36492b (16120624)                    449395.11
3758791.61          6.14995b (16120624)
     449398.98   3758791.61          5.94751b (16120624)                    449402.85
3758791.61          5.75721b (16120624)
     449406.72   3758791.61          5.57796b (16120624)                    449410.59
3758791.61          5.41158b (16120624)
     449414.46   3758791.61          5.26021b (16120624)                    449418.33
3758791.61          5.11667b (16120624)
     449422.20   3758791.61          4.98096b (16120624)                    449426.07
3758791.61          4.85130b (16120624)
     449429.94   3758791.61          4.72784b (16120624)                    449433.81
3758791.61          4.61011b (16120624)
     449437.68   3758791.61          4.49771b (16120624)                    449441.55
3758791.61          4.39178b (16120624)
     449445.42   3758791.61          4.29230b (16120624)                    449368.02
3758805.65          8.08707b (16120624)
     449371.89   3758805.65          7.75140b (16120624)                    449375.76
3758805.65          7.44181b (16120624)
     449379.63   3758805.65          7.15504b (16120624)                    449383.50
3758805.65          6.88848b (16120624)
     449387.37   3758805.65          6.64019b (16120624)                    449391.24
3758805.65          6.40827b (16120624)
     449395.11   3758805.65          6.19118b (16120624)                    449398.98
3758805.65          5.98824b (16120624)
     449402.85   3758805.65          5.79674b (16120624)                    449406.72
3758805.65          5.61634b (16120624)
     449410.59   3758805.65          5.44880b (16120624)                    449414.46
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     3758805.65         5.29620b (16120624)
          449418.33   3758805.65         5.15151b (16120624)                    449422.20
     3758805.65         5.01413b (16120624)
          449426.07   3758805.65         4.88350b (16120624)                    449429.94
     3758805.65         4.75967b (16120624)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   11:46:36

                              PAGE 19
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                         *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                    L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                    L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                    L0000022   , L0000023   , L0000024   , L0000025   , L0000026
,

                                   *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                   ** CONC OF PM_10   IN MICROGRAMS/M**3
                    **


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     X-COORD (M) Y-COORD (M)      CONC     (YYMMDDHH)           X-COORD (M)
Y-COORD (M)        CONC    (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
          449433.81   3758805.65         4.64105b (16120624)                    449437.68
     3758805.65         4.52782b (16120624)
          449441.55   3758805.65         4.41961b (16120624)                    449445.42
     3758805.65         4.31608b (16120624)
          449368.02   3758819.69         8.09335b (16120624)                    449371.89
     3758819.69         7.75773b (16120624)
          449375.76   3758819.69         7.44854b (16120624)                    449379.63
     3758819.69         7.16130b (16120624)
          449383.50   3758819.69         6.89446b (16120624)                    449387.37
     3758819.69         6.64596b (16120624)
          449391.24   3758819.69         6.41391b (16120624)                    449395.11
     3758819.69         6.19752b (16120624)
          449398.98   3758819.69         5.99376b (16120624)                    449402.85
     3758819.69         5.80222b (16120624)
          449406.72   3758819.69         5.62181b (16120624)                    449410.59
     3758819.69         5.45431b (16120624)
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     449414.46   3758819.69          5.30181b (16120624)                 449418.33
3758819.69          5.15722b (16120624)
     449422.20   3758819.69          5.01992b (16120624)                 449426.07
3758819.69          4.88992b (16120624)
     449429.94   3758819.69          4.76558b (16120624)                 449433.81
3758819.69          4.64701b (16120624)
     449437.68   3758819.69          4.53382b (16120624)                 449441.55
3758819.69          4.42564b (16120624)
     449445.42   3758819.69          4.32214b (16120624)                 449368.02
3758833.73          8.09737b (16120624)
     449371.89   3758833.73          7.76119b (16120624)                 449375.76
3758833.73          7.45171b (16120624)
     449379.63   3758833.73          7.16427b (16120624)                 449383.50
3758833.73          6.89730b (16120624)
     449387.37   3758833.73          6.64873b (16120624)                 449391.24
3758833.73          6.41664b (16120624)
     449395.11   3758833.73          6.20025b (16120624)                 449398.98
3758833.73          5.99650b (16120624)
     449402.85   3758833.73          5.80499b (16120624)                 449406.72
3758833.73          5.62462b (16120624)
     449410.59   3758833.73          5.45720b (16120624)                 449414.46
3758833.73          5.30488b (16120624)
     449418.33   3758833.73          5.16043b (16120624)                 449422.20
3758833.73          5.02327b (16120624)
     449426.07   3758833.73          4.89341b (16120624)                 449429.94
3758833.73          4.76918b (16120624)
     449433.81   3758833.73          4.65071b (16120624)                 449437.68
3758833.73          4.53762b (16120624)
     449441.55   3758833.73          4.42953b (16120624)                 449445.42
3758833.73          4.32611b (16120624)
     449368.02   3758847.77          8.15862b (16120624)                 449371.89
3758847.77          7.82531b (16120624)
     449375.76   3758847.77          7.51792b (16120624)                 449379.63
3758847.77          7.23269b (16120624)
     449383.50   3758847.77          6.96393b (16120624)                 449387.37
3758847.77          6.71413b (16120624)
     449391.24   3758847.77          6.48007b (16120624)                 449395.11
3758847.77          6.26087b (16120624)
     449398.98   3758847.77          6.05521b (16120624)                 449402.85
3758847.77          5.86183b (16120624)
     449406.72   3758847.77          5.68034b (16120624)                 449410.59
3758847.77          5.50971b (16120624)
     449414.46   3758847.77          5.35220b (16120624)                 449418.33
3758847.77          5.20360b (16120624)
     449422.20   3758847.77          5.06198b (16120624)                 449426.07
3758847.77          4.92740b (16120624)
     449429.94   3758847.77          4.79936b (16120624)                 449433.81
3758847.77          4.67733b (16120624)
     449437.68   3758847.77          4.56092b (16120624)                 449441.55
3758847.77          4.45121b (16120624)
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     449445.42   3758847.77       4.34721b (16120624)              449368.02
3758861.81         8.20383b (16120624)
     449371.89   3758861.81       7.87843b (16120624)              449375.76
3758861.81         7.57467b (16120624)
     449379.63   3758861.81       7.30189b (16120624)              449383.50
3758861.81         7.03389b (16120624)
     449387.37   3758861.81       6.78262b (16120624)              449391.24
3758861.81         6.54775b (16120624)
     449395.11   3758861.81       6.32788b (16120624)              449398.98
3758861.81         6.12089b (16120624)
     449402.85   3758861.81       5.92595b (16120624)              449406.72
3758861.81         5.74224b (16120624)
     449410.59   3758861.81       5.56929b (16120624)              449414.46
3758861.81         5.40634b (16120624)
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                     ***   11:46:36

                     PAGE 20
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                          *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                             INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                   L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                   L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                   L0000022   , L0000023   , L0000024   , L0000025   , L0000026
,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                            ** CONC OF PM_10   IN MICROGRAMS/M**3
            **

    X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
     449418.33   3758861.81   5.25193b (16120624)   449422.20
3758861.81   5.10547b (16120624)
     449426.07   3758861.81   4.96684b (16120624)   449429.94
3758861.81   4.83444b (16120624)
     449433.81   3758861.81   4.70833b (16120624)   449437.68
3758861.81   4.58805b (16120624)
     449441.55   3758861.81   4.47611b (16120624)   449445.42
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3758861.81          4.37140b (16120624)
    449368.02   3758875.85       8.21906b (16120624)                    449371.89
3758875.85          7.89641b (16120624)
    449375.76   3758875.85       7.59633b (16120624)                    449379.63
3758875.85          7.31719b (16120624)
    449383.50   3758875.85       7.06293b (16120624)                    449387.37
3758875.85          6.81366b (16120624)
    449391.24   3758875.85       6.58748b (16120624)                    449395.11
3758875.85          6.36698b (16120624)
    449398.98   3758875.85       6.16019b (16120624)                    449402.85
3758875.85          5.96476b (16120624)
    449406.72   3758875.85       5.78039b (16120624)                    449410.59
3758875.85          5.60613b (16120624)
    449414.46   3758875.85       5.44123b (16120624)                    449418.33
3758875.85          5.28546b (16120624)
    449422.20   3758875.85       5.13712b (16120624)                    449426.07
3758875.85          4.99615b (16120624)
    449429.94   3758875.85       4.86201b (16120624)                    449433.81
3758875.85          4.73421b (16120624)
    449437.68   3758875.85       4.61281b (16120624)                    449441.55
3758875.85          4.49972b (16120624)
    449445.42   3758875.85       4.39433b (16120624)                    449368.02
3758889.89          8.22278b (16120624)
    449371.89   3758889.89       7.90099b (16120624)                    449375.76
3758889.89          7.60230b (16120624)
    449379.63   3758889.89       7.33612b (16120624)                    449383.50
3758889.89          7.07667b (16120624)
    449387.37   3758889.89       6.83854b (16120624)                    449391.24
3758889.89          6.60643b (16120624)
    449395.11   3758889.89       6.39425b (16120624)                    449398.98
3758889.89          6.18708b (16120624)
    449402.85   3758889.89       5.99187b (16120624)                    449406.72
3758889.89          5.80726b (16120624)
    449410.59   3758889.89       5.63257b (16120624)                    449414.46
3758889.89          5.46725b (16120624)
    449418.33   3758889.89       5.31045b (16120624)                    449422.20
3758889.89          5.16213b (16120624)
    449426.07   3758889.89       5.02063b (16120624)                    449429.94
3758889.89          4.88598b (16120624)
    449433.81   3758889.89       4.75765b (16120624)                    449437.68
3758889.89          4.63524b (16120624)
    449441.55   3758889.89       4.52201b (16120624)                    449445.42
3758889.89          4.41597b (16120624)
    449368.02   3758903.93       8.21643b (16120624)                    449371.89
3758903.93          7.89558b (16120624)
    449375.76   3758903.93       7.59919b (16120624)                    449379.63
3758903.93          7.32387b (16120624)
    449383.50   3758903.93       7.08126b (16120624)                    449387.37
3758903.93          6.84102b (16120624)
    449391.24   3758903.93       6.62398b (16120624)                    449395.11
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 3758903.93          6.40920b (16120624)
       449398.98    3758903.93          6.21332b (16120624)                    449402.85
 3758903.93          6.01965b (16120624)
       449406.72    3758903.93          5.84295b (16120624)                    449410.59
 3758903.93          5.66807b (16120624)
       449414.46    3758903.93          5.50115b (16120624)                    449418.33
 3758903.93          5.34271b (16120624)
       449422.20    3758903.93          5.19205b (16120624)                    449426.07
 3758903.93          5.04870b (16120624)
       449429.94    3758903.93          4.91216b (16120624)                    449433.81
 3758903.93          4.78195b (16120624)
       449437.68    3758903.93          4.65770b (16120624)                    449441.55
 3758903.93          4.54253b (16120624)
       449445.42    3758903.93          4.43631b (16120624)                    449368.02
 3758917.97          8.16982b (16120624)
       449371.89    3758917.97          7.85030b (16120624)                    449375.76
 3758917.97          7.55450b (16120624)
       449379.63    3758917.97          7.28108b (16120624)                    449383.50
 3758917.97          7.05215b (16120624)
       449387.37    3758917.97          6.81874b (16120624)                    449391.24
 3758917.97          6.61268b (16120624)
       449395.11    3758917.97          6.40415b (16120624)                    449398.98
 3758917.97          6.21835b (16120624)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   11:46:36

                          PAGE 21
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                          *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                          INCLUDING SOURCE(S):   L0000001   , L0000002
 , L0000003   , L0000004   , L0000005   ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013   ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021   ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                             ** CONC OF PM_10   IN MICROGRAMS/M**3
              **

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)

- -
```
     449402.85    3758917.97         6.03007b (16120624)                    449406.72
3758917.97         5.86048b (16120624)
     449410.59    3758917.97         5.68852b (16120624)                    449414.46
3758917.97         5.53023b (16120624)
     449418.33    3758917.97         5.37740b (16120624)                    449422.20
3758917.97         5.22459b (16120624)
     449426.07    3758917.97         5.07874b (16120624)                    449429.94
3758917.97         4.93895b (16120624)
     449433.81    3758917.97         4.80586b (16120624)                    449437.68
3758917.97         4.67865b (16120624)
     449441.55    3758917.97         4.56213b (16120624)                    449445.42
3758917.97         4.45489b (16120624)
     449368.02    3758932.01         8.13179b (16120624)                    449371.89
3758932.01         7.81143b (16120624)
     449375.76    3758932.01         7.51542b (16120624)                    449379.63
3758932.01         7.24157b (16120624)
     449383.50    3758932.01         7.00034b (16120624)                    449387.37
3758932.01         6.79457b (16120624)
     449391.24    3758932.01         6.57956b (16120624)                    449395.11
3758932.01         6.39225b (16120624)
     449398.98    3758932.01         6.19880b (16120624)                    449402.85
3758932.01         6.02809b (16120624)
     449406.72    3758932.01         5.85292b (16120624)                    449410.59
3758932.01         5.69685b (16120624)
     449414.46    3758932.01         5.54318b (16120624)                    449418.33
3758932.01         5.38580b (16120624)
     449422.20    3758932.01         5.24137b (16120624)                    449426.07
3758932.01         5.10183b (16120624)
     449429.94    3758932.01         4.96119b (16120624)                    449433.81
3758932.01         4.82655b (16120624)
     449437.68    3758932.01         4.69803b (16120624)                    449441.55
3758932.01         4.57989b (16120624)
     449445.42    3758932.01         4.47093b (16120624)                    449368.02
3758946.05         8.09639b (16120624)
     449371.89    3758946.05         7.77618b (16120624)                    449375.76
3758946.05         7.48048b (16120624)
     449379.63    3758946.05         7.20715b (16120624)                    449383.50
3758946.05         6.99573b (16120624)
     449387.37    3758946.05         6.77062b (16120624)                    449391.24
3758946.05         6.57828b (16120624)
     449395.11    3758946.05         6.37706b (16120624)                    449398.98
3758946.05         6.20112b (16120624)
     449402.85    3758946.05         6.01919b (16120624)                    449406.72
3758946.05         5.85844b (16120624)
     449410.59    3758946.05         5.69336b (16120624)                    449414.46
3758946.05         5.54453b (16120624)
     449418.33    3758946.05         5.39848b (16120624)                    449422.20
3758946.05         5.24853b (16120624)
```

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       449426.07   3758946.05        5.11126b (16120624)                    449429.94
3758946.05        4.97781b (16120624)
       449433.81   3758946.05        4.84342b (16120624)                    449437.68
3758946.05        4.71461b (16120624)
       449441.55   3758946.05        4.59506b (16120624)                    449445.42
3758946.05        4.48374b (16120624)
       449368.02   3758960.09        8.06052b (16120624)                    449371.89
3758960.09        7.74124b (16120624)
       449375.76   3758960.09        7.44625b (16120624)                    449379.63
3758960.09        7.17361b (16120624)
       449383.50   3758960.09        6.96912b (16120624)                    449387.37
3758960.09        6.74565b (16120624)
       449391.24   3758960.09        6.55813b (16120624)                    449395.11
3758960.09        6.35801b (16120624)
       449398.98   3758960.09        6.18646b (16120624)                    449402.85
3758960.09        6.00618b (16120624)
       449406.72   3758960.09        5.84871b (16120624)                    449410.59
3758960.09        5.68537b (16120624)
       449414.46   3758960.09        5.54118b (16120624)                    449418.33
3758960.09        5.39914b (16120624)
       449422.20   3758960.09        5.25189b (16120624)                    449426.07
3758960.09        5.11698b (16120624)
       449429.94   3758960.09        4.98595b (16120624)                    449433.81
3758960.09        4.85858b (16120624)
       449437.68   3758960.09        4.73001b (16120624)                    449441.55
3758960.09        4.60925b (16120624)
       449445.42   3758960.09        4.49501b (16120624)                    449368.02
3758974.13        8.09198b (16120624)
       449371.89   3758974.13        7.77108b (16120624)                    449375.76
3758974.13        7.47461b (16120624)
       449379.63   3758974.13        7.20054b (16120624)                    449383.50
3758974.13        6.98692b (16120624)
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:46:36

                         PAGE 22
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                      *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                         INCLUDING SOURCE(S):   L0000001   , L0000002
, L0000003   , L0000004   , L0000005   ,
                  L0000006   , L0000007   , L0000008   , L0000009   , L0000010
, L0000011   , L0000012   , L0000013   ,
                  L0000014   , L0000015   , L0000016   , L0000017   , L0000018
, L0000019   , L0000020   , L0000021   ,
                  L0000022   , L0000023   , L0000024   , L0000025   , L0000026
,

** CONC OF PM_10   IN MICROGRAMS/M**3
**

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) |
Y-COORD (M)		CONC	(YYMMDDHH)	
449387.37	3758974.13	6.75806b	(16120624)	449391.24
3758974.13		6.54329b	(16120624)	
449395.11	3758974.13	6.36255b	(16120624)	449398.98
3758974.13		6.17161b	(16120624)	
449402.85	3758974.13	6.00734b	(16120624)	449406.72
3758974.13		5.83535b	(16120624)	
449410.59	3758974.13	5.67322b	(16120624)	449414.46
3758974.13		5.53303b	(16120624)	
449418.33	3758974.13	5.39532b	(16120624)	449422.20
3758974.13		5.26001b	(16120624)	
449426.07	3758974.13	5.11939b	(16120624)	449429.94
3758974.13		4.99056b	(16120624)	
449433.81	3758974.13	4.86538b	(16120624)	449437.68
3758974.13		4.74372b	(16120624)	
449441.55	3758974.13	4.62163b	(16120624)	449445.42
3758974.13		4.50549b	(16120624)	
449368.02	3758988.17	8.11693b	(16120624)	449371.89
3758988.17		7.79414b	(16120624)	
449375.76	3758988.17	7.49609b	(16120624)	449379.63
3758988.17		7.21994b	(16120624)	
449383.50	3758988.17	6.99999b	(16120624)	449387.37
3758988.17		6.76779b	(16120624)	
449391.24	3758988.17	6.55030b	(16120624)	449395.11
3758988.17		6.34552b	(16120624)	
449398.98	3758988.17	6.17307b	(16120624)	449402.85
3758988.17		5.99109b	(16120624)	
449406.72	3758988.17	5.81876b	(16120624)	449410.59
3758988.17		5.67273b	(16120624)	
449414.46	3758988.17	5.52118b	(16120624)	449418.33
3758988.17		5.38727b	(16120624)	
449422.20	3758988.17	5.25542b	(16120624)	449426.07
3758988.17		5.11739b	(16120624)	
449429.94	3758988.17	4.99162b	(16120624)	449433.81
3758988.17		4.86857b	(16120624)	
449437.68	3758988.17	4.74892b	(16120624)	449441.55
3758988.17		4.62715b	(16120624)	
449445.42	3758988.17	4.51477b	(16120624)	449368.02
3759002.21		8.06667b	(16120624)	
449371.89	3759002.21	7.74520b	(16120624)	449375.76

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3759002.21       7.44828b (16120624)
     449379.63   3759002.21       7.17395b (16120624)                     449383.50
3759002.21       6.96701b (16120624)
     449387.37   3759002.21       6.73946b (16120624)                     449391.24
3759002.21       6.55114b (16120624)
     449395.11   3759002.21       6.34964b (16120624)                     449398.98
3759002.21       6.15946b (16120624)
     449402.85   3759002.21       5.99743b (16120624)                     449406.72
3759002.21       5.82649b (16120624)
     449410.59   3759002.21       5.67895b (16120624)                     449414.46
3759002.21       5.52523b (16120624)
     449418.33   3759002.21       5.38959b (16120624)                     449422.20
3759002.21       5.24751b (16120624)
     449426.07   3759002.21       5.12011b (16120624)                     449429.94
3759002.21       4.99553b (16120624)
     449433.81   3759002.21       4.86738b (16120624)                     449437.68
3759002.21       4.75101b (16120624)
     449441.55   3759002.21       4.63095b (16120624)                     449445.42
3759002.21       4.52010b (16120624)
     449368.02   3759016.25       8.05110b (16120624)                     449371.89
3759016.25       7.73059b (16120624)
     449375.76   3759016.25       7.43446b (16120624)                     449379.63
3759016.25       7.16082b (16120624)
     449383.50   3759016.25       6.92621b (16120624)                     449387.37
3759016.25       6.73693b (16120624)
     449391.24   3759016.25       6.52765b (16120624)                     449395.11
3759016.25       6.35269b (16120624)
     449398.98   3759016.25       6.16435b (16120624)                     449402.85
3759016.25       5.98596b (16120624)
     449406.72   3759016.25       5.83278b (16120624)                     449410.59
3759016.25       5.67031b (16120624)
     449414.46   3759016.25       5.52831b (16120624)                     449418.33
3759016.25       5.37985b (16120624)
     449422.20   3759016.25       5.24888b (16120624)                     449426.07
3759016.25       5.11212b (16120624)
     449429.94   3759016.25       4.98998b (16120624)                     449433.81
3759016.25       4.86361b (16120624)
     449437.68   3759016.25       4.75005b (16120624)                     449441.55
3759016.25       4.63846b (16120624)
     449445.42   3759016.25       4.52268b (16120624)                     449368.02
3759030.29       8.12440b (16120624)
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                     ***   11:46:36

                     PAGE 23
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                     *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION

```
VALUES FOR SOURCE GROUP:  ALL        ***
                              INCLUDING SOURCE(S):   L0000001    , L0000002
 , L0000003   , L0000004   , L0000005    ,
                 L0000006   , L0000007   , L0000008   , L0000009   , L0000010
 , L0000011   , L0000012   , L0000013    ,
                 L0000014   , L0000015   , L0000016   , L0000017   , L0000018
 , L0000019   , L0000020   , L0000021    ,
                 L0000022   , L0000023   , L0000024   , L0000025   , L0000026
 ,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                              ** CONC OF PM_10    IN MICROGRAMS/M**3
                **

     X-COORD (M)  Y-COORD (M)      CONC     (YYMMDDHH)          X-COORD (M)
 Y-COORD (M)      CONC    (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
       449371.89   3759030.29      7.79925b (16120624)          449375.76
 3759030.29      7.49908b (16120624)
       449379.63   3759030.29      7.22175b (16120624)          449383.50
 3759030.29      7.00786b (16120624)
       449387.37   3759030.29      6.77988b (16120624)          449391.24
 3759030.29      6.58504b (16120624)
       449395.11   3759030.29      6.38130b (16120624)          449398.98
 3759030.29      6.20393b (16120624)
       449402.85   3759030.29      6.02009b (16120624)          449406.72
 3759030.29      5.85794b (16120624)
       449410.59   3759030.29      5.69102b (16120624)          449414.46
 3759030.29      5.54261b (16120624)
       449418.33   3759030.29      5.39149b (16120624)          449422.20
 3759030.29      5.24650b (16120624)
       449426.07   3759030.29      5.11699b (16120624)          449429.94
 3759030.29      4.98511b (16120624)
       449433.81   3759030.29      4.86613b (16120624)          449437.68
 3759030.29      4.74517b (16120624)
       449441.55   3759030.29      4.63338b (16120624)          449445.42
 3759030.29      4.51707b (16120624)
       449368.02   3759044.33      8.20865b (16120624)          449371.89
 3759044.33      7.87926b (16120624)
       449375.76   3759044.33      7.57540b (16120624)          449379.63
 3759044.33      7.29516b (16120624)
       449383.50   3759044.33      7.06519b (16120624)          449387.37
 3759044.33      6.82999b (16120624)
       449391.24   3759044.33      6.62334b (16120624)          449395.11
 3759044.33      6.41359b (16120624)
       449398.98   3759044.33      6.22725b (16120624)          449402.85
 3759044.33      6.03854b (16120624)
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        449406.72   3759044.33       5.86900b (16120624)                    449410.59
   3759044.33       5.69837b (16120624)
        449414.46   3759044.33       5.53717b (16120624)                    449418.33
   3759044.33       5.39253b (16120624)
        449422.20   3759044.33       5.24726b (16120624)                    449426.07
   3759044.33       5.10893b (16120624)
        449429.94   3759044.33       4.98458b (16120624)                    449433.81
   3759044.33       4.85883b (16120624)
        449437.68   3759044.33       4.73888b (16120624)                    449441.55
   3759044.33       4.62709b (16120624)
        449445.42   3759044.33       4.51029b (16120624)
```

                          *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS
AVERAGED OVER   5 YEARS ***

                          ** CONC OF PM_10   IN MICROGRAMS/M**3
            **

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

ALL   1ST HIGHEST VALUE IS   4.91002 AT (449368.02, 3759044.33,
198.07,   198.07,   0.00) DC
         2ND HIGHEST VALUE IS   4.90619 AT (449368.02, 3758889.89,
195.17,   195.17,   0.00) DC
         3RD HIGHEST VALUE IS   4.90405 AT (449368.02, 3758903.93,
195.79,   195.79,   0.00) DC
         4TH HIGHEST VALUE IS   4.90328 AT (449368.02, 3758875.85,
194.70,   194.70,   0.00) DC
         5TH HIGHEST VALUE IS   4.89493 AT (449368.02, 3758861.81,
194.14,   194.14,   0.00) DC
         6TH HIGHEST VALUE IS   4.87708 AT (449368.02, 3758917.97,
196.55,   196.55,   0.00) DC
         7TH HIGHEST VALUE IS   4.86790 AT (449368.02, 3758847.77,
193.38,   193.38,   0.00) DC
         8TH HIGHEST VALUE IS   4.85692 AT (449368.02, 3759030.29,
198.53,   198.53,   0.00) DC

```
         9TH HIGHEST VALUE IS        4.85351 AT (  449368.02,  3758932.01,
197.19,   197.19,    0.00)  DC
         10TH HIGHEST VALUE IS       4.84819 AT (  449368.02,  3758988.17,
198.06,   198.06,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC                        ***          11/11/21
 *** AERMET - VERSION  16216 ***    ***
                        ***         11:46:36

                              PAGE  25
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


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


                                   ** CONC OF PM_10    IN MICROGRAMS/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     8.22278b ON 16120624: AT (  449368.02,
3758889.89,   195.17,   195.17,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM10\PM10.ISC                        ***          11/11/21
 *** AERMET - VERSION  16216 ***    ***
                        ***         11:46:36

                              PAGE  26
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

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

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

 A Total of           0 Fatal Error Message(s)
 A Total of           2 Warning Message(s)
 A Total of        1638 Informational Message(s)

 A Total of       43848 Hours Were Processed

 A Total of        1039 Calm Hours Identified

 A Total of         599 Missing Hours Identified (  1.37 Percent)


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


    ********   WARNING MESSAGES   ********
 ME W186     130         MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187     130         MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


    *********************************
    *** AERMOD Finishes Successfully ***
    *********************************

** Lakes Environmental AERMOD MPI
**
*************************************
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 10.0.1
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 11/11/2021
** FILE: C:\LAKES\AERMOD VIEW\14172 HRA\PM25\PM25.ADI
**
*************************************
**
**
*************************************
** AERMOD CONTROL PATHWAY
*************************************
**
**
CO STARTING
   TITLEONE C:\LAKES\AERMOD VIEW\14172 HRA\PM25\PM25.ISC
   MODELOPT DFAULT CONC
   AVERTIME 24
   URBANOPT 2189641
```

```
       POLLUTID PM_2.5
       RUNORNOT RUN
       ERRORFIL PM25.ERR
CO FINISHED
**
*************************************
** AERMOD SOURCE PATHWAY
*************************************
**
**
SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** ----------------------------------------------------------------------
** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC I-15 FREEWAY
** PREFIX
** LENGTH OF SIDE = 46.00
** CONFIGURATION = ADJACENT
** EMISSION RATE = 0.053663
** VERTICAL DIMENSION = 6.99
** SZINIT = 3.25
** NODES = 2
** 449288.372, 3758373.924, 188.51, 3.49, 21.40
** 449298.585, 3759554.578, 201.92, 3.49, 21.40
** ----------------------------------------------------------------------
       LOCATION L0000287       VOLUME      449288.571 3758396.923 188.77
       LOCATION L0000288       VOLUME      449288.969 3758442.921 189.29
       LOCATION L0000289       VOLUME      449289.367 3758488.920 189.82
       LOCATION L0000290       VOLUME      449289.765 3758534.918 190.34
       LOCATION L0000291       VOLUME      449290.163 3758580.916 190.86
       LOCATION L0000292       VOLUME      449290.561 3758626.914 191.38
       LOCATION L0000293       VOLUME      449290.958 3758672.913 191.91
       LOCATION L0000294       VOLUME      449291.356 3758718.911 192.43
       LOCATION L0000295       VOLUME      449291.754 3758764.909 192.95
       LOCATION L0000296       VOLUME      449292.152 3758810.908 193.47
       LOCATION L0000297       VOLUME      449292.550 3758856.906 194.00
       LOCATION L0000298       VOLUME      449292.948 3758902.904 194.52
       LOCATION L0000299       VOLUME      449293.346 3758948.902 195.04
       LOCATION L0000300       VOLUME      449293.744 3758994.901 195.56
       LOCATION L0000301       VOLUME      449294.142 3759040.899 196.09
       LOCATION L0000302       VOLUME      449294.540 3759086.897 196.61
       LOCATION L0000303       VOLUME      449294.938 3759132.895 197.13
       LOCATION L0000304       VOLUME      449295.335 3759178.894 197.65
       LOCATION L0000305       VOLUME      449295.733 3759224.892 198.18
       LOCATION L0000306       VOLUME      449296.131 3759270.890 198.70
       LOCATION L0000307       VOLUME      449296.529 3759316.889 199.22
       LOCATION L0000308       VOLUME      449296.927 3759362.887 199.74
       LOCATION L0000309       VOLUME      449297.325 3759408.885 200.27
```

```
    LOCATION L0000310      VOLUME    449297.723 3759454.883 200.79
    LOCATION L0000311      VOLUME    449298.121 3759500.882 201.31
    LOCATION L0000312      VOLUME    449298.519 3759546.880 201.83
** END OF LINE VOLUME SOURCE ID = SLINE1
** SOURCE PARAMETERS **
** LINE VOLUME SOURCE ID = SLINE1
    SRCPARAM L0000287    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000288    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000289    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000290    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000291    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000292    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000293    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000294    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000295    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000296    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000297    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000298    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000299    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000300    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000301    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000302    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000303    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000304    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000305    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000306    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000307    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000308    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000309    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000310    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000311    0.0020639615     3.49      21.40      3.25
    SRCPARAM L0000312    0.0020639615     3.49      21.40      3.25
** -----------------------------------------------------------------
    URBANSRC ALL
    SRCGROUP ALL
SO FINISHED
**
***************************************
** AERMOD RECEPTOR PATHWAY
***************************************
**
**
RE STARTING
    INCLUDED PM25.ROU
RE FINISHED
**
***************************************
** AERMOD METEOROLOGY PATHWAY
***************************************
**
```

```
**
ME STARTING
   SURFFILE ..\KRAL_V9_ADJU\KRAL_V9.SFC
   PROFFILE ..\KRAL_V9_ADJU\KRAL_V9.PFL
   SURFDATA 3171 2012
   UAIRDATA 3190 2012
   PROFBASE 245.0 METERS
ME FINISHED
**
*************************************
** AERMOD OUTPUT PATHWAY
*************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 24 1ST
** AUTO-GENERATED PLOTFILES
   PLOTFILE   24 ALL 1ST PM25.AD\24H1GALL.PLT 31
   SUMMFILE PM25.SUM
OU FINISHED


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

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

 A Total of          0 Fatal Error Message(s)
 A Total of          2 Warning Message(s)
 A Total of          0 Informational Message(s)


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


    ********   WARNING MESSAGES   ********
 ME W186      130       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187      130       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


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


♠ *** AERMOD - VERSION  19191 ***    *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC                         ***           11/11/21
 *** AERMET - VERSION  16216 ***    ***
                        ***           12:00:31
```

                                        ***   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 URBAN Dispersion Algorithm for the SBL for   26 Source(s),
   for Total of   1 Urban Area(s):
   Urban Population =   2189641.0 ; Urban Roughness Length = 1.000 m

 **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.
         6. Urban Roughness Length of 1.0 Meter Assumed.

 **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 Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of: PM_2.5

 **Model Calculates 1 Short Term Average(s) of: 24-HR

 **This Run Includes: 26 Source(s);   1 Source Group(s); and   441
 Receptor(s)

                 with: 0 POINT(s), including
                            0 POINTCAP(s) and   0 POINTHOR(s)
               and: 26 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: 16216

  **Output Options Selected:
          Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
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) =   245.00 ; Decay
Coef. =   0.000   ; Rot. Angle =   0.0
                  Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07
                  Output Units   = MICROGRAMS/M**3

  **Approximate Storage Requirements of Model =   3.6 MB of RAM.

  **Input Runstream File: aermod.inp

  **Output Print File: aermod.out

  **Detailed Error/Message File: PM25.ERR

  **File for Summary of Results: PM25.SUM

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   12:00:31

                                   PAGE   2
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                              *** VOLUME SOURCE DATA ***

              NUMBER EMISSION RATE   BASE   RELEASE   INIT.

```
INIT.    URBAN  EMISSION RATE
   SOURCE        PART.  (GRAMS/SEC)      X          Y        ELEV.    HEIGHT      SY
SZ      SOURCE  SCALAR VARY
     ID          CATS.                (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)                  BY
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - -

 L0000287        0   0.20640E-02  449288.6 3758396.9  188.8     3.49     21.40
3.25     YES
 L0000288        0   0.20640E-02  449289.0 3758442.9  189.3     3.49     21.40
3.25     YES
 L0000289        0   0.20640E-02  449289.4 3758488.9  189.8     3.49     21.40
3.25     YES
 L0000290        0   0.20640E-02  449289.8 3758534.9  190.3     3.49     21.40
3.25     YES
 L0000291        0   0.20640E-02  449290.2 3758580.9  190.9     3.49     21.40
3.25     YES
 L0000292        0   0.20640E-02  449290.6 3758626.9  191.4     3.49     21.40
3.25     YES
 L0000293        0   0.20640E-02  449291.0 3758672.9  191.9     3.49     21.40
3.25     YES
 L0000294        0   0.20640E-02  449291.4 3758718.9  192.4     3.49     21.40
3.25     YES
 L0000295        0   0.20640E-02  449291.8 3758764.9  193.0     3.49     21.40
3.25     YES
 L0000296        0   0.20640E-02  449292.2 3758810.9  193.5     3.49     21.40
3.25     YES
 L0000297        0   0.20640E-02  449292.5 3758856.9  194.0     3.49     21.40
3.25     YES
 L0000298        0   0.20640E-02  449292.9 3758902.9  194.5     3.49     21.40
3.25     YES
 L0000299        0   0.20640E-02  449293.3 3758948.9  195.0     3.49     21.40
3.25     YES
 L0000300        0   0.20640E-02  449293.7 3758994.9  195.6     3.49     21.40
3.25     YES
 L0000301        0   0.20640E-02  449294.1 3759040.9  196.1     3.49     21.40
3.25     YES
 L0000302        0   0.20640E-02  449294.5 3759086.9  196.6     3.49     21.40
3.25     YES
 L0000303        0   0.20640E-02  449294.9 3759132.9  197.1     3.49     21.40
3.25     YES
 L0000304        0   0.20640E-02  449295.3 3759178.9  197.7     3.49     21.40
3.25     YES
 L0000305        0   0.20640E-02  449295.7 3759224.9  198.2     3.49     21.40
3.25     YES
 L0000306        0   0.20640E-02  449296.1 3759270.9  198.7     3.49     21.40
3.25     YES
 L0000307        0   0.20640E-02  449296.5 3759316.9  199.2     3.49     21.40
3.25     YES
```

```
 L0000308          0   0.20640E-02  449296.9 3759362.9   199.7     3.49     21.40
3.25     YES
 L0000309          0   0.20640E-02  449297.3 3759408.9   200.3     3.49     21.40
3.25     YES
 L0000310          0   0.20640E-02  449297.7 3759454.9   200.8     3.49     21.40
3.25     YES
 L0000311          0   0.20640E-02  449298.1 3759500.9   201.3     3.49     21.40
3.25     YES
 L0000312          0   0.20640E-02  449298.5 3759546.9   201.8     3.49     21.40
3.25     YES
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:00:31

                                   PAGE   3
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN   ADJ_U*

                                   *** SOURCE IDs DEFINING SOURCE GROUPS
***

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

  ALL   L0000287   , L0000288   , L0000289   , L0000290   , L0000291   ,
L0000292   , L0000293   , L0000294   ,

             L0000295   , L0000296   , L0000297   , L0000298   , L0000299   ,
L0000300   , L0000301   , L0000302   ,

             L0000303   , L0000304   , L0000305   , L0000306   , L0000307   ,
L0000308   , L0000309   , L0000310   ,

             L0000311   , L0000312   ,

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:00:31

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 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN   ADJ_U*

                                   *** SOURCE IDs DEFINED AS URBAN SOURCES
***

 URBAN ID   URBAN POP   SOURCE IDs
 --------   ---------   ----------

```
         2189641.  L0000287   , L0000288   , L0000289   , L0000290   ,
L0000291   , L0000292   , L0000293   ,
 L0000294   ,

         L0000295   , L0000296   , L0000297   , L0000298   , L0000299   ,
L0000300   , L0000301   , L0000302   ,

         L0000303   , L0000304   , L0000305   , L0000306   , L0000307   ,
L0000308   , L0000309   , L0000310   ,

         L0000311   , L0000312   ,
```

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♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC                           ***         11/11/21
 *** AERMET - VERSION  16216 ***   ***
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```
 *** MODELOPTs:    RegDFAULT CONC  ELEV   URBAN  ADJ_U*


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


    ( 449368.0, 3758763.5,     192.6,    195.0,      0.0);        ( 449371.9,
3758763.5,    192.2,    195.0,      0.0);
    ( 449375.8, 3758763.5,     191.8,    195.0,      0.0);        ( 449379.6,
3758763.5,    191.4,    195.0,      0.0);
    ( 449383.5, 3758763.5,     191.2,    195.0,      0.0);        ( 449387.4,
3758763.5,    190.9,    195.0,      0.0);
    ( 449391.2, 3758763.5,     190.6,    190.6,      0.0);        ( 449395.1,
3758763.5,    190.4,    190.4,      0.0);
    ( 449399.0, 3758763.5,     190.1,    190.1,      0.0);        ( 449402.8,
3758763.5,    189.9,    189.9,      0.0);
    ( 449406.7, 3758763.5,     189.6,    189.6,      0.0);        ( 449410.6,
3758763.5,    189.4,    189.4,      0.0);
    ( 449414.5, 3758763.5,     189.3,    189.3,      0.0);        ( 449418.3,
3758763.5,    189.1,    189.1,      0.0);
    ( 449422.2, 3758763.5,     189.0,    189.0,      0.0);        ( 449426.1,
3758763.5,    188.9,    188.9,      0.0);
    ( 449429.9, 3758763.5,     188.7,    188.7,      0.0);        ( 449433.8,
3758763.5,    188.6,    188.6,      0.0);
    ( 449437.7, 3758763.5,     188.5,    188.5,      0.0);        ( 449441.5,
3758763.5,    188.4,    188.4,      0.0);
    ( 449445.4, 3758763.5,     188.3,    188.3,      0.0);        ( 449368.0,
3758777.6,    192.5,    195.0,      0.0);
    ( 449371.9, 3758777.6,     192.0,    195.0,      0.0);        ( 449375.8,
3758777.6,    191.5,    195.0,      0.0);
    ( 449379.6, 3758777.6,     191.0,    195.0,      0.0);        ( 449383.5,
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3758777.6,   190.8,   195.0,   0.0);
    (449387.4, 3758777.6,   190.5,   195.0,   0.0);   (449391.2,
3758777.6,   190.3,   195.0,   0.0);
    (449395.1, 3758777.6,   190.0,   195.0,   0.0);   (449399.0,
3758777.6,   189.7,   195.0,   0.0);
    (449402.8, 3758777.6,   189.5,   195.0,   0.0);   (449406.7,
3758777.6,   189.2,   195.0,   0.0);
    (449410.6, 3758777.6,   189.0,   189.0,   0.0);   (449414.5,
3758777.6,   188.9,   188.9,   0.0);
    (449418.3, 3758777.6,   188.8,   188.8,   0.0);   (449422.2,
3758777.6,   188.6,   188.6,   0.0);
    (449426.1, 3758777.6,   188.5,   188.5,   0.0);   (449429.9,
3758777.6,   188.4,   188.4,   0.0);
    (449433.8, 3758777.6,   188.2,   188.2,   0.0);   (449437.7,
3758777.6,   188.1,   188.1,   0.0);
    (449441.5, 3758777.6,   188.0,   188.0,   0.0);   (449445.4,
3758777.6,   188.0,   188.0,   0.0);
    (449368.0, 3758791.6,   192.6,   192.6,   0.0);   (449371.9,
3758791.6,   192.3,   195.0,   0.0);
    (449375.8, 3758791.6,   191.9,   195.0,   0.0);   (449379.6,
3758791.6,   191.5,   195.0,   0.0);
    (449383.5, 3758791.6,   191.2,   195.0,   0.0);   (449387.4,
3758791.6,   191.0,   191.0,   0.0);
    (449391.2, 3758791.6,   190.7,   190.7,   0.0);   (449395.1,
3758791.6,   190.5,   190.5,   0.0);
    (449399.0, 3758791.6,   190.2,   190.2,   0.0);   (449402.8,
3758791.6,   190.0,   190.0,   0.0);
    (449406.7, 3758791.6,   189.7,   189.7,   0.0);   (449410.6,
3758791.6,   189.5,   189.5,   0.0);
    (449414.5, 3758791.6,   189.3,   189.3,   0.0);   (449418.3,
3758791.6,   189.2,   189.2,   0.0);
    (449422.2, 3758791.6,   189.1,   189.1,   0.0);   (449426.1,
3758791.6,   189.0,   189.0,   0.0);
    (449429.9, 3758791.6,   188.8,   188.8,   0.0);   (449433.8,
3758791.6,   188.7,   188.7,   0.0);
    (449437.7, 3758791.6,   188.6,   188.6,   0.0);   (449441.5,
3758791.6,   188.5,   188.5,   0.0);
    (449445.4, 3758791.6,   188.4,   188.4,   0.0);   (449368.0,
3758805.6,   192.8,   192.8,   0.0);
    (449371.9, 3758805.6,   192.5,   192.5,   0.0);   (449375.8,
3758805.6,   192.2,   192.2,   0.0);
    (449379.6, 3758805.6,   192.0,   192.0,   0.0);   (449383.5,
3758805.6,   191.7,   191.7,   0.0);
    (449387.4, 3758805.6,   191.5,   191.5,   0.0);   (449391.2,
3758805.6,   191.2,   191.2,   0.0);
    (449395.1, 3758805.6,   190.9,   190.9,   0.0);   (449399.0,
3758805.6,   190.7,   190.7,   0.0);
    (449402.8, 3758805.6,   190.4,   190.4,   0.0);   (449406.7,
3758805.6,   190.2,   190.2,   0.0);
    (449410.6, 3758805.6,   189.9,   189.9,   0.0);   (449414.5,

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     ( 449418.3, 3758805.6,       189.7,       189.7,          0.0);                    ( 449422.2,
3758805.6,       189.6,       189.6,          0.0);
     ( 449426.1, 3758805.6,       189.4,       189.4,          0.0);                    ( 449429.9,
3758805.6,       189.3,       189.3,          0.0);
     ( 449433.8, 3758805.6,       189.2,       189.2,          0.0);                    ( 449437.7,
3758805.6,       189.0,       189.0,          0.0);
     ( 449441.5, 3758805.6,       188.9,       188.9,          0.0);                    ( 449445.4,
3758805.6,       188.8,       188.8,          0.0);
     ( 449368.0, 3758819.7,       192.8,       192.8,          0.0);                    ( 449371.9,
3758819.7,       192.5,       192.5,          0.0);
     ( 449375.8, 3758819.7,       192.2,       192.2,          0.0);                    ( 449379.6,
3758819.7,       192.0,       192.0,          0.0);
     ( 449383.5, 3758819.7,       191.7,       191.7,          0.0);                    ( 449387.4,
3758819.7,       191.5,       191.5,          0.0);
```

```
                              PAGE    6
 *** MODELOPTs:    RegDFAULT  CONC  ELEV   URBAN  ADJ_U*


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


     ( 449391.2, 3758819.7,       191.2,       191.2,          0.0);                    ( 449395.1,
3758819.7,       191.0,       191.0,          0.0);
     ( 449399.0, 3758819.7,       190.7,       190.7,          0.0);                    ( 449402.8,
3758819.7,       190.4,       190.4,          0.0);
     ( 449406.7, 3758819.7,       190.2,       190.2,          0.0);                    ( 449410.6,
3758819.7,       190.0,       190.0,          0.0);
     ( 449414.5, 3758819.7,       189.8,       189.8,          0.0);                    ( 449418.3,
3758819.7,       189.7,       189.7,          0.0);
     ( 449422.2, 3758819.7,       189.6,       189.6,          0.0);                    ( 449426.1,
3758819.7,       189.5,       189.5,          0.0);
     ( 449429.9, 3758819.7,       189.3,       189.3,          0.0);                    ( 449433.8,
3758819.7,       189.2,       189.2,          0.0);
     ( 449437.7, 3758819.7,       189.1,       189.1,          0.0);                    ( 449441.5,
3758819.7,       188.9,       188.9,          0.0);
     ( 449445.4, 3758819.7,       188.8,       188.8,          0.0);                    ( 449368.0,
3758833.7,       192.8,       192.8,          0.0);
     ( 449371.9, 3758833.7,       192.5,       192.5,          0.0);                    ( 449375.8,
3758833.7,       192.2,       192.2,          0.0);
     ( 449379.6, 3758833.7,       192.0,       192.0,          0.0);                    ( 449383.5,
3758833.7,       191.7,       191.7,          0.0);
     ( 449387.4, 3758833.7,       191.5,       191.5,          0.0);                    ( 449391.2,
3758833.7,       191.2,       191.2,          0.0);
     ( 449395.1, 3758833.7,       191.0,       191.0,          0.0);                    ( 449399.0,
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      (449402.8, 3758833.7,   190.4,   190.4,   0.0);   (449406.7,
3758833.7,   190.2,   190.2,   0.0);
      (449410.6, 3758833.7,   190.0,   190.0,   0.0);   (449414.5,
3758833.7,   189.8,   189.8,   0.0);
      (449418.3, 3758833.7,   189.7,   189.7,   0.0);   (449422.2,
3758833.7,   189.6,   189.6,   0.0);
      (449426.1, 3758833.7,   189.5,   189.5,   0.0);   (449429.9,
3758833.7,   189.3,   189.3,   0.0);
      (449433.8, 3758833.7,   189.2,   189.2,   0.0);   (449437.7,
3758833.7,   189.1,   189.1,   0.0);
      (449441.5, 3758833.7,   188.9,   188.9,   0.0);   (449445.4,
3758833.7,   188.8,   188.8,   0.0);
      (449368.0, 3758847.8,   193.4,   193.4,   0.0);   (449371.9,
3758847.8,   193.2,   193.2,   0.0);
      (449375.8, 3758847.8,   193.0,   193.0,   0.0);   (449379.6,
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      (449383.5, 3758847.8,   192.5,   192.5,   0.0);   (449387.4,
3758847.8,   192.2,   192.2,   0.0);
      (449391.2, 3758847.8,   192.0,   192.0,   0.0);   (449395.1,
3758847.8,   191.7,   191.7,   0.0);
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      (449406.7, 3758847.8,   191.0,   191.0,   0.0);   (449410.6,
3758847.8,   190.7,   190.7,   0.0);
      (449414.5, 3758847.8,   190.5,   190.5,   0.0);   (449418.3,
3758847.8,   190.4,   190.4,   0.0);
      (449422.2, 3758847.8,   190.2,   190.2,   0.0);   (449426.1,
3758847.8,   190.0,   190.0,   0.0);
      (449429.9, 3758847.8,   189.8,   189.8,   0.0);   (449433.8,
3758847.8,   189.6,   189.6,   0.0);
      (449437.7, 3758847.8,   189.5,   189.5,   0.0);   (449441.5,
3758847.8,   189.3,   189.3,   0.0);
      (449445.4, 3758847.8,   189.2,   189.2,   0.0);   (449368.0,
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      (449371.9, 3758861.8,   194.0,   194.0,   0.0);   (449375.8,
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      (449379.6, 3758861.8,   193.7,   193.7,   0.0);   (449383.5,
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      (449387.4, 3758861.8,   193.2,   193.2,   0.0);   (449391.2,
3758861.8,   192.9,   192.9,   0.0);
      (449395.1, 3758861.8,   192.7,   192.7,   0.0);   (449399.0,
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      (449402.8, 3758861.8,   192.1,   192.1,   0.0);   (449406.7,
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      (449410.6, 3758861.8,   191.6,   191.6,   0.0);   (449414.5,
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      (449418.3, 3758861.8,   191.2,   191.2,   0.0);   (449422.2,
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      (449426.1, 3758861.8,   190.7,   190.7,   0.0);   (449429.9,

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    ( 449433.8, 3758861.8,       190.2,       190.2,         0.0);         ( 449437.7,
3758861.8,       190.0,       190.0,         0.0);
    ( 449441.5, 3758861.8,       189.8,       189.8,         0.0);         ( 449445.4,
3758861.8,       189.7,       189.7,         0.0);
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    ( 449375.8, 3758875.8,       194.4,       194.4,         0.0);         ( 449379.6,
3758875.8,       194.3,       194.3,         0.0);
    ( 449383.5, 3758875.8,       194.1,       194.1,         0.0);         ( 449387.4,
3758875.8,       193.8,       193.8,         0.0);
    ( 449391.2, 3758875.8,       193.5,       193.5,         0.0);         ( 449395.1,
3758875.8,       193.3,       193.3,         0.0);
    ( 449399.0, 3758875.8,       193.0,       193.0,         0.0);         ( 449402.8,
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    ( 449406.7, 3758875.8,       192.5,       192.5,         0.0);         ( 449410.6,
3758875.8,       192.2,       192.2,         0.0);
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:00:31

                        PAGE   7
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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

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    ( 449422.2, 3758875.8,       191.5,       191.5,         0.0);         ( 449426.1,
3758875.8,       191.2,       191.2,         0.0);
    ( 449429.9, 3758875.8,       191.0,       191.0,         0.0);         ( 449433.8,
3758875.8,       190.7,       190.7,         0.0);
    ( 449437.7, 3758875.8,       190.4,       190.4,         0.0);         ( 449441.5,
3758875.8,       190.2,       190.2,         0.0);
    ( 449445.4, 3758875.8,       190.1,       190.1,         0.0);         ( 449368.0,
3758889.9,       195.2,       195.2,         0.0);
    ( 449371.9, 3758889.9,       195.0,       195.0,         0.0);         ( 449375.8,
3758889.9,       194.9,       194.9,         0.0);
    ( 449379.6, 3758889.9,       194.8,       194.8,         0.0);         ( 449383.5,
3758889.9,       194.5,       194.5,         0.0);
    ( 449387.4, 3758889.9,       194.3,       194.3,         0.0);         ( 449391.2,
3758889.9,       194.0,       194.0,         0.0);
    ( 449395.1, 3758889.9,       193.7,       193.7,         0.0);         ( 449399.0,
3758889.9,       193.5,       193.5,         0.0);
    ( 449402.8, 3758889.9,       193.2,       193.2,         0.0);         ( 449406.7,
3758889.9,       193.0,       193.0,         0.0);
    ( 449410.6, 3758889.9,       192.7,       192.7,         0.0);         ( 449414.5,
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(449426.1, 3758889.9,   191.7,   191.7,   0.0);   (449429.9,
3758889.9,   191.4,   191.4,   0.0);
(449433.8, 3758889.9,   191.2,   191.2,   0.0);   (449437.7,
3758889.9,   190.9,   190.9,   0.0);
(449441.5, 3758889.9,   190.7,   190.7,   0.0);   (449445.4,
3758889.9,   190.6,   190.6,   0.0);
(449368.0, 3758903.9,   195.8,   195.8,   0.0);   (449371.9,
3758903.9,   195.7,   195.7,   0.0);
(449375.8, 3758903.9,   195.6,   195.6,   0.0);   (449379.6,
3758903.9,   195.5,   195.5,   0.0);
(449383.5, 3758903.9,   195.2,   195.2,   0.0);   (449387.4,
3758903.9,   195.0,   195.0,   0.0);
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(449399.0, 3758903.9,   194.2,   194.2,   0.0);   (449402.8,
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(449422.2, 3758903.9,   192.6,   192.6,   0.0);   (449426.1,
3758903.9,   192.3,   192.3,   0.0);
(449429.9, 3758903.9,   192.0,   192.0,   0.0);   (449433.8,
3758903.9,   191.7,   195.0,   0.0);
(449437.7, 3758903.9,   191.4,   195.0,   0.0);   (449441.5,
3758903.9,   191.2,   191.2,   0.0);
(449445.4, 3758903.9,   191.1,   191.1,   0.0);   (449368.0,
3758918.0,   196.6,   196.6,   0.0);
(449371.9, 3758918.0,   196.5,   196.5,   0.0);   (449375.8,
3758918.0,   196.5,   196.5,   0.0);
(449379.6, 3758918.0,   196.4,   196.4,   0.0);   (449383.5,
3758918.0,   196.2,   196.2,   0.0);
(449387.4, 3758918.0,   195.9,   195.9,   0.0);   (449391.2,
3758918.0,   195.7,   195.7,   0.0);
(449395.1, 3758918.0,   195.4,   195.4,   0.0);   (449399.0,
3758918.0,   195.1,   195.1,   0.0);
(449402.8, 3758918.0,   194.9,   194.9,   0.0);   (449406.7,
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(449410.6, 3758918.0,   194.3,   194.3,   0.0);   (449414.5,
3758918.0,   194.0,   195.0,   0.0);
(449418.3, 3758918.0,   193.6,   195.0,   0.0);   (449422.2,
3758918.0,   193.3,   195.0,   0.0);
(449426.1, 3758918.0,   192.9,   195.0,   0.0);   (449429.9,
3758918.0,   192.6,   195.0,   0.0);
(449433.8, 3758918.0,   192.2,   195.0,   0.0);   (449437.7,
3758918.0,   191.9,   195.0,   0.0);
(449441.5, 3758918.0,   191.7,   195.0,   0.0);   (449445.4,

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    ( 449368.0, 3758932.0,      197.2,       197.2,        0.0);              ( 449371.9,
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    ( 449375.8, 3758932.0,      197.2,       197.2,        0.0);              ( 449379.6,
3758932.0,      197.2,       197.2,        0.0);
    ( 449383.5, 3758932.0,      196.9,       196.9,        0.0);              ( 449387.4,
3758932.0,      196.7,       196.7,        0.0);
    ( 449391.2, 3758932.0,      196.4,       196.4,        0.0);              ( 449395.1,
3758932.0,      196.2,       196.2,        0.0);
    ( 449399.0, 3758932.0,      195.9,       195.9,        0.0);              ( 449402.8,
3758932.0,      195.6,       195.6,        0.0);
    ( 449406.7, 3758932.0,      195.4,       195.4,        0.0);              ( 449410.6,
3758932.0,      195.1,       195.1,        0.0);
    ( 449414.5, 3758932.0,      194.7,       194.7,        0.0);              ( 449418.3,
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    ( 449422.2, 3758932.0,      193.9,       193.9,        0.0);              ( 449426.1,
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    ( 449429.9, 3758932.0,      193.1,       193.1,        0.0);              ( 449433.8,
3758932.0,      192.8,       192.8,        0.0);
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⬆ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                       ***   12:00:31

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

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    ( 449445.4, 3758932.0,      192.0,       192.0,        0.0);              ( 449368.0,
3758946.0,      197.7,       197.7,        0.0);
    ( 449371.9, 3758946.0,      197.7,       197.7,        0.0);              ( 449375.8,
3758946.0,      197.7,       197.7,        0.0);
    ( 449379.6, 3758946.0,      197.7,       197.7,        0.0);              ( 449383.5,
3758946.0,      197.4,       197.4,        0.0);
    ( 449387.4, 3758946.0,      197.1,       197.1,        0.0);              ( 449391.2,
3758946.0,      196.9,       196.9,        0.0);
    ( 449395.1, 3758946.0,      196.6,       196.6,        0.0);              ( 449399.0,
3758946.0,      196.4,       196.4,        0.0);
    ( 449402.8, 3758946.0,      196.1,       196.1,        0.0);              ( 449406.7,
3758946.0,      195.8,       195.8,        0.0);
    ( 449410.6, 3758946.0,      195.5,       195.5,        0.0);              ( 449414.5,
3758946.0,      195.2,       195.2,        0.0);
    ( 449418.3, 3758946.0,      194.8,       194.8,        0.0);              ( 449422.2,
3758946.0,      194.4,       194.4,        0.0);
    ( 449426.1, 3758946.0,      194.0,       196.0,        0.0);              ( 449429.9,
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(449441.5, 3758946.0, 192.5, 196.0, 0.0); (449445.4,
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(449375.8, 3758960.1, 198.0, 198.0, 0.0); (449379.6,
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(449399.0, 3758960.1, 196.8, 196.8, 0.0); (449402.8,
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(449429.9, 3758960.1, 194.1, 194.1, 0.0); (449433.8,
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(449437.7, 3758960.1, 193.3, 193.3, 0.0); (449441.5,
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(449387.4, 3758974.1, 197.6, 197.6, 0.0); (449391.2,
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(449402.8, 3758974.1, 196.9, 196.9, 0.0); (449406.7,
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(449426.1, 3758974.1, 194.9, 197.0, 0.0); (449429.9,
3758974.1, 194.5, 197.0, 0.0);
(449433.8, 3758974.1, 194.2, 197.0, 0.0); (449437.7,
3758974.1, 193.8, 197.0, 0.0);
(449441.5, 3758974.1, 193.4, 197.0, 0.0); (449445.4,
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(449375.8, 3758988.2, 198.1, 198.1, 0.0); (449379.6,

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    ( 449383.5, 3758988.2,      197.9,      197.9,      0.0);          ( 449387.4,
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    ( 449391.2, 3758988.2,      197.6,      197.6,      0.0);          ( 449395.1,
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    ( 449399.0, 3758988.2,      197.4,      197.4,      0.0);          ( 449402.8,
3758988.2,      197.2,      197.2,      0.0);
    ( 449406.7, 3758988.2,      197.1,      197.1,      0.0);          ( 449410.6,
3758988.2,      196.9,      196.9,      0.0);
    ( 449414.5, 3758988.2,      196.5,      196.5,      0.0);          ( 449418.3,
3758988.2,      196.1,      196.1,      0.0);
    ( 449422.2, 3758988.2,      195.8,      195.8,      0.0);          ( 449426.1,
3758988.2,      195.4,      195.4,      0.0);
    ( 449429.9, 3758988.2,      195.0,      195.0,      0.0);          ( 449433.8,
3758988.2,      194.6,      194.6,      0.0);
    ( 449437.7, 3758988.2,      194.2,      194.2,      0.0);          ( 449441.5,
3758988.2,      193.9,      193.9,      0.0);
    ( 449445.4, 3758988.2,      193.5,      193.5,      0.0);          ( 449368.0,
3759002.2,      198.5,      198.5,      0.0);
    ( 449371.9, 3759002.2,      198.5,      198.5,      0.0);          ( 449375.8,
3759002.2,      198.5,      198.5,      0.0);
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                       ***   12:00:31

                       PAGE   9
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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

```
    ( 449379.6, 3759002.2,      198.5,      198.5,      0.0);          ( 449383.5,
3759002.2,      198.3,      198.3,      0.0);
    ( 449387.4, 3759002.2,      198.1,      198.1,      0.0);          ( 449391.2,
3759002.2,      197.9,      197.9,      0.0);
    ( 449395.1, 3759002.2,      197.7,      197.7,      0.0);          ( 449399.0,
3759002.2,      197.5,      197.5,      0.0);
    ( 449402.8, 3759002.2,      197.3,      197.3,      0.0);          ( 449406.7,
3759002.2,      197.1,      197.1,      0.0);
    ( 449410.6, 3759002.2,      196.9,      196.9,      0.0);          ( 449414.5,
3759002.2,      196.6,      196.6,      0.0);
    ( 449418.3, 3759002.2,      196.3,      196.3,      0.0);          ( 449422.2,
3759002.2,      196.0,      196.0,      0.0);
    ( 449426.1, 3759002.2,      195.6,      195.6,      0.0);          ( 449429.9,
3759002.2,      195.3,      195.3,      0.0);
    ( 449433.8, 3759002.2,      195.0,      195.0,      0.0);          ( 449437.7,
3759002.2,      194.7,      194.7,      0.0);
    ( 449441.5, 3759002.2,      194.3,      194.3,      0.0);          ( 449445.4,
```

3759002.2,   193.9,   193.9,   0.0);
     (449368.0, 3759016.2,   199.0,   199.0,   0.0);   (449371.9,
3759016.2,   199.0,   199.0,   0.0);
     (449375.8, 3759016.2,   199.0,   199.0,   0.0);   (449379.6,
3759016.2,   199.0,   199.0,   0.0);
     (449383.5, 3759016.2,   198.7,   198.7,   0.0);   (449387.4,
3759016.2,   198.5,   198.5,   0.0);
     (449391.2, 3759016.2,   198.2,   198.2,   0.0);   (449395.1,
3759016.2,   198.0,   198.0,   0.0);
     (449399.0, 3759016.2,   197.7,   197.7,   0.0);   (449402.8,
3759016.2,   197.4,   197.4,   0.0);
     (449406.7, 3759016.2,   197.2,   197.2,   0.0);   (449410.6,
3759016.2,   196.9,   196.9,   0.0);
     (449414.5, 3759016.2,   196.7,   196.7,   0.0);   (449418.3,
3759016.2,   196.4,   196.4,   0.0);
     (449422.2, 3759016.2,   196.2,   196.2,   0.0);   (449426.1,
3759016.2,   195.9,   195.9,   0.0);
     (449429.9, 3759016.2,   195.6,   195.6,   0.0);   (449433.8,
3759016.2,   195.4,   195.4,   0.0);
     (449437.7, 3759016.2,   195.1,   195.1,   0.0);   (449441.5,
3759016.2,   194.8,   195.0,   0.0);
     (449445.4, 3759016.2,   194.4,   195.0,   0.0);   (449368.0,
3759030.3,   198.5,   198.5,   0.0);
     (449371.9, 3759030.3,   198.5,   198.5,   0.0);   (449375.8,
3759030.3,   198.5,   198.5,   0.0);
     (449379.6, 3759030.3,   198.5,   198.5,   0.0);   (449383.5,
3759030.3,   198.3,   198.3,   0.0);
     (449387.4, 3759030.3,   198.0,   198.0,   0.0);   (449391.2,
3759030.3,   197.8,   197.8,   0.0);
     (449395.1, 3759030.3,   197.5,   197.5,   0.0);   (449399.0,
3759030.3,   197.2,   197.2,   0.0);
     (449402.8, 3759030.3,   197.0,   197.0,   0.0);   (449406.7,
3759030.3,   196.7,   196.7,   0.0);
     (449410.6, 3759030.3,   196.5,   196.5,   0.0);   (449414.5,
3759030.3,   196.3,   196.3,   0.0);
     (449418.3, 3759030.3,   196.1,   196.1,   0.0);   (449422.2,
3759030.3,   195.9,   195.9,   0.0);
     (449426.1, 3759030.3,   195.7,   195.7,   0.0);   (449429.9,
3759030.3,   195.5,   195.5,   0.0);
     (449433.8, 3759030.3,   195.3,   195.3,   0.0);   (449437.7,
3759030.3,   195.1,   195.1,   0.0);
     (449441.5, 3759030.3,   194.8,   194.8,   0.0);   (449445.4,
3759030.3,   194.4,   194.4,   0.0);
     (449368.0, 3759044.3,   198.1,   198.1,   0.0);   (449371.9,
3759044.3,   198.1,   198.1,   0.0);
     (449375.8, 3759044.3,   198.1,   198.1,   0.0);   (449379.6,
3759044.3,   198.1,   198.1,   0.0);
     (449383.5, 3759044.3,   197.8,   197.8,   0.0);   (449387.4,
3759044.3,   197.5,   197.5,   0.0);
     (449391.2, 3759044.3,   197.3,   197.3,   0.0);   (449395.1,

```
3759044.3,      197.0,      197.0,         0.0);
    ( 449399.0, 3759044.3,      196.8,      196.8,         0.0);         ( 449402.8,
3759044.3,      196.5,      196.5,         0.0);
    ( 449406.7, 3759044.3,      196.2,      196.2,         0.0);         ( 449410.6,
3759044.3,      196.0,      196.0,         0.0);
    ( 449414.5, 3759044.3,      195.9,      195.9,         0.0);         ( 449418.3,
3759044.3,      195.8,      195.8,         0.0);
    ( 449422.2, 3759044.3,      195.6,      195.6,         0.0);         ( 449426.1,
3759044.3,      195.5,      195.5,         0.0);
    ( 449429.9, 3759044.3,      195.3,      195.3,         0.0);         ( 449433.8,
3759044.3,      195.2,      195.2,         0.0);
    ( 449437.7, 3759044.3,      195.1,      195.1,         0.0);         ( 449441.5,
3759044.3,      194.8,      194.8,         0.0);
    ( 449445.4, 3759044.3,      194.4,      194.4,         0.0);
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   12:00:31

                          PAGE 10
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN 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

          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 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   12:00:31

                                      PAGE 11
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

   Surface file: ..\KRAL_V9_ADJU\KRAL_V9.SFC
                Met Version: 16216
   Profile file: ..\KRAL_V9_ADJU\KRAL_V9.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:   3171   Upper air station no.:   3190
                Name: UNKNOWN   Name: UNKNOWN

                Year: 2012   Year: 2012

 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
- -
- - - - - - - - - - - - - - - - - - - -
 12 01 01   1 01 -25.6 0.266 -9.000 -9.000 -999. 330.   77.9 0.15   2.40
1.00   2.93   55.   10.1 288.1   2.0
 12 01 01   1 02 -26.8 0.277 -9.000 -9.000 -999. 351.   84.7 0.15   2.40
1.00   3.05   55.   10.1 287.0   2.0
 12 01 01   1 03 -21.5 0.221 -9.000 -9.000 -999. 250.   53.5 0.15   2.40
1.00   2.45   74.   10.1 284.2   2.0
 12 01 01   1 04 -22.0 0.227 -9.000 -9.000 -999. 260.   56.8 0.15   2.40
1.00   2.52   77.   10.1 285.9   2.0
 12 01 01   1 05 -20.0 0.206 -9.000 -9.000 -999. 225.   46.8 0.15   2.40
1.00   2.30   80.   10.1 285.4   2.0
 12 01 01   1 06 -14.4 0.171 -9.000 -9.000 -999. 170.   32.1 0.15   2.40
1.00   1.93   79.   10.1 287.0   2.0
 12 01 01   1 07 -14.9 0.174 -9.000 -9.000 -999. 174.   33.2 0.15   2.40
1.00   1.96   77.   10.1 284.2   2.0
 12 01 01   1 08 -11.9 0.169 -9.000 -9.000 -999. 167.   36.1 0.15   2.40
0.53   1.89   77.   10.1 288.1   2.0
 12 01 01   1 09   40.4 0.234 0.359 0.006   40. 272.   -28.1 0.15   2.40

```
0.31    2.10   81.   10.1  289.2    2.0
 12 01 01   1 10  112.6  0.246  0.742  0.005  129.  293.    -11.8  0.15   2.40
0.24    1.99  101.   10.1  296.4    2.0
 12 01 01   1 11  161.0  0.402  1.188  0.005  369.  611.    -35.6  0.15   2.40
0.21    3.68   78.   10.1  298.8    2.0
 12 01 01   1 12  184.7  0.337  1.516  0.005  668.  473.    -18.4  0.15   2.40
0.20    2.89   68.   10.1  300.4    2.0
 12 01 01   1 13  183.9  0.310  1.809  0.005 1139.  414.    -14.2  0.15   2.40
0.20    2.57   64.   10.1  302.5    2.0
 12 01 01   1 14  156.6  0.374  1.852  0.005 1434.  549.    -29.5  0.15   2.40
0.22    3.37   63.   10.1  303.1    2.0
 12 01 01   1 15  104.3  0.382  1.658  0.005 1546.  567.    -47.2  0.15   2.40
0.25    3.59   62.   10.1  302.5    2.0
 12 01 01   1 16   31.8  0.374  1.123  0.005 1573.  550.   -145.8  0.15   2.40
0.34    3.76   69.   10.1  300.9    2.0
 12 01 01   1 17  -23.3  0.276 -9.000 -9.000 -999.  354.     84.0  0.15   2.40
0.62    3.03   59.   10.1  297.5    2.0
 12 01 01   1 18  -21.5  0.229 -9.000 -9.000 -999.  264.     57.8  0.15   2.40
1.00    2.54   54.   10.1  295.4    2.0
 12 01 01   1 19  -19.3  0.204 -9.000 -9.000 -999.  221.     45.6  0.15   2.40
1.00    2.27   79.   10.1  292.0    2.0
 12 01 01   1 20  -20.7  0.218 -9.000 -9.000 -999.  244.     52.2  0.15   2.40
1.00    2.42   79.   10.1  292.5    2.0
 12 01 01   1 21  -19.7  0.206 -9.000 -9.000 -999.  225.     46.9  0.15   2.40
1.00    2.30   95.   10.1  290.9    2.0
 12 01 01   1 22  -17.6  0.190 -9.000 -9.000 -999.  199.     39.8  0.15   2.40
1.00    2.13   78.   10.1  290.4    2.0
 12 01 01   1 23  -20.3  0.211 -9.000 -9.000 -999.  233.     49.0  0.15   2.40
1.00    2.35   52.   10.1  289.2    2.0
 12 01 01   1 24  -16.4  0.183 -9.000 -9.000 -999.  189.     37.0  0.15   2.40
1.00    2.06   75.   10.1  288.8    2.0


  First hour of profile data
 YR MO DY HR HEIGHT F  WDIR    WSPD AMB_TMP sigmaA  sigmaW  sigmaV
 12 01 01 01   10.1 1   55.    2.93   288.2   99.0  -99.00  -99.00

 F indicates top of profile (=1) or below (=0)
⬥ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC                            ***           11/11/21
 *** AERMET - VERSION  16216 ***   ***
                        ***           12:00:31

                            PAGE  12
 *** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                            *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL       ***
                            INCLUDING SOURCE(S):    L0000287    , L0000288
 , L0000289    , L0000290    , L0000291    ,
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```
                 L0000292    , L0000293    , L0000294    , L0000295    , L0000296
, L0000297    , L0000298    , L0000299    ,
                 L0000300    , L0000301    , L0000302    , L0000303    , L0000304
, L0000305    , L0000306    , L0000307    ,
                 L0000308    , L0000309    , L0000310    , L0000311    , L0000312
,
```

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                              ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                    **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
        449368.02 3758763.53   2.22782b (16120624)   449371.89
3758763.53   2.13311b (16120624)
        449375.76 3758763.53   2.04457b (16120624)   449379.63
3758763.53   1.96234b (16120624)
        449383.50 3758763.53   1.88907b (16120624)   449387.37
3758763.53   1.82106b (16120624)
        449391.24 3758763.53   1.75730b (16120624)   449395.11
3758763.53   1.69762b (16120624)
        449398.98 3758763.53   1.64162b (16120624)   449402.85
3758763.53   1.58898b (16120624)
        449406.72 3758763.53   1.53957b (16120624)   449410.59
3758763.53   1.49351b (16120624)
        449414.46 3758763.53   1.45157b (16120624)   449418.33
3758763.53   1.41181b (16120624)
        449422.20 3758763.53   1.37405b (16120624)   449426.07
3758763.53   1.33814b (16120624)
        449429.94 3758763.53   1.30395b (16120624)   449433.81
3758763.53   1.27135b (16120624)
        449437.68 3758763.53   1.24024b (16120624)   449441.55
3758763.53   1.21118b (16120624)
        449445.42 3758763.53   1.18362b (16120624)   449368.02
3758777.57   2.22943b (16120624)
        449371.89 3758777.57   2.13134b (16120624)   449375.76
3758777.57   2.03961b (16120624)
        449379.63 3758777.57   1.95475b (16120624)   449383.50
3758777.57   1.88179b (16120624)
        449387.37 3758777.57   1.81384b (16120624)   449391.24
3758777.57   1.75066b (16120624)
        449395.11 3758777.57   1.69129b (16120624)   449398.98
3758777.57   1.63561b (16120624)
        449402.85 3758777.57   1.58327b (16120624)   449406.72
3758777.57   1.53397b (16120624)
        449410.59 3758777.57   1.48823b (16120624)   449414.46
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3758777.57          1.44684b (16120624)
     449418.33   3758777.57          1.40741b (16120624)                449422.20
3758777.57          1.36995b (16120624)
     449426.07   3758777.57          1.33433b (16120624)                449429.94
3758777.57          1.30040b (16120624)
     449433.81   3758777.57          1.26804b (16120624)                449437.68
3758777.57          1.23715b (16120624)
     449441.55   3758777.57          1.20860b (16120624)                449445.42
3758777.57          1.18192b (16120624)
     449368.02   3758791.61          2.23473b (16120624)                449371.89
3758791.61          2.13940b (16120624)
     449375.76   3758791.61          2.05095b (16120624)                449379.63
3758791.61          1.96877b (16120624)
     449383.50   3758791.61          1.89535b (16120624)                449387.37
3758791.61          1.82697b (16120624)
     449391.24   3758791.61          1.76311b (16120624)                449395.11
3758791.61          1.70356b (16120624)
     449398.98   3758791.61          1.64749b (16120624)                449402.85
3758791.61          1.59477b (16120624)
     449406.72   3758791.61          1.54512b (16120624)                449410.59
3758791.61          1.49903b (16120624)
     449414.46   3758791.61          1.45710b (16120624)                449418.33
3758791.61          1.41734b (16120624)
     449422.20   3758791.61          1.37975b (16120624)                449426.07
3758791.61          1.34383b (16120624)
     449429.94   3758791.61          1.30963b (16120624)                449433.81
3758791.61          1.27702b (16120624)
     449437.68   3758791.61          1.24589b (16120624)                449441.55
3758791.61          1.21654b (16120624)
     449445.42   3758791.61          1.18899b (16120624)                449368.02
3758805.65          2.24016b (16120624)
     449371.89   3758805.65          2.14717b (16120624)                449375.76
3758805.65          2.06142b (16120624)
     449379.63   3758805.65          1.98198b (16120624)                449383.50
3758805.65          1.90814b (16120624)
     449387.37   3758805.65          1.83936b (16120624)                449391.24
3758805.65          1.77512b (16120624)
     449395.11   3758805.65          1.71499b (16120624)                449398.98
3758805.65          1.65877b (16120624)
     449402.85   3758805.65          1.60572b (16120624)                449406.72
3758805.65          1.55575b (16120624)
     449410.59   3758805.65          1.50934b (16120624)                449414.46
3758805.65          1.46707b (16120624)
     449418.33   3758805.65          1.42699b (16120624)                449422.20
3758805.65          1.38894b (16120624)
     449426.07   3758805.65          1.35275b (16120624)                449429.94
3758805.65          1.31845b (16120624)
```

```
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                         *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL       ***
                             INCLUDING SOURCE(S):    L0000287    , L0000288
 , L0000289    , L0000290    , L0000291     ,
                  L0000292    , L0000293    , L0000294    , L0000295    , L0000296
 , L0000297    , L0000298    , L0000299     ,
                  L0000300    , L0000301    , L0000302    , L0000303    , L0000304
 , L0000305    , L0000306    , L0000307     ,
                  L0000308    , L0000309    , L0000310    , L0000311    , L0000312
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                             ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                 **


    X-COORD (M)  Y-COORD (M)        CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)       CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
       449433.81  3758805.65     1.28559b (16120624)             449437.68
 3758805.65      1.25423b (16120624)
       449441.55  3758805.65     1.22425b (16120624)             449445.42
 3758805.65      1.19557b (16120624)
       449368.02  3758819.69     2.24189b (16120624)             449371.89
 3758819.69      2.14893b (16120624)
       449375.76  3758819.69     2.06328b (16120624)             449379.63
 3758819.69      1.98371b (16120624)
       449383.50  3758819.69     1.90980b (16120624)             449387.37
 3758819.69      1.84096b (16120624)
       449391.24  3758819.69     1.77668b (16120624)             449395.11
 3758819.69      1.71674b (16120624)
       449398.98  3758819.69     1.66030b (16120624)             449402.85
 3758819.69      1.60724b (16120624)
       449406.72  3758819.69     1.55727b (16120624)             449410.59
 3758819.69      1.51087b (16120624)
       449414.46  3758819.69     1.46863b (16120624)             449418.33
 3758819.69      1.42857b (16120624)
       449422.20  3758819.69     1.39054b (16120624)             449426.07
 3758819.69      1.35453b (16120624)
       449429.94  3758819.69     1.32009b (16120624)             449433.81
 3758819.69      1.28724b (16120624)
       449437.68  3758819.69     1.25589b (16120624)             449441.55
 3758819.69      1.22592b (16120624)
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     449445.42   3758819.69        1.19725b (16120624)              449368.02
3758833.73        2.24301b (16120624)
     449371.89   3758833.73        2.14989b (16120624)              449375.76
3758833.73        2.06416b (16120624)
     449379.63   3758833.73        1.98454b (16120624)              449383.50
3758833.73        1.91059b (16120624)
     449387.37   3758833.73        1.84173b (16120624)              449391.24
3758833.73        1.77744b (16120624)
     449395.11   3758833.73        1.71750b (16120624)              449398.98
3758833.73        1.66106b (16120624)
     449402.85   3758833.73        1.60801b (16120624)              449406.72
3758833.73        1.55805b (16120624)
     449410.59   3758833.73        1.51167b (16120624)              449414.46
3758833.73        1.46948b (16120624)
     449418.33   3758833.73        1.42946b (16120624)              449422.20
3758833.73        1.39147b (16120624)
     449426.07   3758833.73        1.35550b (16120624)              449429.94
3758833.73        1.32108b (16120624)
     449433.81   3758833.73        1.28827b (16120624)              449437.68
3758833.73        1.25694b (16120624)
     449441.55   3758833.73        1.22700b (16120624)              449445.42
3758833.73        1.19835b (16120624)
     449368.02   3758847.77        2.25997b (16120624)              449371.89
3758847.77        2.16765b (16120624)
     449375.76   3758847.77        2.08250b (16120624)              449379.63
3758847.77        2.00349b (16120624)
     449383.50   3758847.77        1.92904b (16120624)              449387.37
3758847.77        1.85985b (16120624)
     449391.24   3758847.77        1.79501b (16120624)              449395.11
3758847.77        1.73429b (16120624)
     449398.98   3758847.77        1.67732b (16120624)              449402.85
3758847.77        1.62375b (16120624)
     449406.72   3758847.77        1.57348b (16120624)              449410.59
3758847.77        1.52622b (16120624)
     449414.46   3758847.77        1.48258b (16120624)              449418.33
3758847.77        1.44142b (16120624)
     449422.20   3758847.77        1.40219b (16120624)              449426.07
3758847.77        1.36491b (16120624)
     449429.94   3758847.77        1.32944b (16120624)              449433.81
3758847.77        1.29564b (16120624)
     449437.68   3758847.77        1.26340b (16120624)              449441.55
3758847.77        1.23301b (16120624)
     449445.42   3758847.77        1.20420b (16120624)              449368.02
3758861.81        2.27250b (16120624)
     449371.89   3758861.81        2.18236b (16120624)              449375.76
3758861.81        2.09822b (16120624)
     449379.63   3758861.81        2.02266b (16120624)              449383.50
3758861.81        1.94842b (16120624)
     449387.37   3758861.81        1.87882b (16120624)              449391.24
3758861.81        1.81376b (16120624)
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     449395.11   3758861.81        1.75285b (16120624)              449398.98
3758861.81          1.69551b (16120624)
     449402.85   3758861.81        1.64152b (16120624)              449406.72
3758861.81          1.59063b (16120624)
     449410.59   3758861.81        1.54272b (16120624)              449414.46
3758861.81          1.49758b (16120624)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:00:31

                             PAGE 14
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                          *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                               INCLUDING SOURCE(S):   L0000287   , L0000288
, L0000289   , L0000290   , L0000291   ,
                    L0000292   , L0000293   , L0000294   , L0000295   , L0000296
, L0000297   , L0000298   , L0000299   ,
                    L0000300   , L0000301   , L0000302   , L0000303   , L0000304
, L0000305   , L0000306   , L0000307   ,
                    L0000308   , L0000309   , L0000310   , L0000311   , L0000312
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                          ** CONC OF PM_2.5   IN MICROGRAMS/M**3
             **

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
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     449418.33   3758861.81        1.45481b (16120624)              449422.20
3758861.81          1.41424b (16120624)
     449426.07   3758861.81        1.37584b (16120624)              449429.94
3758861.81          1.33916b (16120624)
     449433.81   3758861.81        1.30423b (16120624)              449437.68
3758861.81          1.27091b (16120624)
     449441.55   3758861.81        1.23990b (16120624)              449445.42
3758861.81          1.21090b (16120624)
     449368.02   3758875.85        2.27672b (16120624)              449371.89
3758875.85          2.18734b (16120624)
     449375.76   3758875.85        2.10422b (16120624)              449379.63
3758875.85          2.02690b (16120624)
     449383.50   3758875.85        1.95646b (16120624)              449387.37
3758875.85          1.88742b (16120624)
     449391.24   3758875.85        1.82476b (16120624)              449395.11
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3758875.85          1.76368b (16120624)
      449398.98   3758875.85          1.70640b (16120624)                449402.85
3758875.85          1.65226b (16120624)
      449406.72   3758875.85          1.60120b (16120624)                449410.59
3758875.85          1.55292b (16120624)
      449414.46   3758875.85          1.50725b (16120624)                449418.33
3758875.85          1.46410b (16120624)
      449422.20   3758875.85          1.42301b (16120624)                449426.07
3758875.85          1.38396b (16120624)
      449429.94   3758875.85          1.34680b (16120624)                449433.81
3758875.85          1.31140b (16120624)
      449437.68   3758875.85          1.27777b (16120624)                449441.55
3758875.85          1.24644b (16120624)
      449445.42   3758875.85          1.21725b (16120624)                449368.02
3758889.89          2.27775b (16120624)
      449371.89   3758889.89          2.18861b (16120624)                449375.76
3758889.89          2.10587b (16120624)
      449379.63   3758889.89          2.03214b (16120624)                449383.50
3758889.89          1.96027b (16120624)
      449387.37   3758889.89          1.89431b (16120624)                449391.24
3758889.89          1.83001b (16120624)
      449395.11   3758889.89          1.77124b (16120624)                449398.98
3758889.89          1.71385b (16120624)
      449402.85   3758889.89          1.65978b (16120624)                449406.72
3758889.89          1.60864b (16120624)
      449410.59   3758889.89          1.56025b (16120624)                449414.46
3758889.89          1.51445b (16120624)
      449418.33   3758889.89          1.47102b (16120624)                449422.20
3758889.89          1.42994b (16120624)
      449426.07   3758889.89          1.39074b (16120624)                449429.94
3758889.89          1.35344b (16120624)
      449433.81   3758889.89          1.31789b (16120624)                449437.68
3758889.89          1.28398b (16120624)
      449441.55   3758889.89          1.25262b (16120624)                449445.42
3758889.89          1.22324b (16120624)
      449368.02   3758903.93          2.27599b (16120624)                449371.89
3758903.93          2.18711b (16120624)
      449375.76   3758903.93          2.10501b (16120624)                449379.63
3758903.93          2.02875b (16120624)
      449383.50   3758903.93          1.96154b (16120624)                449387.37
3758903.93          1.89499b (16120624)
      449391.24   3758903.93          1.83487b (16120624)                449395.11
3758903.93          1.77538b (16120624)
      449398.98   3758903.93          1.72112b (16120624)                449402.85
3758903.93          1.66747b (16120624)
      449406.72   3758903.93          1.61852b (16120624)                449410.59
3758903.93          1.57008b (16120624)
      449414.46   3758903.93          1.52384b (16120624)                449418.33
3758903.93          1.47995b (16120624)
      449422.20   3758903.93          1.43822b (16120624)                449426.07
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      3758903.93          1.39851b (16120624)
         449429.94   3758903.93          1.36069b (16120624)                 449433.81
3758903.93          1.32462b (16120624)
         449437.68   3758903.93          1.29020b (16120624)                 449441.55
3758903.93          1.25830b (16120624)
         449445.42   3758903.93          1.22888b (16120624)                 449368.02
3758917.97          2.26308b (16120624)
         449371.89   3758917.97          2.17457b (16120624)                 449375.76
3758917.97          2.09263b (16120624)
         449379.63   3758917.97          2.01689b (16120624)                 449383.50
3758917.97          1.95348b (16120624)
         449387.37   3758917.97          1.88882b (16120624)                 449391.24
3758917.97          1.83174b (16120624)
         449395.11   3758917.97          1.77398b (16120624)                 449398.98
3758917.97          1.72251b (16120624)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   12:00:31

                                PAGE 15
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                              *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                 INCLUDING SOURCE(S):   L0000287   , L0000288
 , L0000289   , L0000290   , L0000291   ,
                   L0000292   , L0000293   , L0000294   , L0000295   , L0000296
 , L0000297   , L0000298   , L0000299   ,
                   L0000300   , L0000301   , L0000302   , L0000303   , L0000304
 , L0000305   , L0000306   , L0000307   ,
                   L0000308   , L0000309   , L0000310   , L0000311   , L0000312
 ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                            ** CONC OF PM_2.5   IN MICROGRAMS/M**3
             **

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
         449402.85   3758917.97   1.67036b (16120624)   449406.72
3758917.97   1.62338b (16120624)
         449410.59   3758917.97   1.57575b (16120624)   449414.46
3758917.97   1.53190b (16120624)
         449418.33   3758917.97   1.48957b (16120624)   449422.20
3758917.97   1.44724b (16120624)

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     449426.07   3758917.97        1.40683b (16120624)              449429.94
3758917.97          1.36811b (16120624)
     449433.81   3758917.97        1.33125b (16120624)              449437.68
3758917.97          1.29601b (16120624)
     449441.55   3758917.97        1.26373b (16120624)              449445.42
3758917.97          1.23403b (16120624)
     449368.02   3758932.01        2.25254b (16120624)              449371.89
3758932.01          2.16380b (16120624)
     449375.76   3758932.01        2.08181b (16120624)              449379.63
3758932.01          2.00595b (16120624)
     449383.50   3758932.01        1.93913b (16120624)              449387.37
3758932.01          1.88213b (16120624)
     449391.24   3758932.01        1.82257b (16120624)              449395.11
3758932.01          1.77068b (16120624)
     449398.98   3758932.01        1.71710b (16120624)              449402.85
3758932.01          1.66981b (16120624)
     449406.72   3758932.01        1.62129b (16120624)              449410.59
3758932.01          1.57805b (16120624)
     449414.46   3758932.01        1.53549b (16120624)              449418.33
3758932.01          1.49189b (16120624)
     449422.20   3758932.01        1.45188b (16120624)              449426.07
3758932.01          1.41323b (16120624)
     449429.94   3758932.01        1.37427b (16120624)              449433.81
3758932.01          1.33698b (16120624)
     449437.68   3758932.01        1.30138b (16120624)              449441.55
3758932.01          1.26865b (16120624)
     449445.42   3758932.01        1.23847b (16120624)              449368.02
3758946.05          2.24274b (16120624)
     449371.89   3758946.05        2.15404b (16120624)              449375.76
3758946.05          2.07213b (16120624)
     449379.63   3758946.05        1.99641b (16120624)              449383.50
3758946.05          1.93785b (16120624)
     449387.37   3758946.05        1.87549b (16120624)              449391.24
3758946.05          1.82221b (16120624)
     449395.11   3758946.05        1.76647b (16120624)              449398.98
3758946.05          1.71774b (16120624)
     449402.85   3758946.05        1.66734b (16120624)              449406.72
3758946.05          1.62281b (16120624)
     449410.59   3758946.05        1.57709b (16120624)              449414.46
3758946.05          1.53586b (16120624)
     449418.33   3758946.05        1.49541b (16120624)              449422.20
3758946.05          1.45387b (16120624)
     449426.07   3758946.05        1.41584b (16120624)              449429.94
3758946.05          1.37888b (16120624)
     449433.81   3758946.05        1.34165b (16120624)              449437.68
3758946.05          1.30597b (16120624)
     449441.55   3758946.05        1.27285b (16120624)              449445.42
3758946.05          1.24202b (16120624)
     449368.02   3758960.09        2.23280b (16120624)              449371.89
3758960.09          2.14436b (16120624)
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        449375.76   3758960.09        2.06265b (16120624)              449379.63
3758960.09        1.98712b (16120624)
        449383.50   3758960.09        1.93048b (16120624)              449387.37
3758960.09        1.86858b (16120624)
        449391.24   3758960.09        1.81663b (16120624)              449395.11
3758960.09        1.76120b (16120624)
        449398.98   3758960.09        1.71368b (16120624)              449402.85
3758960.09        1.66374b (16120624)
        449406.72   3758960.09        1.62012b (16120624)              449410.59
3758960.09        1.57487b (16120624)
        449414.46   3758960.09        1.53493b (16120624)              449418.33
3758960.09        1.49559b (16120624)
        449422.20   3758960.09        1.45480b (16120624)              449426.07
3758960.09        1.41743b (16120624)
        449429.94   3758960.09        1.38113b (16120624)              449433.81
3758960.09        1.34585b (16120624)
        449437.68   3758960.09        1.31023b (16120624)              449441.55
3758960.09        1.27678b (16120624)
        449445.42   3758960.09        1.24514b (16120624)              449368.02
3758974.13        2.24152b (16120624)
        449371.89   3758974.13        2.15262b (16120624)              449375.76
3758974.13        2.07050b (16120624)
        449379.63   3758974.13        1.99458b (16120624)              449383.50
3758974.13        1.93541b (16120624)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   12:00:31

                          PAGE 16
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                         *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000287   , L0000288
 , L0000289   , L0000290   , L0000291   ,
                    L0000292   , L0000293   , L0000294   , L0000295   , L0000296
 , L0000297   , L0000298   , L0000299   ,
                    L0000300   , L0000301   , L0000302   , L0000303   , L0000304
 , L0000305   , L0000306   , L0000307   ,
                    L0000308   , L0000309   , L0000310   , L0000311   , L0000312
 ,

                                         *** DISCRETE CARTESIAN RECEPTOR POINTS
***

                                   ** CONC OF PM_2.5   IN MICROGRAMS/M**3
                 **

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)

```
Y-COORD (M)        CONC      (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - -
        449387.37   3758974.13         1.87201b (16120624)              449391.24
3758974.13         1.81252b (16120624)
        449395.11   3758974.13         1.76246b (16120624)              449398.98
3758974.13         1.70956b (16120624)
        449402.85   3758974.13         1.66406b (16120624)              449406.72
3758974.13         1.61642b (16120624)
        449410.59   3758974.13         1.57151b (16120624)              449414.46
3758974.13         1.53267b (16120624)
        449418.33   3758974.13         1.49453b (16120624)              449422.20
3758974.13         1.45705b (16120624)
        449426.07   3758974.13         1.41809b (16120624)              449429.94
3758974.13         1.38241b (16120624)
        449433.81   3758974.13         1.34773b (16120624)              449437.68
3758974.13         1.31403b (16120624)
        449441.55   3758974.13         1.28021b (16120624)              449445.42
3758974.13         1.24804b (16120624)
        449368.02   3758988.17         2.24843b (16120624)              449371.89
3758988.17         2.15901b (16120624)
        449375.76   3758988.17         2.07645b (16120624)              449379.63
3758988.17         1.99996b (16120624)
        449383.50   3758988.17         1.93903b (16120624)              449387.37
3758988.17         1.87471b (16120624)
        449391.24   3758988.17         1.81446b (16120624)              449395.11
3758988.17         1.75774b (16120624)
        449398.98   3758988.17         1.70997b (16120624)              449402.85
3758988.17         1.65956b (16120624)
        449406.72   3758988.17         1.61182b (16120624)              449410.59
3758988.17         1.57137b (16120624)
        449414.46   3758988.17         1.52939b (16120624)              449418.33
3758988.17         1.49230b (16120624)
        449422.20   3758988.17         1.45578b (16120624)              449426.07
3758988.17         1.41754b (16120624)
        449429.94   3758988.17         1.38270b (16120624)              449433.81
3758988.17         1.34862b (16120624)
        449437.68   3758988.17         1.31547b (16120624)              449441.55
3758988.17         1.28174b (16120624)
        449445.42   3758988.17         1.25061b (16120624)              449368.02
3759002.21         2.23451b (16120624)
        449371.89   3759002.21         2.14546b (16120624)              449375.76
3759002.21         2.06321b (16120624)
        449379.63   3759002.21         1.98722b (16120624)              449383.50
3759002.21         1.92989b (16120624)
        449387.37   3759002.21         1.86686b (16120624)              449391.24
3759002.21         1.81470b (16120624)
        449395.11   3759002.21         1.75888b (16120624)              449398.98
3759002.21         1.70620b (16120624)
        449402.85   3759002.21         1.66132b (16120624)              449406.72
```

```
3759002.21         1.61397b (16120624)
      449410.59   3759002.21        1.57310b (16120624)              449414.46
3759002.21         1.53051b (16120624)
      449418.33   3759002.21        1.49294b (16120624)              449422.20
3759002.21         1.45359b (16120624)
      449426.07   3759002.21        1.41829b (16120624)              449429.94
3759002.21         1.38378b (16120624)
      449433.81   3759002.21        1.34829b (16120624)              449437.68
3759002.21         1.31605b (16120624)
      449441.55   3759002.21        1.28279b (16120624)              449445.42
3759002.21         1.25209b (16120624)
      449368.02   3759016.25        2.23019b (16120624)              449371.89
3759016.25         2.14141b (16120624)
      449375.76   3759016.25        2.05938b (16120624)              449379.63
3759016.25         1.98358b (16120624)
      449383.50   3759016.25        1.91859b (16120624)              449387.37
3759016.25         1.86616b (16120624)
      449391.24   3759016.25        1.80819b (16120624)              449395.11
3759016.25         1.75973b (16120624)
      449398.98   3759016.25        1.70755b (16120624)              449402.85
3759016.25         1.65814b (16120624)
      449406.72   3759016.25        1.61571b (16120624)              449410.59
3759016.25         1.57070b (16120624)
      449414.46   3759016.25        1.53137b (16120624)              449418.33
3759016.25         1.49024b (16120624)
      449422.20   3759016.25        1.45396b (16120624)              449426.07
3759016.25         1.41608b (16120624)
      449429.94   3759016.25        1.38225b (16120624)              449433.81
3759016.25         1.34724b (16120624)
      449437.68   3759016.25        1.31579b (16120624)              449441.55
3759016.25         1.28487b (16120624)
      449445.42   3759016.25        1.25280b (16120624)              449368.02
3759030.29         2.25050b (16120624)
```
⦿ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   12:00:31

                    PAGE 17
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                       *** THE   1ST HIGHEST 24-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                          INCLUDING SOURCE(S):   L0000287   , L0000288
, L0000289   , L0000290   , L0000291   ,
               L0000292   , L0000293   , L0000294   , L0000295   , L0000296
, L0000297   , L0000298   , L0000299   ,
               L0000300   , L0000301   , L0000302   , L0000303   , L0000304
, L0000305   , L0000306   , L0000307   ,
               L0000308   , L0000309   , L0000310   , L0000311   , L0000312

,

** CONC OF PM_2.5   IN MICROGRAMS/M**3 **

X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)	X-COORD (M)	Y-COORD (M)	CONC	(YYMMDDHH)
- -							
449371.89	3759030.29	2.16043b	(16120624)	449375.76	3759030.29	2.07728b	(16120624)
449379.63	3759030.29	2.00046b	(16120624)	449383.50	3759030.29	1.94121b	(16120624)
449387.37	3759030.29	1.87806b	(16120624)	449391.24	3759030.29	1.82409b	(16120624)
449395.11	3759030.29	1.76765b	(16120624)	449398.98	3759030.29	1.71852b	(16120624)
449402.85	3759030.29	1.66759b	(16120624)	449406.72	3759030.29	1.62268b	(16120624)
449410.59	3759030.29	1.57644b	(16120624)	449414.46	3759030.29	1.53533b	(16120624)
449418.33	3759030.29	1.49347b	(16120624)	449422.20	3759030.29	1.45331b	(16120624)
449426.07	3759030.29	1.41743b	(16120624)	449429.94	3759030.29	1.38090b	(16120624)
449433.81	3759030.29	1.34794b	(16120624)	449437.68	3759030.29	1.31443b	(16120624)
449441.55	3759030.29	1.28347b	(16120624)	449445.42	3759030.29	1.25125b	(16120624)
449368.02	3759044.33	2.27383b	(16120624)	449371.89	3759044.33	2.18259b	(16120624)
449375.76	3759044.33	2.09842b	(16120624)	449379.63	3759044.33	2.02079b	(16120624)
449383.50	3759044.33	1.95709b	(16120624)	449387.37	3759044.33	1.89194b	(16120624)
449391.24	3759044.33	1.83470b	(16120624)	449395.11	3759044.33	1.77659b	(16120624)
449398.98	3759044.33	1.72498b	(16120624)	449402.85	3759044.33	1.67270b	(16120624)
449406.72	3759044.33	1.62574b	(16120624)	449410.59	3759044.33	1.57847b	(16120624)
449414.46	3759044.33	1.53382b	(16120624)	449418.33	3759044.33	1.49376b	(16120624)
449422.20	3759044.33	1.45351b	(16120624)	449426.07	3759044.33	1.41520b	(16120624)
449429.94	3759044.33	1.38075b	(16120624)	449433.81	3759044.33	1.34592b	(16120624)

```
        449437.68   3759044.33       1.31269b (16120624)                      449441.55
   3759044.33        1.28172b (16120624)
        449445.42   3759044.33       1.24937b (16120624)
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                       ***   12:00:31

                            PAGE 18
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

                            ** CONC OF PM_2.5   IN MICROGRAMS/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   2.27775b ON 16120624: AT (449368.02,
3758889.89,   195.17,   195.17,   0.00) DC

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

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\PM25\PM25.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                       ***   12:00:31

                            PAGE 19
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

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

 A Total of   0 Fatal Error Message(s)
 A Total of   2 Warning Message(s)
 A Total of   1638 Informational Message(s)

```
   A Total of         43848 Hours Were Processed

   A Total of          1039 Calm Hours Identified

   A Total of           599 Missing Hours Identified (  1.37 Percent)


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



      ********    WARNING MESSAGES    ********
 ME W186      130       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
      0.50
 ME W187      130       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


     ***********************************
     *** AERMOD Finishes Successfully ***
     ***********************************

** Lakes Environmental AERMOD MPI
**
***************************************
**
** AERMOD INPUT PRODUCED BY:
** AERMOD VIEW VER. 10.0.1
** LAKES ENVIRONMENTAL SOFTWARE INC.
** DATE: 11/11/2021
** FILE: C:\LAKES\AERMOD VIEW\14172 HRA\TOGGAS\TOGGAS.ADI
**
***************************************
**
**
***************************************
** AERMOD CONTROL PATHWAY
***************************************
**
**
CO STARTING
   TITLEONE C:\LAKES\AERMOD VIEW\14172 HRA\TOGGAS\TOGGAS.ISC
   MODELOPT DFAULT CONC
   AVERTIME 1 8 ANNUAL
   URBANOPT 2189641
   POLLUTID TOGGAS
   RUNORNOT RUN
   ERRORFIL TOGGAS.ERR
CO FINISHED
**
***************************************
```

```
** AERMOD SOURCE PATHWAY
************************************
**
**
SO STARTING
** SOURCE LOCATION **
** SOURCE ID - TYPE - X COORD. - Y COORD. **
** -----------------------------------------------------------------------
** LINE SOURCE REPRESENTED BY ADJACENT VOLUME SOURCES
** LINE VOLUME SOURCE ID = SLINE1
** DESCRSRC I-15 FREEWAY
** PREFIX
** LENGTH OF SIDE = 46.00
** CONFIGURATION = ADJACENT
** EMISSION RATE = 0.00479
** VERTICAL DIMENSION = 6.99
** SZINIT = 3.25
** NODES = 2
** 449288.372, 3758373.924, 188.51, 3.49, 21.40
** 449298.585, 3759554.578, 201.92, 3.49, 21.40
** -----------------------------------------------------------------------
   LOCATION L0000183    VOLUME    449288.571 3758396.923 188.77
   LOCATION L0000184    VOLUME    449288.969 3758442.921 189.29
   LOCATION L0000185    VOLUME    449289.367 3758488.920 189.82
   LOCATION L0000186    VOLUME    449289.765 3758534.918 190.34
   LOCATION L0000187    VOLUME    449290.163 3758580.916 190.86
   LOCATION L0000188    VOLUME    449290.561 3758626.914 191.38
   LOCATION L0000189    VOLUME    449290.958 3758672.913 191.91
   LOCATION L0000190    VOLUME    449291.356 3758718.911 192.43
   LOCATION L0000191    VOLUME    449291.754 3758764.909 192.95
   LOCATION L0000192    VOLUME    449292.152 3758810.908 193.47
   LOCATION L0000193    VOLUME    449292.550 3758856.906 194.00
   LOCATION L0000194    VOLUME    449292.948 3758902.904 194.52
   LOCATION L0000195    VOLUME    449293.346 3758948.902 195.04
   LOCATION L0000196    VOLUME    449293.744 3758994.901 195.56
   LOCATION L0000197    VOLUME    449294.142 3759040.899 196.09
   LOCATION L0000198    VOLUME    449294.540 3759086.897 196.61
   LOCATION L0000199    VOLUME    449294.938 3759132.895 197.13
   LOCATION L0000200    VOLUME    449295.335 3759178.894 197.65
   LOCATION L0000201    VOLUME    449295.733 3759224.892 198.18
   LOCATION L0000202    VOLUME    449296.131 3759270.890 198.70
   LOCATION L0000203    VOLUME    449296.529 3759316.889 199.22
   LOCATION L0000204    VOLUME    449296.927 3759362.887 199.74
   LOCATION L0000205    VOLUME    449297.325 3759408.885 200.27
   LOCATION L0000206    VOLUME    449297.723 3759454.883 200.79
   LOCATION L0000207    VOLUME    449298.121 3759500.882 201.31
   LOCATION L0000208    VOLUME    449298.519 3759546.880 201.83
** END OF LINE VOLUME SOURCE ID = SLINE1
** SOURCE PARAMETERS **
** LINE VOLUME SOURCE ID = SLINE1
```

```
    SRCPARAM L0000183        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000184        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000185        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000186        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000187        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000188        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000189        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000190        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000191        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000192        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000193        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000194        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000195        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000196        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000197        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000198        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000199        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000200        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000201        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000202        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000203        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000204        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000205        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000206        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000207        0.0001842308        3.49       21.40       3.25
    SRCPARAM L0000208        0.0001842308        3.49       21.40       3.25
** -------------------------------------------------------------------
    URBANSRC ALL
    SRCGROUP ALL
SO FINISHED
**
***************************************
** AERMOD RECEPTOR PATHWAY
***************************************
**
**
RE STARTING
    INCLUDED TOGGAS.ROU
RE FINISHED
**
***************************************
** AERMOD METEOROLOGY PATHWAY
***************************************
**
**
ME STARTING
    SURFFILE ..\KRAL_V9_ADJU\KRAL_V9.SFC
    PROFFILE ..\KRAL_V9_ADJU\KRAL_V9.PFL
    SURFDATA 3171 2012
    UAIRDATA 3190 2012
```

```
   PROFBASE 245.0 METERS
ME FINISHED
**
*************************************
** AERMOD OUTPUT PATHWAY
*************************************
**
**
OU STARTING
   RECTABLE ALLAVE 1ST
   RECTABLE 1 1ST
   RECTABLE 8 1ST
** AUTO-GENERATED PLOTFILES
   PLOTFILE   1 ALL 1ST TOGGAS.AD\01H1GALL.PLT 31
   PLOTFILE   8 ALL 1ST TOGGAS.AD\08H1GALL.PLT 32
   PLOTFILE   ANNUAL ALL TOGGAS.AD\AN00GALL.PLT 33
   SUMMFILE TOGGAS.SUM
OU FINISHED


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

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

 A Total of          0 Fatal Error Message(s)
 A Total of          2 Warning Message(s)
 A Total of          0 Informational Message(s)


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


    ********   WARNING MESSAGES   ********
 ME W186     130       MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
 ME W187     130       MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


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

♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC                        ***          11/11/21
 *** AERMET - VERSION  16216 ***    ***
                        ***          11:24:07

                                 PAGE   1
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

- -
- -

 **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 URBAN Dispersion Algorithm for the SBL for   26 Source(s),
   for Total of   1 Urban Area(s):
   Urban Population =   2189641.0 ; Urban Roughness Length = 1.000 m

 **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.
         6. Urban Roughness Length of 1.0 Meter Assumed.

 **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 Assumes No FLAGPOLE Receptor Heights.

 **The User Specified a Pollutant Type of: TOGGAS

 **Model Calculates 2 Short Term Average(s) of: 1-HR   8-HR
     and Calculates ANNUAL Averages

 **This Run Includes: 26 Source(s);   1 Source Group(s); and   441
Receptor(s)

                 with: 0 POINT(s), including
                           0 POINTCAP(s) and   0 POINTHOR(s)
              and: 26 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: 16216

 **Output Options Selected:
         Model Outputs Tables of ANNUAL Averages by Receptor
         Model Outputs Tables of Highest Short Term Values by Receptor (RECTABLE
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) =   245.00 ; Decay
Coef. =   0.000   ; Rot. Angle =   0.0
                 Emission Units = GRAMS/SEC   ;
Emission Rate Unit Factor =   0.10000E+07
                 Output Units   = MICROGRAMS/M**3

 **Approximate Storage Requirements of Model =   3.6 MB of RAM.

 **Input Runstream File: aermod.inp

 **Output Print File: aermod.out

 **Detailed Error/Message File: TOGGAS.ERR

 **File for Summary of Results: TOGGAS.SUM

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:24:07

                                PAGE   2
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                                        *** VOLUME SOURCE DATA ***

            NUMBER EMISSION RATE   BASE   RELEASE   INIT.
INIT.   URBAN EMISSION RATE

```
   SOURCE        PART.  (GRAMS/SEC)    X         Y       ELEV.    HEIGHT     SY
SZ     SOURCE  SCALAR VARY
    ID          CATS.                (METERS) (METERS) (METERS) (METERS) (METERS)
(METERS)           BY
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -


 L0000183        0   0.18423E-03  449288.6 3758396.9   188.8     3.49     21.40
3.25    YES
 L0000184        0   0.18423E-03  449289.0 3758442.9   189.3     3.49     21.40
3.25    YES
 L0000185        0   0.18423E-03  449289.4 3758488.9   189.8     3.49     21.40
3.25    YES
 L0000186        0   0.18423E-03  449289.8 3758534.9   190.3     3.49     21.40
3.25    YES
 L0000187        0   0.18423E-03  449290.2 3758580.9   190.9     3.49     21.40
3.25    YES
 L0000188        0   0.18423E-03  449290.6 3758626.9   191.4     3.49     21.40
3.25    YES
 L0000189        0   0.18423E-03  449291.0 3758672.9   191.9     3.49     21.40
3.25    YES
 L0000190        0   0.18423E-03  449291.4 3758718.9   192.4     3.49     21.40
3.25    YES
 L0000191        0   0.18423E-03  449291.8 3758764.9   193.0     3.49     21.40
3.25    YES
 L0000192        0   0.18423E-03  449292.2 3758810.9   193.5     3.49     21.40
3.25    YES
 L0000193        0   0.18423E-03  449292.5 3758856.9   194.0     3.49     21.40
3.25    YES
 L0000194        0   0.18423E-03  449292.9 3758902.9   194.5     3.49     21.40
3.25    YES
 L0000195        0   0.18423E-03  449293.3 3758948.9   195.0     3.49     21.40
3.25    YES
 L0000196        0   0.18423E-03  449293.7 3758994.9   195.6     3.49     21.40
3.25    YES
 L0000197        0   0.18423E-03  449294.1 3759040.9   196.1     3.49     21.40
3.25    YES
 L0000198        0   0.18423E-03  449294.5 3759086.9   196.6     3.49     21.40
3.25    YES
 L0000199        0   0.18423E-03  449294.9 3759132.9   197.1     3.49     21.40
3.25    YES
 L0000200        0   0.18423E-03  449295.3 3759178.9   197.7     3.49     21.40
3.25    YES
 L0000201        0   0.18423E-03  449295.7 3759224.9   198.2     3.49     21.40
3.25    YES
 L0000202        0   0.18423E-03  449296.1 3759270.9   198.7     3.49     21.40
3.25    YES
 L0000203        0   0.18423E-03  449296.5 3759316.9   199.2     3.49     21.40
3.25    YES
 L0000204        0   0.18423E-03  449296.9 3759362.9   199.7     3.49     21.40
```

```
3.25     YES
 L0000205       0  0.18423E-03  449297.3 3759408.9  200.3    3.49    21.40
3.25     YES
 L0000206       0  0.18423E-03  449297.7 3759454.9  200.8    3.49    21.40
3.25     YES
 L0000207       0  0.18423E-03  449298.1 3759500.9  201.3    3.49    21.40
3.25     YES
 L0000208       0  0.18423E-03  449298.5 3759546.9  201.8    3.49    21.40
3.25     YES
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:24:07

                                 PAGE   3
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

                                       *** SOURCE IDs DEFINING SOURCE GROUPS
***

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

  ALL   L0000183   , L0000184   , L0000185   , L0000186   , L0000187   ,
L0000188   , L0000189   , L0000190   ,

             L0000191   , L0000192   , L0000193   , L0000194   , L0000195   ,
L0000196   , L0000197   , L0000198   ,

             L0000199   , L0000200   , L0000201   , L0000202   , L0000203   ,
L0000204   , L0000205   , L0000206   ,

             L0000207   , L0000208   ,

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:24:07

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 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

                                       *** SOURCE IDs DEFINED AS URBAN SOURCES
***

  URBAN ID   URBAN POP   SOURCE IDs
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           2189641.  L0000183   , L0000184   , L0000185   , L0000186   ,
L0000187   , L0000188   , L0000189   ,
 L0000190   ,

           L0000191   , L0000192   , L0000193   , L0000194   , L0000195   ,
L0000196   , L0000197   , L0000198   ,

           L0000199   , L0000200   , L0000201   , L0000202   , L0000203   ,
L0000204   , L0000205   , L0000206   ,

           L0000207   , L0000208   ,
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   11:24:07

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 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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


   ( 449368.0, 3758763.5,    192.6,    195.0,      0.0);       ( 449371.9,
3758763.5,    192.2,    195.0,     0.0);
   ( 449375.8, 3758763.5,    191.8,    195.0,      0.0);       ( 449379.6,
3758763.5,    191.4,    195.0,     0.0);
   ( 449383.5, 3758763.5,    191.2,    195.0,      0.0);       ( 449387.4,
3758763.5,    190.9,    195.0,     0.0);
   ( 449391.2, 3758763.5,    190.6,    190.6,      0.0);       ( 449395.1,
3758763.5,    190.4,    190.4,     0.0);
   ( 449399.0, 3758763.5,    190.1,    190.1,      0.0);       ( 449402.8,
3758763.5,    189.9,    189.9,     0.0);
   ( 449406.7, 3758763.5,    189.6,    189.6,      0.0);       ( 449410.6,
3758763.5,    189.4,    189.4,     0.0);
   ( 449414.5, 3758763.5,    189.3,    189.3,      0.0);       ( 449418.3,
3758763.5,    189.1,    189.1,     0.0);
   ( 449422.2, 3758763.5,    189.0,    189.0,      0.0);       ( 449426.1,
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   ( 449429.9, 3758763.5,    188.7,    188.7,      0.0);       ( 449433.8,
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   ( 449437.7, 3758763.5,    188.5,    188.5,      0.0);       ( 449441.5,
3758763.5,    188.4,    188.4,     0.0);
   ( 449445.4, 3758763.5,    188.3,    188.3,      0.0);       ( 449368.0,
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   ( 449371.9, 3758777.6,    192.0,    195.0,      0.0);       ( 449375.8,
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   ( 449379.6, 3758777.6,    191.0,    195.0,      0.0);       ( 449383.5,
3758777.6,    190.8,    195.0,     0.0);
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    ( 449395.1, 3758777.6,     190.0,     195.0,       0.0);       ( 449399.0,
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    ( 449402.8, 3758777.6,     189.5,     195.0,       0.0);       ( 449406.7,
3758777.6,     189.2,     195.0,       0.0);
    ( 449410.6, 3758777.6,     189.0,     189.0,       0.0);       ( 449414.5,
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    ( 449418.3, 3758777.6,     188.8,     188.8,       0.0);       ( 449422.2,
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    ( 449426.1, 3758777.6,     188.5,     188.5,       0.0);       ( 449429.9,
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    ( 449433.8, 3758777.6,     188.2,     188.2,       0.0);       ( 449437.7,
3758777.6,     188.1,     188.1,       0.0);
    ( 449441.5, 3758777.6,     188.0,     188.0,       0.0);       ( 449445.4,
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3758791.6,     192.3,     195.0,       0.0);
    ( 449375.8, 3758791.6,     191.9,     195.0,       0.0);       ( 449379.6,
3758791.6,     191.5,     195.0,       0.0);
    ( 449383.5, 3758791.6,     191.2,     195.0,       0.0);       ( 449387.4,
3758791.6,     191.0,     191.0,       0.0);
    ( 449391.2, 3758791.6,     190.7,     190.7,       0.0);       ( 449395.1,
3758791.6,     190.5,     190.5,       0.0);
    ( 449399.0, 3758791.6,     190.2,     190.2,       0.0);       ( 449402.8,
3758791.6,     190.0,     190.0,       0.0);
    ( 449406.7, 3758791.6,     189.7,     189.7,       0.0);       ( 449410.6,
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    ( 449414.5, 3758791.6,     189.3,     189.3,       0.0);       ( 449418.3,
3758791.6,     189.2,     189.2,       0.0);
    ( 449422.2, 3758791.6,     189.1,     189.1,       0.0);       ( 449426.1,
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    ( 449429.9, 3758791.6,     188.8,     188.8,       0.0);       ( 449433.8,
3758791.6,     188.7,     188.7,       0.0);
    ( 449437.7, 3758791.6,     188.6,     188.6,       0.0);       ( 449441.5,
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    ( 449445.4, 3758791.6,     188.4,     188.4,       0.0);       ( 449368.0,
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    ( 449371.9, 3758805.6,     192.5,     192.5,       0.0);       ( 449375.8,
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    ( 449379.6, 3758805.6,     192.0,     192.0,       0.0);       ( 449383.5,
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    ( 449387.4, 3758805.6,     191.5,     191.5,       0.0);       ( 449391.2,
3758805.6,     191.2,     191.2,       0.0);
    ( 449395.1, 3758805.6,     190.9,     190.9,       0.0);       ( 449399.0,
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    ( 449402.8, 3758805.6,     190.4,     190.4,       0.0);       ( 449406.7,
3758805.6,     190.2,     190.2,       0.0);
    ( 449410.6, 3758805.6,     189.9,     189.9,       0.0);       ( 449414.5,
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     ( 449426.1, 3758805.6,      189.4,      189.4,       0.0);        ( 449429.9,
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     ( 449433.8, 3758805.6,      189.2,      189.2,       0.0);        ( 449437.7,
3758805.6,      189.0,      189.0,       0.0);
     ( 449441.5, 3758805.6,      188.9,      188.9,       0.0);        ( 449445.4,
3758805.6,      188.8,      188.8,       0.0);
     ( 449368.0, 3758819.7,      192.8,      192.8,       0.0);        ( 449371.9,
3758819.7,      192.5,      192.5,       0.0);
     ( 449375.8, 3758819.7,      192.2,      192.2,       0.0);        ( 449379.6,
3758819.7,      192.0,      192.0,       0.0);
     ( 449383.5, 3758819.7,      191.7,      191.7,       0.0);        ( 449387.4,
3758819.7,      191.5,      191.5,       0.0);
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   11:24:07

                         PAGE   6
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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

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     ( 449391.2, 3758819.7,      191.2,      191.2,       0.0);        ( 449395.1,
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     ( 449399.0, 3758819.7,      190.7,      190.7,       0.0);        ( 449402.8,
3758819.7,      190.4,      190.4,       0.0);
     ( 449406.7, 3758819.7,      190.2,      190.2,       0.0);        ( 449410.6,
3758819.7,      190.0,      190.0,       0.0);
     ( 449414.5, 3758819.7,      189.8,      189.8,       0.0);        ( 449418.3,
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     ( 449422.2, 3758819.7,      189.6,      189.6,       0.0);        ( 449426.1,
3758819.7,      189.5,      189.5,       0.0);
     ( 449429.9, 3758819.7,      189.3,      189.3,       0.0);        ( 449433.8,
3758819.7,      189.2,      189.2,       0.0);
     ( 449437.7, 3758819.7,      189.1,      189.1,       0.0);        ( 449441.5,
3758819.7,      188.9,      188.9,       0.0);
     ( 449445.4, 3758819.7,      188.8,      188.8,       0.0);        ( 449368.0,
3758833.7,      192.8,      192.8,       0.0);
     ( 449371.9, 3758833.7,      192.5,      192.5,       0.0);        ( 449375.8,
3758833.7,      192.2,      192.2,       0.0);
     ( 449379.6, 3758833.7,      192.0,      192.0,       0.0);        ( 449383.5,
3758833.7,      191.7,      191.7,       0.0);
     ( 449387.4, 3758833.7,      191.5,      191.5,       0.0);        ( 449391.2,
3758833.7,      191.2,      191.2,       0.0);
     ( 449395.1, 3758833.7,      191.0,      191.0,       0.0);        ( 449399.0,
3758833.7,      190.7,      190.7,       0.0);
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    ( 449402.8, 3758833.7,     190.4,      190.4,        0.0);        ( 449406.7,
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    ( 449410.6, 3758833.7,     190.0,      190.0,        0.0);        ( 449414.5,
3758833.7,       189.8,       189.8,       0.0);
    ( 449418.3, 3758833.7,     189.7,      189.7,        0.0);        ( 449422.2,
3758833.7,       189.6,       189.6,       0.0);
    ( 449426.1, 3758833.7,     189.5,      189.5,        0.0);        ( 449429.9,
3758833.7,       189.3,       189.3,       0.0);
    ( 449433.8, 3758833.7,     189.2,      189.2,        0.0);        ( 449437.7,
3758833.7,       189.1,       189.1,       0.0);
    ( 449441.5, 3758833.7,     188.9,      188.9,        0.0);        ( 449445.4,
3758833.7,       188.8,       188.8,       0.0);
    ( 449368.0, 3758847.8,     193.4,      193.4,        0.0);        ( 449371.9,
3758847.8,       193.2,       193.2,       0.0);
    ( 449375.8, 3758847.8,     193.0,      193.0,        0.0);        ( 449379.6,
3758847.8,       192.8,       192.8,       0.0);
    ( 449383.5, 3758847.8,     192.5,      192.5,        0.0);        ( 449387.4,
3758847.8,       192.2,       192.2,       0.0);
    ( 449391.2, 3758847.8,     192.0,      192.0,        0.0);        ( 449395.1,
3758847.8,       191.7,       191.7,       0.0);
    ( 449399.0, 3758847.8,     191.5,      191.5,        0.0);        ( 449402.8,
3758847.8,       191.2,       191.2,       0.0);
    ( 449406.7, 3758847.8,     191.0,      191.0,        0.0);        ( 449410.6,
3758847.8,       190.7,       190.7,       0.0);
    ( 449414.5, 3758847.8,     190.5,      190.5,        0.0);        ( 449418.3,
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    ( 449422.2, 3758847.8,     190.2,      190.2,        0.0);        ( 449426.1,
3758847.8,       190.0,       190.0,       0.0);
    ( 449429.9, 3758847.8,     189.8,      189.8,        0.0);        ( 449433.8,
3758847.8,       189.6,       189.6,       0.0);
    ( 449437.7, 3758847.8,     189.5,      189.5,        0.0);        ( 449441.5,
3758847.8,       189.3,       189.3,       0.0);
    ( 449445.4, 3758847.8,     189.2,      189.2,        0.0);        ( 449368.0,
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    ( 449371.9, 3758861.8,     194.0,      194.0,        0.0);        ( 449375.8,
3758861.8,       193.8,       193.8,       0.0);
    ( 449379.6, 3758861.8,     193.7,      193.7,        0.0);        ( 449383.5,
3758861.8,       193.4,       193.4,       0.0);
    ( 449387.4, 3758861.8,     193.2,      193.2,        0.0);        ( 449391.2,
3758861.8,       192.9,       192.9,       0.0);
    ( 449395.1, 3758861.8,     192.7,      192.7,        0.0);        ( 449399.0,
3758861.8,       192.4,       192.4,       0.0);
    ( 449402.8, 3758861.8,     192.1,      192.1,        0.0);        ( 449406.7,
3758861.8,       191.9,       191.9,       0.0);
    ( 449410.6, 3758861.8,     191.6,      191.6,        0.0);        ( 449414.5,
3758861.8,       191.4,       191.4,       0.0);
    ( 449418.3, 3758861.8,     191.2,      191.2,        0.0);        ( 449422.2,
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    ( 449426.1, 3758861.8,     190.7,      190.7,        0.0);        ( 449429.9,
3758861.8,       190.4,       190.4,       0.0);
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     ( 449433.8, 3758861.8,    190.2,    190.2,      0.0);        ( 449437.7,
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     ( 449441.5, 3758861.8,    189.8,    189.8,      0.0);        ( 449445.4,
3758861.8,    189.7,    189.7,      0.0);
     ( 449368.0, 3758875.8,    194.7,    194.7,      0.0);        ( 449371.9,
3758875.8,    194.6,    194.6,      0.0);
     ( 449375.8, 3758875.8,    194.4,    194.4,      0.0);        ( 449379.6,
3758875.8,    194.3,    194.3,      0.0);
     ( 449383.5, 3758875.8,    194.1,    194.1,      0.0);        ( 449387.4,
3758875.8,    193.8,    193.8,      0.0);
     ( 449391.2, 3758875.8,    193.5,    193.5,      0.0);        ( 449395.1,
3758875.8,    193.3,    193.3,      0.0);
     ( 449399.0, 3758875.8,    193.0,    193.0,      0.0);        ( 449402.8,
3758875.8,    192.8,    192.8,      0.0);
     ( 449406.7, 3758875.8,    192.5,    192.5,      0.0);        ( 449410.6,
3758875.8,    192.2,    192.2,      0.0);
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:24:07

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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


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     ( 449422.2, 3758875.8,    191.5,    191.5,      0.0);        ( 449426.1,
3758875.8,    191.2,    191.2,      0.0);
     ( 449429.9, 3758875.8,    191.0,    191.0,      0.0);        ( 449433.8,
3758875.8,    190.7,    190.7,      0.0);
     ( 449437.7, 3758875.8,    190.4,    190.4,      0.0);        ( 449441.5,
3758875.8,    190.2,    190.2,      0.0);
     ( 449445.4, 3758875.8,    190.1,    190.1,      0.0);        ( 449368.0,
3758889.9,    195.2,    195.2,      0.0);
     ( 449371.9, 3758889.9,    195.0,    195.0,      0.0);        ( 449375.8,
3758889.9,    194.9,    194.9,      0.0);
     ( 449379.6, 3758889.9,    194.8,    194.8,      0.0);        ( 449383.5,
3758889.9,    194.5,    194.5,      0.0);
     ( 449387.4, 3758889.9,    194.3,    194.3,      0.0);        ( 449391.2,
3758889.9,    194.0,    194.0,      0.0);
     ( 449395.1, 3758889.9,    193.7,    193.7,      0.0);        ( 449399.0,
3758889.9,    193.5,    193.5,      0.0);
     ( 449402.8, 3758889.9,    193.2,    193.2,      0.0);        ( 449406.7,
3758889.9,    193.0,    193.0,      0.0);
     ( 449410.6, 3758889.9,    192.7,    192.7,      0.0);        ( 449414.5,
3758889.9,    192.5,    192.5,      0.0);
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      ( 449426.1, 3758889.9,      191.7,      191.7,      0.0);      ( 449429.9,
3758889.9,      191.4,      191.4,      0.0);
      ( 449433.8, 3758889.9,      191.2,      191.2,      0.0);      ( 449437.7,
3758889.9,      190.9,      190.9,      0.0);
      ( 449441.5, 3758889.9,      190.7,      190.7,      0.0);      ( 449445.4,
3758889.9,      190.6,      190.6,      0.0);
      ( 449368.0, 3758903.9,      195.8,      195.8,      0.0);      ( 449371.9,
3758903.9,      195.7,      195.7,      0.0);
      ( 449375.8, 3758903.9,      195.6,      195.6,      0.0);      ( 449379.6,
3758903.9,      195.5,      195.5,      0.0);
      ( 449383.5, 3758903.9,      195.2,      195.2,      0.0);      ( 449387.4,
3758903.9,      195.0,      195.0,      0.0);
      ( 449391.2, 3758903.9,      194.7,      194.7,      0.0);      ( 449395.1,
3758903.9,      194.5,      194.5,      0.0);
      ( 449399.0, 3758903.9,      194.2,      194.2,      0.0);      ( 449402.8,
3758903.9,      194.0,      194.0,      0.0);
      ( 449406.7, 3758903.9,      193.7,      193.7,      0.0);      ( 449410.6,
3758903.9,      193.4,      193.4,      0.0);
      ( 449414.5, 3758903.9,      193.1,      193.1,      0.0);      ( 449418.3,
3758903.9,      192.8,      192.8,      0.0);
      ( 449422.2, 3758903.9,      192.6,      192.6,      0.0);      ( 449426.1,
3758903.9,      192.3,      192.3,      0.0);
      ( 449429.9, 3758903.9,      192.0,      192.0,      0.0);      ( 449433.8,
3758903.9,      191.7,      195.0,      0.0);
      ( 449437.7, 3758903.9,      191.4,      195.0,      0.0);      ( 449441.5,
3758903.9,      191.2,      191.2,      0.0);
      ( 449445.4, 3758903.9,      191.1,      191.1,      0.0);      ( 449368.0,
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      ( 449371.9, 3758918.0,      196.5,      196.5,      0.0);      ( 449375.8,
3758918.0,      196.5,      196.5,      0.0);
      ( 449379.6, 3758918.0,      196.4,      196.4,      0.0);      ( 449383.5,
3758918.0,      196.2,      196.2,      0.0);
      ( 449387.4, 3758918.0,      195.9,      195.9,      0.0);      ( 449391.2,
3758918.0,      195.7,      195.7,      0.0);
      ( 449395.1, 3758918.0,      195.4,      195.4,      0.0);      ( 449399.0,
3758918.0,      195.1,      195.1,      0.0);
      ( 449402.8, 3758918.0,      194.9,      194.9,      0.0);      ( 449406.7,
3758918.0,      194.6,      194.6,      0.0);
      ( 449410.6, 3758918.0,      194.3,      194.3,      0.0);      ( 449414.5,
3758918.0,      194.0,      195.0,      0.0);
      ( 449418.3, 3758918.0,      193.6,      195.0,      0.0);      ( 449422.2,
3758918.0,      193.3,      195.0,      0.0);
      ( 449426.1, 3758918.0,      192.9,      195.0,      0.0);      ( 449429.9,
3758918.0,      192.6,      195.0,      0.0);
      ( 449433.8, 3758918.0,      192.2,      195.0,      0.0);      ( 449437.7,
3758918.0,      191.9,      195.0,      0.0);
      ( 449441.5, 3758918.0,      191.7,      195.0,      0.0);      ( 449445.4,
3758918.0,      191.5,      191.5,      0.0);
```

```
    ( 449368.0, 3758932.0,      197.2,      197.2,       0.0);       ( 449371.9,
3758932.0,      197.2,      197.2,       0.0);
    ( 449375.8, 3758932.0,      197.2,      197.2,       0.0);       ( 449379.6,
3758932.0,      197.2,      197.2,       0.0);
    ( 449383.5, 3758932.0,      196.9,      196.9,       0.0);       ( 449387.4,
3758932.0,      196.7,      196.7,       0.0);
    ( 449391.2, 3758932.0,      196.4,      196.4,       0.0);       ( 449395.1,
3758932.0,      196.2,      196.2,       0.0);
    ( 449399.0, 3758932.0,      195.9,      195.9,       0.0);       ( 449402.8,
3758932.0,      195.6,      195.6,       0.0);
    ( 449406.7, 3758932.0,      195.4,      195.4,       0.0);       ( 449410.6,
3758932.0,      195.1,      195.1,       0.0);
    ( 449414.5, 3758932.0,      194.7,      194.7,       0.0);       ( 449418.3,
3758932.0,      194.3,      194.3,       0.0);
    ( 449422.2, 3758932.0,      193.9,      193.9,       0.0);       ( 449426.1,
3758932.0,      193.5,      193.5,       0.0);
    ( 449429.9, 3758932.0,      193.1,      193.1,       0.0);       ( 449433.8,
3758932.0,      192.8,      192.8,       0.0);
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   11:24:07

                        PAGE   8
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

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

```
    ( 449437.7, 3758932.0,      192.4,      192.4,       0.0);       ( 449441.5,
3758932.0,      192.1,      192.1,       0.0);
    ( 449445.4, 3758932.0,      192.0,      192.0,       0.0);       ( 449368.0,
3758946.0,      197.7,      197.7,       0.0);
    ( 449371.9, 3758946.0,      197.7,      197.7,       0.0);       ( 449375.8,
3758946.0,      197.7,      197.7,       0.0);
    ( 449379.6, 3758946.0,      197.7,      197.7,       0.0);       ( 449383.5,
3758946.0,      197.4,      197.4,       0.0);
    ( 449387.4, 3758946.0,      197.1,      197.1,       0.0);       ( 449391.2,
3758946.0,      196.9,      196.9,       0.0);
    ( 449395.1, 3758946.0,      196.6,      196.6,       0.0);       ( 449399.0,
3758946.0,      196.4,      196.4,       0.0);
    ( 449402.8, 3758946.0,      196.1,      196.1,       0.0);       ( 449406.7,
3758946.0,      195.8,      195.8,       0.0);
    ( 449410.6, 3758946.0,      195.5,      195.5,       0.0);       ( 449414.5,
3758946.0,      195.2,      195.2,       0.0);
    ( 449418.3, 3758946.0,      194.8,      194.8,       0.0);       ( 449422.2,
3758946.0,      194.4,      194.4,       0.0);
    ( 449426.1, 3758946.0,      194.0,      196.0,       0.0);       ( 449429.9,
3758946.0,      193.6,      196.0,       0.0);
```

```
( 449433.8, 3758946.0,     193.2,     196.0,     0.0);     ( 449437.7,
3758946.0,     192.8,     196.0,     0.0);
( 449441.5, 3758946.0,     192.5,     196.0,     0.0);     ( 449445.4,
3758946.0,     192.3,     192.3,     0.0);
( 449368.0, 3758960.1,     198.0,     198.0,     0.0);     ( 449371.9,
3758960.1,     198.0,     198.0,     0.0);
( 449375.8, 3758960.1,     198.0,     198.0,     0.0);     ( 449379.6,
3758960.1,     198.0,     198.0,     0.0);
( 449383.5, 3758960.1,     197.8,     197.8,     0.0);     ( 449387.4,
3758960.1,     197.5,     197.5,     0.0);
( 449391.2, 3758960.1,     197.3,     197.3,     0.0);     ( 449395.1,
3758960.1,     197.0,     197.0,     0.0);
( 449399.0, 3758960.1,     196.8,     196.8,     0.0);     ( 449402.8,
3758960.1,     196.5,     196.5,     0.0);
( 449406.7, 3758960.1,     196.3,     196.3,     0.0);     ( 449410.6,
3758960.1,     196.0,     196.0,     0.0);
( 449414.5, 3758960.1,     195.6,     195.6,     0.0);     ( 449418.3,
3758960.1,     195.2,     195.2,     0.0);
( 449422.2, 3758960.1,     194.9,     194.9,     0.0);     ( 449426.1,
3758960.1,     194.5,     194.5,     0.0);
( 449429.9, 3758960.1,     194.1,     194.1,     0.0);     ( 449433.8,
3758960.1,     193.7,     193.7,     0.0);
( 449437.7, 3758960.1,     193.3,     193.3,     0.0);     ( 449441.5,
3758960.1,     193.0,     193.0,     0.0);
( 449445.4, 3758960.1,     192.7,     192.7,     0.0);     ( 449368.0,
3758974.1,     198.0,     198.0,     0.0);
( 449371.9, 3758974.1,     198.0,     198.0,     0.0);     ( 449375.8,
3758974.1,     198.0,     198.0,     0.0);
( 449379.6, 3758974.1,     198.0,     198.0,     0.0);     ( 449383.5,
3758974.1,     197.8,     197.8,     0.0);
( 449387.4, 3758974.1,     197.6,     197.6,     0.0);     ( 449391.2,
3758974.1,     197.5,     197.5,     0.0);
( 449395.1, 3758974.1,     197.3,     197.3,     0.0);     ( 449399.0,
3758974.1,     197.1,     197.1,     0.0);
( 449402.8, 3758974.1,     196.9,     196.9,     0.0);     ( 449406.7,
3758974.1,     196.7,     196.7,     0.0);
( 449410.6, 3758974.1,     196.5,     196.5,     0.0);     ( 449414.5,
3758974.1,     196.1,     196.1,     0.0);
( 449418.3, 3758974.1,     195.7,     195.7,     0.0);     ( 449422.2,
3758974.1,     195.3,     195.3,     0.0);
( 449426.1, 3758974.1,     194.9,     197.0,     0.0);     ( 449429.9,
3758974.1,     194.5,     197.0,     0.0);
( 449433.8, 3758974.1,     194.2,     197.0,     0.0);     ( 449437.7,
3758974.1,     193.8,     197.0,     0.0);
( 449441.5, 3758974.1,     193.4,     197.0,     0.0);     ( 449445.4,
3758974.1,     193.1,     197.0,     0.0);
( 449368.0, 3758988.2,     198.1,     198.1,     0.0);     ( 449371.9,
3758988.2,     198.1,     198.1,     0.0);
( 449375.8, 3758988.2,     198.1,     198.1,     0.0);     ( 449379.6,
3758988.2,     198.1,     198.1,     0.0);
```

```
     ( 449383.5, 3758988.2,     197.9,     197.9,      0.0);         ( 449387.4,
3758988.2,     197.8,     197.8,      0.0);
     ( 449391.2, 3758988.2,     197.6,     197.6,      0.0);         ( 449395.1,
3758988.2,     197.5,     197.5,      0.0);
     ( 449399.0, 3758988.2,     197.4,     197.4,      0.0);         ( 449402.8,
3758988.2,     197.2,     197.2,      0.0);
     ( 449406.7, 3758988.2,     197.1,     197.1,      0.0);         ( 449410.6,
3758988.2,     196.9,     196.9,      0.0);
     ( 449414.5, 3758988.2,     196.5,     196.5,      0.0);         ( 449418.3,
3758988.2,     196.1,     196.1,      0.0);
     ( 449422.2, 3758988.2,     195.8,     195.8,      0.0);         ( 449426.1,
3758988.2,     195.4,     195.4,      0.0);
     ( 449429.9, 3758988.2,     195.0,     195.0,      0.0);         ( 449433.8,
3758988.2,     194.6,     194.6,      0.0);
     ( 449437.7, 3758988.2,     194.2,     194.2,      0.0);         ( 449441.5,
3758988.2,     193.9,     193.9,      0.0);
     ( 449445.4, 3758988.2,     193.5,     193.5,      0.0);         ( 449368.0,
3759002.2,     198.5,     198.5,      0.0);
     ( 449371.9, 3759002.2,     198.5,     198.5,      0.0);         ( 449375.8,
3759002.2,     198.5,     198.5,      0.0);
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:24:07

                         PAGE   9

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

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

```
     ( 449379.6, 3759002.2,     198.5,     198.5,      0.0);         ( 449383.5,
3759002.2,     198.3,     198.3,      0.0);
     ( 449387.4, 3759002.2,     198.1,     198.1,      0.0);         ( 449391.2,
3759002.2,     197.9,     197.9,      0.0);
     ( 449395.1, 3759002.2,     197.7,     197.7,      0.0);         ( 449399.0,
3759002.2,     197.5,     197.5,      0.0);
     ( 449402.8, 3759002.2,     197.3,     197.3,      0.0);         ( 449406.7,
3759002.2,     197.1,     197.1,      0.0);
     ( 449410.6, 3759002.2,     196.9,     196.9,      0.0);         ( 449414.5,
3759002.2,     196.6,     196.6,      0.0);
     ( 449418.3, 3759002.2,     196.3,     196.3,      0.0);         ( 449422.2,
3759002.2,     196.0,     196.0,      0.0);
     ( 449426.1, 3759002.2,     195.6,     195.6,      0.0);         ( 449429.9,
3759002.2,     195.3,     195.3,      0.0);
     ( 449433.8, 3759002.2,     195.0,     195.0,      0.0);         ( 449437.7,
3759002.2,     194.7,     194.7,      0.0);
     ( 449441.5, 3759002.2,     194.3,     194.3,      0.0);         ( 449445.4,
3759002.2,     193.9,     193.9,      0.0);
```

```
    ( 449368.0, 3759016.2,     199.0,      199.0,      0.0);      ( 449371.9,
3759016.2,     199.0,      199.0,      0.0);
    ( 449375.8, 3759016.2,     199.0,      199.0,      0.0);      ( 449379.6,
3759016.2,     199.0,      199.0,      0.0);
    ( 449383.5, 3759016.2,     198.7,      198.7,      0.0);      ( 449387.4,
3759016.2,     198.5,      198.5,      0.0);
    ( 449391.2, 3759016.2,     198.2,      198.2,      0.0);      ( 449395.1,
3759016.2,     198.0,      198.0,      0.0);
    ( 449399.0, 3759016.2,     197.7,      197.7,      0.0);      ( 449402.8,
3759016.2,     197.4,      197.4,      0.0);
    ( 449406.7, 3759016.2,     197.2,      197.2,      0.0);      ( 449410.6,
3759016.2,     196.9,      196.9,      0.0);
    ( 449414.5, 3759016.2,     196.7,      196.7,      0.0);      ( 449418.3,
3759016.2,     196.4,      196.4,      0.0);
    ( 449422.2, 3759016.2,     196.2,      196.2,      0.0);      ( 449426.1,
3759016.2,     195.9,      195.9,      0.0);
    ( 449429.9, 3759016.2,     195.6,      195.6,      0.0);      ( 449433.8,
3759016.2,     195.4,      195.4,      0.0);
    ( 449437.7, 3759016.2,     195.1,      195.1,      0.0);      ( 449441.5,
3759016.2,     194.8,      195.0,      0.0);
    ( 449445.4, 3759016.2,     194.4,      195.0,      0.0);      ( 449368.0,
3759030.3,     198.5,      198.5,      0.0);
    ( 449371.9, 3759030.3,     198.5,      198.5,      0.0);      ( 449375.8,
3759030.3,     198.5,      198.5,      0.0);
    ( 449379.6, 3759030.3,     198.5,      198.5,      0.0);      ( 449383.5,
3759030.3,     198.3,      198.3,      0.0);
    ( 449387.4, 3759030.3,     198.0,      198.0,      0.0);      ( 449391.2,
3759030.3,     197.8,      197.8,      0.0);
    ( 449395.1, 3759030.3,     197.5,      197.5,      0.0);      ( 449399.0,
3759030.3,     197.2,      197.2,      0.0);
    ( 449402.8, 3759030.3,     197.0,      197.0,      0.0);      ( 449406.7,
3759030.3,     196.7,      196.7,      0.0);
    ( 449410.6, 3759030.3,     196.5,      196.5,      0.0);      ( 449414.5,
3759030.3,     196.3,      196.3,      0.0);
    ( 449418.3, 3759030.3,     196.1,      196.1,      0.0);      ( 449422.2,
3759030.3,     195.9,      195.9,      0.0);
    ( 449426.1, 3759030.3,     195.7,      195.7,      0.0);      ( 449429.9,
3759030.3,     195.5,      195.5,      0.0);
    ( 449433.8, 3759030.3,     195.3,      195.3,      0.0);      ( 449437.7,
3759030.3,     195.1,      195.1,      0.0);
    ( 449441.5, 3759030.3,     194.8,      194.8,      0.0);      ( 449445.4,
3759030.3,     194.4,      194.4,      0.0);
    ( 449368.0, 3759044.3,     198.1,      198.1,      0.0);      ( 449371.9,
3759044.3,     198.1,      198.1,      0.0);
    ( 449375.8, 3759044.3,     198.1,      198.1,      0.0);      ( 449379.6,
3759044.3,     198.1,      198.1,      0.0);
    ( 449383.5, 3759044.3,     197.8,      197.8,      0.0);      ( 449387.4,
3759044.3,     197.5,      197.5,      0.0);
    ( 449391.2, 3759044.3,     197.3,      197.3,      0.0);      ( 449395.1,
3759044.3,     197.0,      197.0,      0.0);
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```
      ( 449399.0, 3759044.3,      196.8,      196.8,       0.0);       ( 449402.8,
3759044.3,      196.5,      196.5,      0.0);
      ( 449406.7, 3759044.3,      196.2,      196.2,       0.0);       ( 449410.6,
3759044.3,      196.0,      196.0,      0.0);
      ( 449414.5, 3759044.3,      195.9,      195.9,       0.0);       ( 449418.3,
3759044.3,      195.8,      195.8,      0.0);
      ( 449422.2, 3759044.3,      195.6,      195.6,       0.0);       ( 449426.1,
3759044.3,      195.5,      195.5,      0.0);
      ( 449429.9, 3759044.3,      195.3,      195.3,       0.0);       ( 449433.8,
3759044.3,      195.2,      195.2,      0.0);
      ( 449437.7, 3759044.3,      195.1,      195.1,       0.0);       ( 449441.5,
3759044.3,      194.8,      194.8,      0.0);
      ( 449445.4, 3759044.3,      194.4,      194.4,       0.0);
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                     ***   11:24:07

                     PAGE 10
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN 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 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC                        ***          11/11/21
 *** AERMET - VERSION  16216 ***   ***
                         ***         11:24:07

                                 PAGE  11
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

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

   Surface file:   ..\KRAL_V9_ADJU\KRAL_V9.SFC
                Met Version:  16216
   Profile file:   ..\KRAL_V9_ADJU\KRAL_V9.PFL

   Surface format: FREE

   Profile format: FREE

   Surface station no.:    3171           Upper air station no.:     3190
                Name: UNKNOWN                          Name: UNKNOWN

                Year:   2012                           Year:   2012

 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
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - -
 12 01 01   1 01  -25.6  0.266 -9.000 -9.000 -999.  330.     77.9  0.15   2.40
1.00    2.93   55.   10.1  288.1    2.0
 12 01 01   1 02  -26.8  0.277 -9.000 -9.000 -999.  351.     84.7  0.15   2.40
1.00    3.05   55.   10.1  287.0    2.0
 12 01 01   1 03  -21.5  0.221 -9.000 -9.000 -999.  250.     53.5  0.15   2.40
1.00    2.45   74.   10.1  284.2    2.0
 12 01 01   1 04  -22.0  0.227 -9.000 -9.000 -999.  260.     56.8  0.15   2.40
1.00    2.52   77.   10.1  285.9    2.0
 12 01 01   1 05  -20.0  0.206 -9.000 -9.000 -999.  225.     46.8  0.15   2.40
1.00    2.30   80.   10.1  285.4    2.0
 12 01 01   1 06  -14.4  0.171 -9.000 -9.000 -999.  170.     32.1  0.15   2.40
1.00    1.93   79.   10.1  287.0    2.0
 12 01 01   1 07  -14.9  0.174 -9.000 -9.000 -999.  174.     33.2  0.15   2.40
1.00    1.96   77.   10.1  284.2    2.0
 12 01 01   1 08  -11.9  0.169 -9.000 -9.000 -999.  167.     36.1  0.15   2.40
0.53    1.89   77.   10.1  288.1    2.0
 12 01 01   1 09   40.4  0.234  0.359  0.006   40.  272.    -28.1  0.15   2.40
0.31    2.10   81.   10.1  289.2    2.0
```

```
 12 01 01   1 10  112.6  0.246  0.742  0.005  129.   293.     -11.8   0.15   2.40
0.24    1.99  101.   10.1  296.4    2.0
 12 01 01   1 11  161.0  0.402  1.188  0.005  369.   611.     -35.6   0.15   2.40
0.21    3.68   78.   10.1  298.8    2.0
 12 01 01   1 12  184.7  0.337  1.516  0.005  668.   473.     -18.4   0.15   2.40
0.20    2.89   68.   10.1  300.4    2.0
 12 01 01   1 13  183.9  0.310  1.809  0.005 1139.   414.     -14.2   0.15   2.40
0.20    2.57   64.   10.1  302.5    2.0
 12 01 01   1 14  156.6  0.374  1.852  0.005 1434.   549.     -29.5   0.15   2.40
0.22    3.37   63.   10.1  303.1    2.0
 12 01 01   1 15  104.3  0.382  1.658  0.005 1546.   567.     -47.2   0.15   2.40
0.25    3.59   62.   10.1  302.5    2.0
 12 01 01   1 16   31.8  0.374  1.123  0.005 1573.   550.    -145.8   0.15   2.40
0.34    3.76   69.   10.1  300.9    2.0
 12 01 01   1 17  -23.3  0.276 -9.000 -9.000 -999.   354.      84.0   0.15   2.40
0.62    3.03   59.   10.1  297.5    2.0
 12 01 01   1 18  -21.5  0.229 -9.000 -9.000 -999.   264.      57.8   0.15   2.40
1.00    2.54   54.   10.1  295.4    2.0
 12 01 01   1 19  -19.3  0.204 -9.000 -9.000 -999.   221.      45.6   0.15   2.40
1.00    2.27   79.   10.1  292.0    2.0
 12 01 01   1 20  -20.7  0.218 -9.000 -9.000 -999.   244.      52.2   0.15   2.40
1.00    2.42   79.   10.1  292.5    2.0
 12 01 01   1 21  -19.7  0.206 -9.000 -9.000 -999.   225.      46.9   0.15   2.40
1.00    2.30   95.   10.1  290.9    2.0
 12 01 01   1 22  -17.6  0.190 -9.000 -9.000 -999.   199.      39.8   0.15   2.40
1.00    2.13   78.   10.1  290.4    2.0
 12 01 01   1 23  -20.3  0.211 -9.000 -9.000 -999.   233.      49.0   0.15   2.40
1.00    2.35   52.   10.1  289.2    2.0
 12 01 01   1 24  -16.4  0.183 -9.000 -9.000 -999.   189.      37.0   0.15   2.40
1.00    2.06   75.   10.1  288.8    2.0
```

 First hour of profile data
 YR MO DY HR HEIGHT F WDIR   WSPD AMB_TMP sigmaA sigmaW sigmaV
 12 01 01 01   10.1 1   55.   2.93   288.2   99.0 -99.00 -99.00

 F indicates top of profile (=1) or below (=0)
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:24:07

                      PAGE 12
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

              *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                      INCLUDING SOURCE(S):   L0000183   , L0000184
 , L0000185   , L0000186   , L0000187   ,
              L0000188   , L0000189   , L0000190   , L0000191   , L0000192

```
            , L0000193      , L0000194     , L0000195       ,
                            L0000196      , L0000197      , L0000198      , L0000199      , L0000200
            , L0000201      , L0000202     , L0000203       ,
                            L0000204      , L0000205      , L0000206      , L0000207      , L0000208
            ,
```

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
449368.02	3758763.53	0.11874	449371.89	3758763.53	0.11360
449375.76	3758763.53	0.10877	449379.63	3758763.53	0.10427
449383.50	3758763.53	0.10029	449387.37	3758763.53	0.09660
449391.24	3758763.53	0.09314	449395.11	3758763.53	0.08990
449398.98	3758763.53	0.08686	449402.85	3758763.53	0.08401
449406.72	3758763.53	0.08134	449410.59	3758763.53	0.07886
449414.46	3758763.53	0.07661	449418.33	3758763.53	0.07449
449422.20	3758763.53	0.07247	449426.07	3758763.53	0.07055
449429.94	3758763.53	0.06873	449433.81	3758763.53	0.06699
449437.68	3758763.53	0.06533	449441.55	3758763.53	0.06379
449445.42	3758763.53	0.06234	449368.02	3758777.57	0.11879
449371.89	3758777.57	0.11342	449375.76	3758777.57	0.10838
449379.63	3758777.57	0.10372	449383.50	3758777.57	0.09975
449387.37	3758777.57	0.09607	449391.24	3758777.57	0.09264
449395.11	3758777.57	0.08943	449398.98	3758777.57	0.08641
449402.85	3758777.57	0.08358	449406.72	3758777.57	0.08092
449410.59	3758777.57	0.07846	449414.46	3758777.57	0.07625

```
        449418.33    3758777.57        0.07415                        449422.20
3758777.57        0.07215
        449426.07    3758777.57        0.07025                        449429.94
3758777.57        0.06845
        449433.81    3758777.57        0.06673                        449437.68
3758777.57        0.06508
        449441.55    3758777.57        0.06358                        449445.42
3758777.57        0.06218
        449368.02    3758791.61        0.11905                        449371.89
3758791.61        0.11385
        449375.76    3758791.61        0.10902                        449379.63
3758791.61        0.10452
        449383.50    3758791.61        0.10053                        449387.37
3758791.61        0.09682
        449391.24    3758791.61        0.09335                        449395.11
3758791.61        0.09013
        449398.98    3758791.61        0.08709                        449402.85
3758791.61        0.08424
        449406.72    3758791.61        0.08156                        449410.59
3758791.61        0.07907
        449414.46    3758791.61        0.07683                        449418.33
3758791.61        0.07471
        449422.20    3758791.61        0.07271                        449426.07
3758791.61        0.07079
        449429.94    3758791.61        0.06897                        449433.81
3758791.61        0.06723
        449437.68    3758791.61        0.06558                        449441.55
3758791.61        0.06402
        449445.42    3758791.61        0.06257                        449368.02
3758805.65        0.11931
        449371.89    3758805.65        0.11426                        449375.76
3758805.65        0.10960
        449379.63    3758805.65        0.10529                        449383.50
3758805.65        0.10127
        449387.37    3758805.65        0.09754                        449391.24
3758805.65        0.09405
        449395.11    3758805.65        0.09079                        449398.98
3758805.65        0.08774
        449402.85    3758805.65        0.08487                        449406.72
3758805.65        0.08217
        449410.59    3758805.65        0.07967                        449414.46
3758805.65        0.07741
        449418.33    3758805.65        0.07526                        449422.20
3758805.65        0.07323
        449426.07    3758805.65        0.07130                        449429.94
3758805.65        0.06947
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                    *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000183   , L0000184
, L0000185   , L0000186   , L0000187   ,
                    L0000188   , L0000189   , L0000190   , L0000191   , L0000192
, L0000193   , L0000194   , L0000195   ,
                    L0000196   , L0000197   , L0000198   , L0000199   , L0000200
, L0000201   , L0000202   , L0000203   ,
                    L0000204   , L0000205   , L0000206   , L0000207   , L0000208
 ,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
        449433.81   3758805.65   0.06772   449437.68
3758805.65   0.06605
        449441.55   3758805.65   0.06446   449445.42
3758805.65   0.06293
        449368.02   3758819.69   0.11937   449371.89
3758819.69   0.11432
        449375.76   3758819.69   0.10966   449379.63
3758819.69   0.10534
        449383.50   3758819.69   0.10132   449387.37
3758819.69   0.09758
        449391.24   3758819.69   0.09409   449395.11
3758819.69   0.09084
        449398.98   3758819.69   0.08778   449402.85
3758819.69   0.08491
        449406.72   3758819.69   0.08221   449410.59
3758819.69   0.07971
        449414.46   3758819.69   0.07745   449418.33
3758819.69   0.07531
        449422.20   3758819.69   0.07328   449426.07
3758819.69   0.07136
        449429.94   3758819.69   0.06953   449433.81
3758819.69   0.06778
        449437.68   3758819.69   0.06611   449441.55
3758819.69   0.06452
        449445.42   3758819.69   0.06300   449368.02

```
3758833.73         0.11938
       449371.89     3758833.73           0.11432                    449375.76
3758833.73         0.10966
       449379.63     3758833.73           0.10533                    449383.50
3758833.73         0.10131
       449387.37     3758833.73           0.09757                    449391.24
3758833.73         0.09408
       449395.11     3758833.73           0.09084                    449398.98
3758833.73         0.08778
       449402.85     3758833.73           0.08491                    449406.72
3758833.73         0.08221
       449410.59     3758833.73           0.07972                    449414.46
3758833.73         0.07746
       449418.33     3758833.73           0.07533                    449422.20
3758833.73         0.07330
       449426.07     3758833.73           0.07138                    449429.94
3758833.73         0.06955
       449433.81     3758833.73           0.06781                    449437.68
3758833.73         0.06614
       449441.55     3758833.73           0.06455                    449445.42
3758833.73         0.06303
       449368.02     3758847.77           0.12036                    449371.89
3758847.77         0.11536
       449375.76     3758847.77           0.11075                    449379.63
3758847.77         0.10646
       449383.50     3758847.77           0.10242                    449387.37
3758847.77         0.09866
       449391.24     3758847.77           0.09514                    449395.11
3758847.77         0.09185
       449398.98     3758847.77           0.08876                    449402.85
3758847.77         0.08586
       449406.72     3758847.77           0.08314                    449410.59
3758847.77         0.08059
       449414.46     3758847.77           0.07825                    449418.33
3758847.77         0.07604
       449422.20     3758847.77           0.07393                    449426.07
3758847.77         0.07194
       449429.94     3758847.77           0.07004                    449433.81
3758847.77         0.06823
       449437.68     3758847.77           0.06651                    449441.55
3758847.77         0.06489
       449445.42     3758847.77           0.06336                    449368.02
3758861.81         0.12103
       449371.89     3758861.81           0.11618                    449375.76
3758861.81         0.11164
       449379.63     3758861.81           0.10756                    449383.50
3758861.81         0.10356
       449387.37     3758861.81           0.09979                    449391.24
3758861.81         0.09627
       449395.11     3758861.81           0.09297                    449398.98
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3758861.81        0.08986
         449402.85    3758861.81        0.08694                        449406.72
3758861.81        0.08418
         449410.59    3758861.81        0.08159                        449414.46
3758861.81        0.07915
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC                      ***        11/11/21
 *** AERMET - VERSION  16216 ***   ***
                      ***        11:24:07


                         PAGE  14
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                 *** THE ANNUAL AVERAGE CONCENTRATION    VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL       ***
                              INCLUDING SOURCE(S):    L0000183    , L0000184
 , L0000185    , L0000186    , L0000187    ,
                    L0000188    , L0000189    , L0000190    , L0000191    , L0000192
 , L0000193    , L0000194    , L0000195    ,
                    L0000196    , L0000197    , L0000198    , L0000199    , L0000200
 , L0000201    , L0000202    , L0000203    ,
                    L0000204    , L0000205    , L0000206    , L0000207    , L0000208
 ,


                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***


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


      X-COORD (M)   Y-COORD (M)      CONC                    X-COORD (M)
Y-COORD (M)      CONC
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
         449418.33    3758861.81        0.07684                        449422.20
3758861.81        0.07466
         449426.07    3758861.81        0.07259                        449429.94
3758861.81        0.07062
         449433.81    3758861.81        0.06874                        449437.68
3758861.81        0.06695
         449441.55    3758861.81        0.06530                        449445.42
3758861.81        0.06375
         449368.02    3758875.85        0.12124                        449371.89
3758875.85        0.11641
         449375.76    3758875.85        0.11193                        449379.63
3758875.85        0.10777
         449383.50    3758875.85        0.10400                        449387.37
3758875.85        0.10028
         449391.24    3758875.85        0.09690                        449395.11
3758875.85        0.09360
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        449398.98    3758875.85        0.09050                    449402.85
3758875.85        0.08757
        449406.72    3758875.85        0.08481                    449410.59
3758875.85        0.08220
        449414.46    3758875.85        0.07973                    449418.33
3758875.85        0.07740
        449422.20    3758875.85        0.07518                    449426.07
3758875.85        0.07307
        449429.94    3758875.85        0.07107                    449433.81
3758875.85        0.06916
        449437.68    3758875.85        0.06736                    449441.55
3758875.85        0.06568
        449445.42    3758875.85        0.06413                    449368.02
3758889.89        0.12131
        449371.89    3758889.89        0.11648                    449375.76
3758889.89        0.11203
        449379.63    3758889.89        0.10805                    449383.50
3758889.89        0.10419
        449387.37    3758889.89        0.10064                    449391.24
3758889.89        0.09720
        449395.11    3758889.89        0.09402                    449398.98
3758889.89        0.09093
        449402.85    3758889.89        0.08800                    449406.72
3758889.89        0.08524
        449410.59    3758889.89        0.08263                    449414.46
3758889.89        0.08015
        449418.33    3758889.89        0.07781                    449422.20
3758889.89        0.07559
        449426.07    3758889.89        0.07348                    449429.94
3758889.89        0.07147
        449433.81    3758889.89        0.06955                    449437.68
3758889.89        0.06773
        449441.55    3758889.89        0.06605                    449445.42
3758889.89        0.06449
        449368.02    3758903.93        0.12126                    449371.89
3758903.93        0.11646
        449375.76    3758903.93        0.11203                    449379.63
3758903.93        0.10792
        449383.50    3758903.93        0.10427                    449387.37
3758903.93        0.10067
        449391.24    3758903.93        0.09745                    449395.11
3758903.93        0.09426
        449398.98    3758903.93        0.09134                    449402.85
3758903.93        0.08846
        449406.72    3758903.93        0.08582                    449410.59
3758903.93        0.08321
        449414.46    3758903.93        0.08071                    449418.33
3758903.93        0.07834
        449422.20    3758903.93        0.07609                    449426.07
3758903.93        0.07394
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```
        449429.94    3758903.93         0.07190                        449433.81
3758903.93        0.06996
        449437.68    3758903.93         0.06810                        449441.55
3758903.93        0.06639
        449445.42    3758903.93         0.06483                        449368.02
3758917.97        0.12059
        449371.89    3758917.97         0.11582                        449375.76
3758917.97        0.11141
        449379.63    3758917.97         0.10733                        449383.50
3758917.97        0.10390
        449387.37    3758917.97         0.10041                        449391.24
3758917.97        0.09732
        449395.11    3758917.97         0.09420                        449398.98
3758917.97        0.09141
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                       ***   11:24:07

                                PAGE 15
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

              *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                             INCLUDING SOURCE(S):   L0000183   , L0000184
 , L0000185   , L0000186   , L0000187   ,
                    L0000188   , L0000189   , L0000190   , L0000191   , L0000192
 , L0000193   , L0000194   , L0000195   ,
                    L0000196   , L0000197   , L0000198   , L0000199   , L0000200
 , L0000201   , L0000202   , L0000203   ,
                    L0000204   , L0000205   , L0000206   , L0000207   , L0000208
 ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
 -
- -
        449402.85   3758917.97   0.08861   449406.72
3758917.97   0.08610
        449410.59   3758917.97   0.08355   449414.46
3758917.97   0.08120
        449418.33   3758917.97   0.07891   449422.20
3758917.97   0.07663
        449426.07   3758917.97   0.07445   449429.94

```
3758917.97        0.07235
        449433.81    3758917.97        0.07036                  449437.68
3758917.97        0.06845
        449441.55    3758917.97        0.06672                  449445.42
3758917.97        0.06514
        449368.02    3758932.01        0.12001                  449371.89
3758932.01        0.11524
        449375.76    3758932.01        0.11083                  449379.63
3758932.01        0.10675
        449383.50    3758932.01        0.10317                  449387.37
3758932.01        0.10009
        449391.24    3758932.01        0.09688                  449395.11
3758932.01        0.09407
        449398.98    3758932.01        0.09118                  449402.85
3758932.01        0.08861
        449406.72    3758932.01        0.08600                  449410.59
3758932.01        0.08368
        449414.46    3758932.01        0.08140                  449418.33
3758932.01        0.07907
        449422.20    3758932.01        0.07692                  449426.07
3758932.01        0.07483
        449429.94    3758932.01        0.07273                  449433.81
3758932.01        0.07071
        449437.68    3758932.01        0.06878                  449441.55
3758932.01        0.06702
        449445.42    3758932.01        0.06541                  449368.02
3758946.05        0.11948
        449371.89    3758946.05        0.11472                  449375.76
3758946.05        0.11033
        449379.63    3758946.05        0.10627                  449383.50
3758946.05        0.10311
        449387.37    3758946.05        0.09977                  449391.24
3758946.05        0.09689
        449395.11    3758946.05        0.09389                  449398.98
3758946.05        0.09125
        449402.85    3758946.05        0.08853                  449406.72
3758946.05        0.08612
        449410.59    3758946.05        0.08365                  449414.46
3758946.05        0.08144
        449418.33    3758946.05        0.07927                  449422.20
3758946.05        0.07705
        449426.07    3758946.05        0.07500                  449429.94
3758946.05        0.07300
        449433.81    3758946.05        0.07100                  449437.68
3758946.05        0.06907
        449441.55    3758946.05        0.06729                  449445.42
3758946.05        0.06563
        449368.02    3758960.09        0.11898                  449371.89
3758960.09        0.11424
        449375.76    3758960.09        0.10986                  449379.63
```

```
3758960.09        0.10581
        449383.50     3758960.09         0.10275                         449387.37
3758960.09        0.09943
        449391.24     3758960.09         0.09663                         449395.11
3758960.09        0.09364
        449398.98     3758960.09         0.09107                         449402.85
3758960.09        0.08838
        449406.72     3758960.09         0.08602                         449410.59
3758960.09        0.08358
        449414.46     3758960.09         0.08141                         449418.33
3758960.09        0.07930
        449422.20     3758960.09         0.07712                         449426.07
3758960.09        0.07512
        449429.94     3758960.09         0.07316                         449433.81
3758960.09        0.07125
        449437.68     3758960.09         0.06933                         449441.55
3758960.09        0.06753
        449445.42     3758960.09         0.06583                         449368.02
3758974.13        0.11948
        449371.89     3758974.13         0.11471                         449375.76
3758974.13        0.11030
        449379.63     3758974.13         0.10623                         449383.50
3758974.13        0.10304
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   11:24:07

                         PAGE 16
 *** MODELOPTs: RegDFAULT CONC ELEV   URBAN ADJ_U*

                *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                           INCLUDING SOURCE(S):   L0000183   , L0000184
 , L0000185   , L0000186   , L0000187   ,
                L0000188   , L0000189   , L0000190   , L0000191   , L0000192
 , L0000193   , L0000194   , L0000195   ,
                L0000196   , L0000197   , L0000198   , L0000199   , L0000200
 , L0000201   , L0000202   , L0000203   ,
                L0000204   , L0000205   , L0000206   , L0000207   , L0000208
 ,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

      X-COORD (M)   Y-COORD (M)   CONC   X-COORD (M)
Y-COORD (M)   CONC
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- -
- -

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        449387.37     3758974.13          0.09964                        449391.24
3758974.13        0.09644
        449395.11     3758974.13          0.09374                        449398.98
3758974.13        0.09089
        449402.85     3758974.13          0.08843                        449406.72
3758974.13        0.08587
        449410.59     3758974.13          0.08345                        449414.46
3758974.13        0.08133
        449418.33     3758974.13          0.07927                        449422.20
3758974.13        0.07726
        449426.07     3758974.13          0.07518                        449429.94
3758974.13        0.07326
        449433.81     3758974.13          0.07139                        449437.68
3758974.13        0.06957
        449441.55     3758974.13          0.06775                        449445.42
3758974.13        0.06602
        449368.02     3758988.17          0.11987                        449371.89
3758988.17        0.11508
        449375.76     3758988.17          0.11065                        449379.63
3758988.17        0.10655
        449383.50     3758988.17          0.10326                        449387.37
3758988.17        0.09981
        449391.24     3758988.17          0.09657                        449395.11
3758988.17        0.09352
        449398.98     3758988.17          0.09095                        449402.85
3758988.17        0.08824
        449406.72     3758988.17          0.08567                        449410.59
3758988.17        0.08348
        449414.46     3758988.17          0.08121                        449418.33
3758988.17        0.07919
        449422.20     3758988.17          0.07723                        449426.07
3758988.17        0.07518
        449429.94     3758988.17          0.07332                        449433.81
3758988.17        0.07148
        449437.68     3758988.17          0.06969                        449441.55
3758988.17        0.06788
        449445.42     3758988.17          0.06620                        449368.02
3759002.21        0.11916
        449371.89     3759002.21          0.11439                        449375.76
3759002.21        0.10998
        449379.63     3759002.21          0.10591                        449383.50
3759002.21        0.10282
        449387.37     3759002.21          0.09944                        449391.24
3759002.21        0.09662
        449395.11     3759002.21          0.09362                        449398.98
3759002.21        0.09078
        449402.85     3759002.21          0.08836                        449406.72
3759002.21        0.08581
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        449410.59    3759002.21        0.08360                        449414.46
3759002.21        0.08129
        449418.33    3759002.21        0.07926                        449422.20
3759002.21        0.07714
        449426.07    3759002.21        0.07525                        449429.94
3759002.21        0.07340
        449433.81    3759002.21        0.07150                        449437.68
3759002.21        0.06977
        449441.55    3759002.21        0.06798                        449445.42
3759002.21        0.06632
        449368.02    3759016.25        0.11893                        449371.89
3759016.25        0.11418
        449375.76    3759016.25        0.10980                        449379.63
3759016.25        0.10574
        449383.50    3759016.25        0.10226                        449387.37
3759016.25        0.09942
        449391.24    3759016.25        0.09631                        449395.11
3759016.25        0.09369
        449398.98    3759016.25        0.09089                        449402.85
3759016.25        0.08822
        449406.72    3759016.25        0.08592                        449410.59
3759016.25        0.08350
        449414.46    3759016.25        0.08136                        449418.33
3759016.25        0.07915
        449422.20    3759016.25        0.07719                        449426.07
3759016.25        0.07516
        449429.94    3759016.25        0.07336                        449433.81
3759016.25        0.07148
        449437.68    3759016.25        0.06980                        449441.55
3759016.25        0.06814
        449445.42    3759016.25        0.06641                        449368.02
3759030.29        0.12009
```

              *** THE ANNUAL AVERAGE CONCENTRATION   VALUES AVERAGED OVER   5
YEARS FOR SOURCE GROUP: ALL   ***
                          INCLUDING SOURCE(S):   L0000183   , L0000184
, L0000185   , L0000186   , L0000187   ,
                    L0000188   , L0000189   , L0000190   , L0000191   , L0000192
, L0000193   , L0000194   , L0000195   ,
                    L0000196   , L0000197   , L0000198   , L0000199   , L0000200
, L0000201   , L0000202   , L0000203   ,
                    L0000204   , L0000205   , L0000206   , L0000207   , L0000208
,

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

X-COORD (M)	Y-COORD (M)	CONC	X-COORD (M)	Y-COORD (M)	CONC
449371.89	3759030.29	0.11526	449375.76	3759030.29	0.11080
449379.63	3759030.29	0.10668	449383.50	3759030.29	0.10348
449387.37	3759030.29	0.10009	449391.24	3759030.29	0.09717
449395.11	3759030.29	0.09413	449398.98	3759030.29	0.09147
449402.85	3759030.29	0.08871	449406.72	3759030.29	0.08628
449410.59	3759030.29	0.08378	449414.46	3759030.29	0.08158
449418.33	3759030.29	0.07933	449422.20	3759030.29	0.07718
449426.07	3759030.29	0.07526	449429.94	3759030.29	0.07331
449433.81	3759030.29	0.07154	449437.68	3759030.29	0.06975
449441.55	3759030.29	0.06808	449445.42	3759030.29	0.06634
449368.02	3759044.33	0.12140	449371.89	3759044.33	0.11650
449375.76	3759044.33	0.11197	449379.63	3759044.33	0.10780
449383.50	3759044.33	0.10436	449387.37	3759044.33	0.10084
449391.24	3759044.33	0.09774	449395.11	3759044.33	0.09459
449398.98	3759044.33	0.09179	449402.85	3759044.33	0.08897
449406.72	3759044.33	0.08645	449410.59	3759044.33	0.08391
449414.46	3759044.33	0.08152	449418.33	3759044.33	0.07937
449422.20	3759044.33	0.07722	449426.07	3759044.33	0.07517
449429.94	3759044.33	0.07332	449433.81	3759044.33	0.07146
449437.68	3759044.33	0.06968	449441.55		

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3759044.33        0.06801
        449445.42    3759044.33        0.06626


♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC                      ***          11/11/21
 *** AERMET - VERSION  16216 ***    ***
                         ***          11:24:07


                              PAGE  18
 *** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


                              *** THE   1ST HIGHEST  1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL      ***
                              INCLUDING SOURCE(S):    L0000183    , L0000184
 , L0000185    , L0000186    , L0000187      ,
                L0000188    , L0000189    , L0000190    , L0000191    , L0000192
 , L0000193    , L0000194    , L0000195      ,
                L0000196    , L0000197    , L0000198    , L0000199    , L0000200
 , L0000201    , L0000202    , L0000203      ,
                L0000204    , L0000205    , L0000206    , L0000207    , L0000208
 ,


                                        *** DISCRETE CARTESIAN RECEPTOR POINTS
***


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


      X-COORD (M)  Y-COORD (M)      CONC     (YYMMDDHH)           X-COORD (M)
Y-COORD (M)       CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - -
        449368.02   3758763.53       0.28794  (13112916)           449371.89
3758763.53       0.27232  (13062606)
        449375.76   3758763.53       0.26122  (13062606)           449379.63
3758763.53       0.25095  (13062606)
        449383.50   3758763.53       0.24155  (13062606)           449387.37
3758763.53       0.23281  (13062606)
        449391.24   3758763.53       0.22466  (13062606)           449395.11
3758763.53       0.21704  (13062606)
        449398.98   3758763.53       0.20989  (13062606)           449402.85
3758763.53       0.20318  (13062606)
        449406.72   3758763.53       0.19687  (13062606)           449410.59
3758763.53       0.19095  (13062606)
        449414.46   3758763.53       0.18541  (13062606)           449418.33
3758763.53       0.18017  (13062606)
        449422.20   3758763.53       0.17519  (13062606)           449426.07
3758763.53       0.17047  (13062606)
        449429.94   3758763.53       0.16598  (13062606)           449433.81
3758763.53       0.16170  (13062606)
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    449437.68    3758763.53        0.15762    (13062606)                    449441.55
3758763.53          0.15376    (13062606)
    449445.42    3758763.53        0.15007    (13062606)                    449368.02
3758777.57          0.28824    (13112916)
    449371.89    3758777.57        0.27300    (13062606)                    449375.76
3758777.57          0.26176    (13062606)
    449379.63    3758777.57        0.25136    (13062606)                    449383.50
3758777.57          0.24194    (13062606)
    449387.37    3758777.57        0.23319    (13062606)                    449391.24
3758777.57          0.22504    (13062606)
    449395.11    3758777.57        0.21741    (13062606)                    449398.98
3758777.57          0.21026    (13062606)
    449402.85    3758777.57        0.20354    (13062606)                    449406.72
3758777.57          0.19722    (13062606)
    449410.59    3758777.57        0.19129    (13062606)                    449414.46
3758777.57          0.18577    (13062606)
    449418.33    3758777.57        0.18053    (13062606)                    449422.20
3758777.57          0.17556    (13062606)
    449426.07    3758777.57        0.17085    (13062606)                    449429.94
3758777.57          0.16636    (13062606)
    449433.81    3758777.57        0.16208    (13062606)                    449437.68
3758777.57          0.15801    (13062606)
    449441.55    3758777.57        0.15415    (13062606)                    449445.42
3758777.57          0.15050    (13062606)
    449368.02    3758791.61        0.28942    (13112916)                    449371.89
3758791.61          0.27399    (13062606)
    449375.76    3758791.61        0.26284    (13062606)                    449379.63
3758791.61          0.25253    (13062606)
    449383.50    3758791.61        0.24309    (13062606)                    449387.37
3758791.61          0.23430    (13062606)
    449391.24    3758791.61        0.22611    (13062606)                    449395.11
3758791.61          0.21847    (13062606)
    449398.98    3758791.61        0.21129    (13062606)                    449402.85
3758791.61          0.20456    (13062606)
    449406.72    3758791.61        0.19821    (13062606)                    449410.59
3758791.61          0.19226    (13062606)
    449414.46    3758791.61        0.18671    (13062606)                    449418.33
3758791.61          0.18145    (13062606)
    449422.20    3758791.61        0.17647    (13062606)                    449426.07
3758791.61          0.17173    (13062606)
    449429.94    3758791.61        0.16722    (13062606)                    449433.81
3758791.61          0.16293    (13062606)
    449437.68    3758791.61        0.15883    (13062606)                    449441.55
3758791.61          0.15494    (13062606)
    449445.42    3758791.61        0.15124    (13062606)                    449368.02
3758805.65          0.29020    (13112916)
    449371.89    3758805.65        0.27494    (13062606)                    449375.76
3758805.65          0.26386    (13062606)
    449379.63    3758805.65        0.25363    (13062606)                    449383.50
3758805.65          0.24416    (13062606)
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        449387.37   3758805.65        0.23534  (13062606)                    449391.24
 3758805.65         0.22713  (13062606)
        449395.11   3758805.65        0.21945  (13062606)                    449398.98
 3758805.65         0.21226  (13062606)
        449402.85   3758805.65        0.20550  (13062606)                    449406.72
 3758805.65         0.19914  (13062606)
        449410.59   3758805.65        0.19317  (13062606)                    449414.46
 3758805.65         0.18759  (13062606)
        449418.33   3758805.65        0.18231  (13062606)                    449422.20
 3758805.65         0.17730  (13062606)
        449426.07   3758805.65        0.17254  (13062606)                    449429.94
 3758805.65         0.16803  (13062606)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:24:07

                              PAGE 19

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                           *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000183   , L0000184
 , L0000185   , L0000186   , L0000187   ,
                    L0000188   , L0000189   , L0000190   , L0000191   , L0000192
 , L0000193   , L0000194   , L0000195   ,
                    L0000196   , L0000197   , L0000198   , L0000199   , L0000200
 , L0000201   , L0000202   , L0000203   ,
                    L0000204   , L0000205   , L0000206   , L0000207   , L0000208
 ,

                                          *** DISCRETE CARTESIAN RECEPTOR POINTS
 ***

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

      X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
 Y-COORD (M)   CONC   (YYMMDDHH)
 -
 -
```
        449433.81   3758805.65        0.16372  (13062606)                    449437.68
 3758805.65         0.15961  (13062606)
        449441.55   3758805.65        0.15568  (13062606)                    449445.42
 3758805.65         0.15193  (13062606)
        449368.02   3758819.69        0.29061  (13112916)                    449371.89
 3758819.69         0.27562  (13062606)
        449375.76   3758819.69        0.26453  (13062606)                    449379.63
 3758819.69         0.25427  (13062606)
        449383.50   3758819.69        0.24477  (13062606)                    449387.37
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3758819.69          0.23594  (13062606)
     449391.24   3758819.69          0.22771  (13062606)                   449395.11
3758819.69          0.22002  (13062606)
     449398.98   3758819.69          0.21281  (13062606)                   449402.85
3758819.69          0.20604  (13062606)
     449406.72   3758819.69          0.19967  (13062606)                   449410.59
3758819.69          0.19369  (13062606)
     449414.46   3758819.69          0.18810  (13062606)                   449418.33
3758819.69          0.18281  (13062606)
     449422.20   3758819.69          0.17780  (13062606)                   449426.07
3758819.69          0.17304  (13062606)
     449429.94   3758819.69          0.16851  (13062606)                   449433.81
3758819.69          0.16420  (13062606)
     449437.68   3758819.69          0.16008  (13062606)                   449441.55
3758819.69          0.15615  (13062606)
     449445.42   3758819.69          0.15239  (13062606)                   449368.02
3758833.73          0.29111  (13112916)
     449371.89   3758833.73          0.27623  (13062606)                   449375.76
3758833.73          0.26511  (13062606)
     449379.63   3758833.73          0.25484  (13062606)                   449383.50
3758833.73          0.24532  (13062606)
     449387.37   3758833.73          0.23647  (13062606)                   449391.24
3758833.73          0.22822  (13062606)
     449395.11   3758833.73          0.22052  (13062606)                   449398.98
3758833.73          0.21330  (13062606)
     449402.85   3758833.73          0.20652  (13062606)                   449406.72
3758833.73          0.20013  (13062606)
     449410.59   3758833.73          0.19414  (13062606)                   449414.46
3758833.73          0.18855  (13062606)
     449418.33   3758833.73          0.18325  (13062606)                   449422.20
3758833.73          0.17823  (13062606)
     449426.07   3758833.73          0.17347  (13062606)                   449429.94
3758833.73          0.16894  (13062606)
     449433.81   3758833.73          0.16462  (13062606)                   449437.68
3758833.73          0.16050  (13062606)
     449441.55   3758833.73          0.15656  (13062606)                   449445.42
3758833.73          0.15280  (13062606)
     449368.02   3758847.77          0.29380  (13112916)                   449371.89
3758847.77          0.27772  (13112916)
     449375.76   3758847.77          0.26630  (13062606)                   449379.63
3758847.77          0.25603  (13062606)
     449383.50   3758847.77          0.24648  (13062606)                   449387.37
3758847.77          0.23761  (13062606)
     449391.24   3758847.77          0.22934  (13062606)                   449395.11
3758847.77          0.22160  (13062606)
     449398.98   3758847.77          0.21435  (13062606)                   449402.85
3758847.77          0.20754  (13062606)
     449406.72   3758847.77          0.20114  (13062606)                   449410.59
3758847.77          0.19511  (13062606)
     449414.46   3758847.77          0.18945  (13062606)                   449418.33
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3758847.77        0.18411 (13062606)
      449422.20   3758847.77        0.17903 (13062606)                449426.07
3758847.77        0.17421 (13062606)
      449429.94   3758847.77        0.16963 (13062606)                449433.81
3758847.77        0.16526 (13062606)
      449437.68   3758847.77        0.16110 (13062606)                449441.55
3758847.77        0.15714 (13062606)
      449445.42   3758847.77        0.15337 (13062606)                449368.02
3758861.81        0.29708 (13112916)
      449371.89   3758861.81        0.28117 (13112916)                449375.76
3758861.81        0.26740 (13062606)
      449379.63   3758861.81        0.25716 (13062606)                449383.50
3758861.81        0.24761 (13062606)
      449387.37   3758861.81        0.23872 (13062606)                449391.24
3758861.81        0.23043 (13062606)
      449395.11   3758861.81        0.22268 (13062606)                449398.98
3758861.81        0.21541 (13062606)
      449402.85   3758861.81        0.20858 (13062606)                449406.72
3758861.81        0.20216 (13062606)
      449410.59   3758861.81        0.19610 (13062606)                449414.46
3758861.81        0.19038 (13062606)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:24:07

                              PAGE 20

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000183   , L0000184
 , L0000185   , L0000186   , L0000187   ,
                   L0000188   , L0000189   , L0000190   , L0000191   , L0000192
 , L0000193   , L0000194   , L0000195   ,
                   L0000196   , L0000197   , L0000198   , L0000199   , L0000200
 , L0000201   , L0000202   , L0000203   ,
                   L0000204   , L0000205   , L0000206   , L0000207   , L0000208
 ,

                                         *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -

```
     449418.33   3758861.81        0.18497  (13062606)                 449422.20
3758861.81        0.17984  (13062606)
     449426.07   3758861.81        0.17497  (13062606)                 449429.94
3758861.81        0.17033  (13062606)
     449433.81   3758861.81        0.16592  (13062606)                 449437.68
3758861.81        0.16171  (13062606)
     449441.55   3758861.81        0.15772  (13062606)                 449445.42
3758861.81        0.15394  (13062606)
     449368.02   3758875.85        0.29832  (13112916)                 449371.89
3758875.85        0.28273  (13112916)
     449375.76   3758875.85        0.26838  (13112916)                 449379.63
3758875.85        0.25790  (13062606)
     449383.50   3758875.85        0.24837  (13062606)                 449387.37
3758875.85        0.23948  (13062606)
     449391.24   3758875.85        0.23120  (13062606)                 449395.11
3758875.85        0.22343  (13062606)
     449398.98   3758875.85        0.21616  (13062606)                 449402.85
3758875.85        0.20932  (13062606)
     449406.72   3758875.85        0.20288  (13062606)                 449410.59
3758875.85        0.19680  (13062606)
     449414.46   3758875.85        0.19106  (13062606)                 449418.33
3758875.85        0.18563  (13062606)
     449422.20   3758875.85        0.18048  (13062606)                 449426.07
3758875.85        0.17558  (13062606)
     449429.94   3758875.85        0.17092  (13062606)                 449433.81
3758875.85        0.16649  (13062606)
     449437.68   3758875.85        0.16226  (13062606)                 449441.55
3758875.85        0.15826  (13062606)
     449445.42   3758875.85        0.15446  (13062606)                 449368.02
3758889.89        0.29872  (13112916)
     449371.89   3758889.89        0.28306  (13112916)                 449375.76
3758889.89        0.26879  (13112916)
     449379.63   3758889.89        0.25851  (13062606)                 449383.50
3758889.89        0.24899  (13062606)
     449387.37   3758889.89        0.24010  (13062606)                 449391.24
3758889.89        0.23181  (13062606)
     449395.11   3758889.89        0.22404  (13062606)                 449398.98
3758889.89        0.21676  (13062606)
     449402.85   3758889.89        0.20991  (13062606)                 449406.72
3758889.89        0.20346  (13062606)
     449410.59   3758889.89        0.19738  (13062606)                 449414.46
3758889.89        0.19162  (13062606)
     449418.33   3758889.89        0.18618  (13062606)                 449422.20
3758889.89        0.18102  (13062606)
     449426.07   3758889.89        0.17611  (13062606)                 449429.94
3758889.89        0.17144  (13062606)
     449433.81   3758889.89        0.16700  (13062606)                 449437.68
3758889.89        0.16276  (13062606)
     449441.55   3758889.89        0.15875  (13062606)                 449445.42
3758889.89        0.15495  (13062606)
```

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      449368.02   3758903.93      0.29792  (13112916)                 449371.89
3758903.93      0.28244  (13112916)
      449375.76   3758903.93      0.26929  (13062606)                 449379.63
3758903.93      0.25903  (13062606)
      449383.50   3758903.93      0.24953  (13062606)                 449387.37
3758903.93      0.24067  (13062606)
      449391.24   3758903.93      0.23240  (13062606)                 449395.11
3758903.93      0.22465  (13062606)
      449398.98   3758903.93      0.21738  (13062606)                 449402.85
3758903.93      0.21054  (13062606)
      449406.72   3758903.93      0.20409  (13062606)                 449410.59
3758903.93      0.19800  (13062606)
      449414.46   3758903.93      0.19222  (13062606)                 449418.33
3758903.93      0.18676  (13062606)
      449422.20   3758903.93      0.18157  (13062606)                 449426.07
3758903.93      0.17664  (13062606)
      449429.94   3758903.93      0.17196  (13062606)                 449433.81
3758903.93      0.16749  (13062606)
      449437.68   3758903.93      0.16323  (13062606)                 449441.55
3758903.93      0.15920  (13062606)
      449445.42   3758903.93      0.15538  (13062606)                 449368.02
3758917.97      0.29711  (13112916)
      449371.89   3758917.97      0.28154  (13112916)                 449375.76
3758917.97      0.26962  (13062606)
      449379.63   3758917.97      0.25936  (13062606)                 449383.50
3758917.97      0.24990  (13062606)
      449387.37   3758917.97      0.24107  (13062606)                 449391.24
3758917.97      0.23285  (13062606)
      449395.11   3758917.97      0.22513  (13062606)                 449398.98
3758917.97      0.21789  (13062606)
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                         ***   11:24:07

                         PAGE 21
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                        *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                         INCLUDING SOURCE(S):   L0000183   , L0000184
, L0000185   , L0000186   , L0000187   ,
                L0000188   , L0000189   , L0000190   , L0000191   , L0000192
, L0000193   , L0000194   , L0000195   ,
                L0000196   , L0000197   , L0000198   , L0000199   , L0000200
, L0000201   , L0000202   , L0000203   ,
                L0000204   , L0000205   , L0000206   , L0000207   , L0000208
,

                                        *** DISCRETE CARTESIAN RECEPTOR POINTS

```
     ***

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

      X-COORD (M)   Y-COORD (M)      CONC      (YYMMDDHH)              X-COORD (M)
Y-COORD (M)       CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
 - - - - - - - - - - - - - - - - - - - - - - - - - -
         449402.85   3758917.97     0.21108  (13062606)               449406.72
3758917.97        0.20465  (13062606)
         449410.59   3758917.97     0.19857  (13062606)               449414.46
3758917.97        0.19280  (13062606)
         449418.33   3758917.97     0.18732  (13062606)               449422.20
3758917.97        0.18211  (13062606)
         449426.07   3758917.97     0.17716  (13062606)               449429.94
3758917.97        0.17244  (13062606)
         449433.81   3758917.97     0.16794  (13062606)               449437.68
3758917.97        0.16365  (13062606)
         449441.55   3758917.97     0.15960  (13062606)               449445.42
3758917.97        0.15577  (13062606)
         449368.02   3758932.01     0.29682  (13112916)               449371.89
3758932.01        0.28115  (13112916)
         449375.76   3758932.01     0.26988  (13062606)               449379.63
3758932.01        0.25960  (13062606)
         449383.50   3758932.01     0.25014  (13062606)               449387.37
3758932.01        0.24136  (13062606)
         449391.24   3758932.01     0.23314  (13062606)               449395.11
3758932.01        0.22546  (13062606)
         449398.98   3758932.01     0.21823  (13062606)               449402.85
3758932.01        0.21144  (13062606)
         449406.72   3758932.01     0.20503  (13062606)               449410.59
3758932.01        0.19898  (13062606)
         449414.46   3758932.01     0.19322  (13062606)               449418.33
3758932.01        0.18774  (13062606)
         449422.20   3758932.01     0.18253  (13062606)               449426.07
3758932.01        0.17758  (13062606)
         449429.94   3758932.01     0.17285  (13062606)               449433.81
3758932.01        0.16833  (13062606)
         449437.68   3758932.01     0.16403  (13062606)               449441.55
3758932.01        0.15996  (13062606)
         449445.42   3758932.01     0.15611  (13062606)               449368.02
3758946.05        0.29567  (13112916)
         449371.89   3758946.05     0.28132  (13062606)               449375.76
3758946.05        0.27016  (13062606)
         449379.63   3758946.05     0.25991  (13020301)               449383.50
3758946.05        0.25043  (13062606)
         449387.37   3758946.05     0.24163  (13062606)               449391.24
3758946.05        0.23343  (13062606)
         449395.11   3758946.05     0.22573  (13062606)               449398.98
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3758946.05        0.21851  (13062606)
        449402.85   3758946.05        0.21172  (13062606)                449406.72
3758946.05        0.20532  (13062606)
        449410.59   3758946.05        0.19926  (13062606)                449414.46
3758946.05        0.19352  (13062606)
        449418.33   3758946.05        0.18806  (13062606)                449422.20
3758946.05        0.18285  (13062606)
        449426.07   3758946.05        0.17790  (13062606)                449429.94
3758946.05        0.17317  (13062606)
        449433.81   3758946.05        0.16866  (13062606)                449437.68
3758946.05        0.16435  (13062606)
        449441.55   3758946.05        0.16027  (13062606)                449445.42
3758946.05        0.15639  (13062606)
        449368.02   3758960.09        0.29731  (13020301)                449371.89
3758960.09        0.28861  (13020301)
        449375.76   3758960.09        0.28032  (13020301)                449379.63
3758960.09        0.27224  (13020301)
        449383.50   3758960.09        0.25121  (13020301)                449387.37
3758960.09        0.24200  (13020301)
        449391.24   3758960.09        0.23366  (13062606)                449395.11
3758960.09        0.22595  (13062606)
        449398.98   3758960.09        0.21874  (13062606)                449402.85
3758960.09        0.21194  (13062606)
        449406.72   3758960.09        0.20555  (13062606)                449410.59
3758960.09        0.19949  (13062606)
        449414.46   3758960.09        0.19376  (13062606)                449418.33
3758960.09        0.18831  (13062606)
        449422.20   3758960.09        0.18312  (13062606)                449426.07
3758960.09        0.17817  (13062606)
        449429.94   3758960.09        0.17345  (13062606)                449433.81
3758960.09        0.16894  (13062606)
        449437.68   3758960.09        0.16463  (13062606)                449441.55
3758960.09        0.16053  (13062606)
        449445.42   3758960.09        0.15663  (13062606)                449368.02
3758974.13        0.29735  (13112916)
        449371.89   3758974.13        0.28511  (13020301)                449375.76
3758974.13        0.27707  (13020301)
        449379.63   3758974.13        0.26926  (13020301)                449383.50
3758974.13        0.25101  (13062606)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                        ***   11:24:07

                          PAGE 22
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                         *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL   ***
                           INCLUDING SOURCE(S):   L0000183   , L0000184

```
, L0000185     , L0000186     , L0000187       ,
                L0000188     , L0000189     , L0000190     , L0000191     , L0000192
, L0000193     , L0000194     , L0000195       ,
                L0000196     , L0000197     , L0000198     , L0000199     , L0000200
, L0000201     , L0000202     , L0000203       ,
                L0000204     , L0000205     , L0000206     , L0000207     , L0000208
,

                                    *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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


     X-COORD (M)  Y-COORD (M)      CONC     (YYMMDDHH)              X-COORD (M)
Y-COORD (M)      CONC     (YYMMDDHH)
- - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - -
        449387.37   3758974.13      0.24216  (13062606)              449391.24
3758974.13       0.23390  (16092620)
        449395.11   3758974.13      0.22619  (13062606)              449398.98
3758974.13       0.21894  (13062606)
        449402.85   3758974.13      0.21214  (13062606)              449406.72
3758974.13       0.20573  (13062606)
        449410.59   3758974.13      0.19967  (13062606)              449414.46
3758974.13       0.19396  (13062606)
        449418.33   3758974.13      0.18852  (13062606)              449422.20
3758974.13       0.18334  (13062606)
        449426.07   3758974.13      0.17839  (13062606)              449429.94
3758974.13       0.17368  (13062606)
        449433.81   3758974.13      0.16918  (13062606)              449437.68
3758974.13       0.16487  (13062606)
        449441.55   3758974.13      0.16076  (13062606)              449445.42
3758974.13       0.15683  (13062606)
        449368.02   3758988.17      0.29784  (13112916)              449371.89
3758988.17       0.28248  (13062606)
        449375.76   3758988.17      0.27452  (13020301)              449379.63
3758988.17       0.26703  (13020301)
        449383.50   3758988.17      0.25130  (13062606)              449387.37
3758988.17       0.24241  (13062606)
        449391.24   3758988.17      0.23412  (13062606)              449395.11
3758988.17       0.22684  (16092620)
        449398.98   3758988.17      0.21912  (13062606)              449402.85
3758988.17       0.21229  (13062606)
        449406.72   3758988.17      0.20586  (13062606)              449410.59
3758988.17       0.19982  (13062606)
        449414.46   3758988.17      0.19410  (13062606)              449418.33
3758988.17       0.18867  (13062606)
        449422.20   3758988.17      0.18350  (13062606)              449426.07
3758988.17       0.17856  (13062606)
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     449429.94   3758988.17      0.17386  (13062606)            449433.81
3758988.17        0.16936  (13062606)
     449437.68   3758988.17      0.16506  (13062606)            449441.55
3758988.17        0.16094  (13062606)
     449445.42   3758988.17      0.15700  (13062606)            449368.02
3759002.21        0.30573  (13020301)
     449371.89   3759002.21      0.29704  (13020301)            449375.76
3759002.21        0.28874  (13020301)
     449379.63   3759002.21      0.28065  (13020301)            449383.50
3759002.21        0.25978  (13020301)
     449387.37   3759002.21      0.25109  (13020301)            449391.24
3759002.21        0.23428  (13062606)
     449395.11   3759002.21      0.22653  (13062606)            449398.98
3759002.21        0.21996  (16092620)
     449402.85   3759002.21      0.21245  (13062606)            449406.72
3759002.21        0.20601  (13062606)
     449410.59   3759002.21      0.19995  (13062606)            449414.46
3759002.21        0.19421  (13062606)
     449418.33   3759002.21      0.18877  (13062606)            449422.20
3759002.21        0.18359  (13062606)
     449426.07   3759002.21      0.17867  (13062606)            449429.94
3759002.21        0.17397  (13062606)
     449433.81   3759002.21      0.16948  (13062606)            449437.68
3759002.21        0.16520  (13062606)
     449441.55   3759002.21      0.16109  (13062606)            449445.42
3759002.21        0.15715  (13062606)
     449368.02   3759016.25      0.30723  (13020301)            449371.89
3759016.25        0.29877  (13020301)
     449375.76   3759016.25      0.29070  (13020301)            449379.63
3759016.25        0.28284  (13020301)
     449383.50   3759016.25      0.27241  (13020301)            449387.37
3759016.25        0.25181  (13020301)
     449391.24   3759016.25      0.24295  (13020301)            449395.11
3759016.25        0.22666  (13062606)
     449398.98   3759016.25      0.21946  (16092620)            449402.85
3759016.25        0.21297  (16092620)
     449406.72   3759016.25      0.20613  (13062606)            449410.59
3759016.25        0.20004  (13062606)
     449414.46   3759016.25      0.19430  (13062606)            449418.33
3759016.25        0.18884  (13062606)
     449422.20   3759016.25      0.18366  (13062606)            449426.07
3759016.25        0.17873  (13062606)
     449429.94   3759016.25      0.17404  (13062606)            449433.81
3759016.25        0.16956  (13062606)
     449437.68   3759016.25      0.16529  (13062606)            449441.55
3759016.25        0.16120  (13062606)
     449445.42   3759016.25      0.15726  (13062606)            449368.02
3759030.29        0.29967  (13112916)
```

                              *** THE   1ST HIGHEST 1-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                    INCLUDING SOURCE(S):   L0000183   , L0000184
  , L0000185   , L0000186   , L0000187   ,
                    L0000188   , L0000189   , L0000190   , L0000191   , L0000192
  , L0000193   , L0000194   , L0000195   ,
                    L0000196   , L0000197   , L0000198   , L0000199   , L0000200
  , L0000201   , L0000202   , L0000203   ,
                    L0000204   , L0000205   , L0000206   , L0000207   , L0000208
  ,

                                            *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
 Y-COORD (M)   CONC   (YYMMDDHH)
 -
 -
         449371.89   3759030.29   0.28934 (13020301)   449375.76
  3759030.29   0.28151 (13020301)
         449379.63   3759030.29   0.27393 (13020301)   449383.50
  3759030.29   0.25338 (13020301)
         449387.37   3759030.29   0.24551 (16092620)   449391.24
  3759030.29   0.23467 (13062606)
         449395.11   3759030.29   0.22688 (13062606)   449398.98
  3759030.29   0.21958 (13062606)
         449402.85   3759030.29   0.21270 (13062606)   449406.72
  3759030.29   0.20623 (13062606)
         449410.59   3759030.29   0.20010 (13062606)   449414.46
  3759030.29   0.19432 (13062606)
         449418.33   3759030.29   0.18884 (13062606)   449422.20
  3759030.29   0.18364 (13062606)
         449426.07   3759030.29   0.17870 (13062606)   449429.94
  3759030.29   0.17400 (13062606)
         449433.81   3759030.29   0.16953 (13062606)   449437.68
  3759030.29   0.16526 (13062606)
         449441.55   3759030.29   0.16116 (13062606)   449445.42
  3759030.29   0.15721 (13062606)
         449368.02   3759044.33   0.30209 (13112916)   449371.89
  3759044.33   0.28630 (13112916)
         449375.76   3759044.33   0.27238 (13062606)   449379.63

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3759044.33          0.26187  (13062606)
        449383.50   3759044.33          0.25223  (13062606)                    449387.37
3759044.33          0.24323  (13062606)
        449391.24   3759044.33          0.23486  (13062606)                    449395.11
3759044.33          0.22701  (13062606)
        449398.98   3759044.33          0.21966  (13062606)                    449402.85
3759044.33          0.21273  (13062606)
        449406.72   3759044.33          0.20621  (13062606)                    449410.59
3759044.33          0.20005  (13062606)
        449414.46   3759044.33          0.19425  (13062606)                    449418.33
3759044.33          0.18876  (13062606)
        449422.20   3759044.33          0.18356  (13062606)                    449426.07
3759044.33          0.17861  (13062606)
        449429.94   3759044.33          0.17392  (13062606)                    449433.81
3759044.33          0.16944  (13062606)
        449437.68   3759044.33          0.16518  (13062606)                    449441.55
3759044.33          0.16108  (13062606)
        449445.42   3759044.33          0.15712  (13062606)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                      ***   11:24:07

                                 PAGE 24

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                              *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                                  INCLUDING SOURCE(S):   L0000183   , L0000184
 , L0000185   , L0000186   , L0000187   ,
                  L0000188   , L0000189   , L0000190   , L0000191   , L0000192
 , L0000193   , L0000194   , L0000195   ,
                  L0000196   , L0000197   , L0000198   , L0000199   , L0000200
 , L0000201   , L0000202   , L0000203   ,
                  L0000204   , L0000205   , L0000206   , L0000207   , L0000208
 ,

                                       *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
        449368.02   3758763.53   0.24197c (12121708)   449371.89
 3758763.53   0.23174c (12121708)
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      449375.76   3758763.53      0.22229c (12121708)              449379.63
3758763.53        0.21355c (12121708)
      449383.50   3758763.53      0.20555c (12121708)              449387.37
3758763.53        0.19812c (12121708)
      449391.24   3758763.53      0.19118c (12121708)              449395.11
3758763.53        0.18469c (12121708)
      449398.98   3758763.53      0.17861c (12121708)              449402.85
3758763.53        0.17289c (12121708)
      449406.72   3758763.53      0.16752c (12121708)              449410.59
3758763.53        0.16248c (12121708)
      449414.46   3758763.53      0.15777c (12121708)              449418.33
3758763.53        0.15331c (12121708)
      449422.20   3758763.53      0.14908c (12121708)              449426.07
3758763.53        0.14506c (12121708)
      449429.94   3758763.53      0.14124c (12121708)              449433.81
3758763.53        0.13760c (12121708)
      449437.68   3758763.53      0.13413c (12121708)              449441.55
3758763.53        0.13084c (12121708)
      449445.42   3758763.53      0.12771c (12121708)              449368.02
3758777.57        0.24267c (12121708)
      449371.89   3758777.57      0.23231c (12121708)              449375.76
3758777.57        0.22273c (12121708)
      449379.63   3758777.57      0.21387c (12121708)              449383.50
3758777.57        0.20585c (12121708)
      449387.37   3758777.57      0.19840c (12121708)              449391.24
3758777.57        0.19147c (12121708)
      449395.11   3758777.57      0.18497c (12121708)              449398.98
3758777.57        0.17889c (12121708)
      449402.85   3758777.57      0.17317c (12121708)              449406.72
3758777.57        0.16779c (12121708)
      449410.59   3758777.57      0.16275c (12121708)              449414.46
3758777.57        0.15805c (12121708)
      449418.33   3758777.57      0.15360c (12121708)              449422.20
3758777.57        0.14937c (12121708)
      449426.07   3758777.57      0.14536c (12121708)              449429.94
3758777.57        0.14154c (12121708)
      449433.81   3758777.57      0.13791c (12121708)              449437.68
3758777.57        0.13444c (12121708)
      449441.55   3758777.57      0.13116c (12121708)              449445.42
3758777.57        0.12806c (12121708)
      449368.02   3758791.61      0.24344c (12121708)              449371.89
3758791.61        0.23315c (12121708)
      449375.76   3758791.61      0.22366c (12121708)              449379.63
3758791.61        0.21488c (12121708)
      449383.50   3758791.61      0.20685c (12121708)              449387.37
3758791.61        0.19937c (12121708)
      449391.24   3758791.61      0.19240c (12121708)              449395.11
3758791.61        0.18589c (12121708)
      449398.98   3758791.61      0.17979c (12121708)              449402.85
3758791.61        0.17405c (12121708)
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      449406.72   3758791.61        0.16865c (12121708)                    449410.59
3758791.61        0.16359c (12121708)
      449414.46   3758791.61        0.15886c (12121708)                    449418.33
3758791.61        0.15439c (12121708)
      449422.20   3758791.61        0.15015c (12121708)                    449426.07
3758791.61        0.14612c (12121708)
      449429.94   3758791.61        0.14229c (12121708)                    449433.81
3758791.61        0.13864c (12121708)
      449437.68   3758791.61        0.13516c (12121708)                    449441.55
3758791.61        0.13185c (12121708)
      449445.42   3758791.61        0.12870c (12121708)                    449368.02
3758805.65        0.24420c (12121708)
      449371.89   3758805.65        0.23396c (12121708)                    449375.76
3758805.65        0.22454c (12121708)
      449379.63   3758805.65        0.21584c (12121708)                    449383.50
3758805.65        0.20777c (12121708)
      449387.37   3758805.65        0.20027c (12121708)                    449391.24
3758805.65        0.19328c (12121708)
      449395.11   3758805.65        0.18675c (12121708)                    449398.98
3758805.65        0.18063c (12121708)
      449402.85   3758805.65        0.17487c (12121708)                    449406.72
3758805.65        0.16946c (12121708)
      449410.59   3758805.65        0.16437c (12121708)                    449414.46
3758805.65        0.15963c (12121708)
      449418.33   3758805.65        0.15514c (12121708)                    449422.20
3758805.65        0.15088c (12121708)
      449426.07   3758805.65        0.14683c (12121708)                    449429.94
3758805.65        0.14299c (12121708)
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♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   11:24:07

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                          *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                             INCLUDING SOURCE(S):   L0000183   , L0000184
 , L0000185   , L0000186   , L0000187   ,
                 L0000188   , L0000189   , L0000190   , L0000191   , L0000192
 , L0000193   , L0000194   , L0000195   ,
                 L0000196   , L0000197   , L0000198   , L0000199   , L0000200
 , L0000201   , L0000202   , L0000203   ,
                 L0000204   , L0000205   , L0000206   , L0000207   , L0000208
 ,

                                     *** DISCRETE CARTESIAN RECEPTOR POINTS
***

| X-COORD (M) | Y-COORD (M) | CONC | (YYMMDDHH) | X-COORD (M) |
| Y-COORD (M) | | CONC | (YYMMDDHH) | |

- -
- -

449433.81	3758805.65	0.13932c (12121708)		449437.68
3758805.65	0.13583c (12121708)			
449441.55	3758805.65	0.13249c (12121708)		449445.42
3758805.65	0.12930c (12121708)			
449368.02	3758819.69	0.24480c (12121708)		449371.89
3758819.69	0.23453c (12121708)			
449375.76	3758819.69	0.22510c (12121708)		449379.63
3758819.69	0.21638c (12121708)			
449383.50	3758819.69	0.20829c (12121708)		449387.37
3758819.69	0.20078c (12121708)			
449391.24	3758819.69	0.19377c (12121708)		449395.11
3758819.69	0.18723c (12121708)			
449398.98	3758819.69	0.18109c (12121708)		449402.85
3758819.69	0.17532c (12121708)			
449406.72	3758819.69	0.16990c (12121708)		449410.59
3758819.69	0.16481c (12121708)			
449414.46	3758819.69	0.16006c (12121708)		449418.33
3758819.69	0.15556c (12121708)			
449422.20	3758819.69	0.15129c (12121708)		449426.07
3758819.69	0.14725c (12121708)			
449429.94	3758819.69	0.14339c (12121708)		449433.81
3758819.69	0.13972c (12121708)			
449437.68	3758819.69	0.13622c (12121708)		449441.55
3758819.69	0.13288c (12121708)			
449445.42	3758819.69	0.12968c (12121708)		449368.02
3758833.73	0.24533c (12121708)			
449371.89	3758833.73	0.23505c (12121708)		449375.76
3758833.73	0.22559c (12121708)			
449379.63	3758833.73	0.21685c (12121708)		449383.50
3758833.73	0.20875c (12121708)			
449387.37	3758833.73	0.20122c (12121708)		449391.24
3758833.73	0.19420c (12121708)			
449395.11	3758833.73	0.18764c (12121708)		449398.98
3758833.73	0.18149c (12121708)			
449402.85	3758833.73	0.17572c (12121708)		449406.72
3758833.73	0.17028c (12121708)			
449410.59	3758833.73	0.16519c (12121708)		449414.46
3758833.73	0.16043c (12121708)			
449418.33	3758833.73	0.15593c (12121708)		449422.20
3758833.73	0.15166c (12121708)			
449426.07	3758833.73	0.14761c (12121708)		449429.94
3758833.73	0.14375c (12121708)			
449433.81	3758833.73	0.14008c (12121708)		449437.68

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3758833.73         0.13657c (12121708)
        449441.55   3758833.73         0.13322c (12121708)              449445.42
3758833.73         0.13002c (12121708)
        449368.02   3758847.77         0.24636c (12121708)              449371.89
3758847.77         0.23608c (12121708)
        449375.76   3758847.77         0.22663c (12121708)              449379.63
3758847.77         0.21790c (12121708)
        449383.50   3758847.77         0.20977c (12121708)              449387.37
3758847.77         0.20222c (12121708)
        449391.24   3758847.77         0.19518c (12121708)              449395.11
3758847.77         0.18859c (12121708)
        449398.98   3758847.77         0.18242c (12121708)              449402.85
3758847.77         0.17662c (12121708)
        449406.72   3758847.77         0.17117c (12121708)              449410.59
3758847.77         0.16604c (12121708)
        449414.46   3758847.77         0.16123c (12121708)              449418.33
3758847.77         0.15668c (12121708)
        449422.20   3758847.77         0.15236c (12121708)              449426.07
3758847.77         0.14825c (12121708)
        449429.94   3758847.77         0.14435c (12121708)              449433.81
3758847.77         0.14064c (12121708)
        449437.68   3758847.77         0.13709c (12121708)              449441.55
3758847.77         0.13373c (12121708)
        449445.42   3758847.77         0.13052c (12121708)              449368.02
3758861.81         0.24728c (12121708)
        449371.89   3758861.81         0.23704c (12121708)              449375.76
3758861.81         0.22760c (12121708)
        449379.63   3758861.81         0.21889c (12121708)              449383.50
3758861.81         0.21076c (12121708)
        449387.37   3758861.81         0.20320c (12121708)              449391.24
3758861.81         0.19614c (12121708)
        449395.11   3758861.81         0.18955c (12121708)              449398.98
3758861.81         0.18336c (12121708)
        449402.85   3758861.81         0.17754c (12121708)              449406.72
3758861.81         0.17207c (12121708)
        449410.59   3758861.81         0.16691c (12121708)              449414.46
3758861.81         0.16204c (12121708)
```

                       *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                         INCLUDING SOURCE(S):   L0000183   , L0000184
, L0000185   , L0000186   , L0000187   ,
              L0000188   , L0000189   , L0000190   , L0000191   , L0000192

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, L0000193    , L0000194    , L0000195    ,
                 L0000196    , L0000197    , L0000198    , L0000199    , L0000200
, L0000201    , L0000202    , L0000203    ,
                 L0000204    , L0000205    , L0000206    , L0000207    , L0000208
,
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                                              *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

```
     X-COORD (M)  Y-COORD (M)      CONC     (YYMMDDHH)          X-COORD (M)
Y-COORD (M)      CONC     (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - - - -
      449418.33  3758861.81      0.15743c (12121708)          449422.20
 3758861.81      0.15306c (12121708)
      449426.07  3758861.81      0.14892c (12121708)          449429.94
 3758861.81      0.14497c (12121708)
      449433.81  3758861.81      0.14121c (12121708)          449437.68
 3758861.81      0.13763c (12121708)
      449441.55  3758861.81      0.13423c (12121708)          449445.42
 3758861.81      0.13101c (12121708)
      449368.02  3758875.85      0.24791c (12121708)          449371.89
 3758875.85      0.23767c (12121708)
      449375.76  3758875.85      0.22824c (12121708)          449379.63
 3758875.85      0.21953c (12121708)
      449383.50  3758875.85      0.21143c (12121708)          449387.37
 3758875.85      0.20386c (12121708)
      449391.24  3758875.85      0.19681c (12121708)          449395.11
 3758875.85      0.19020c (12121708)
      449398.98  3758875.85      0.18401c (12121708)          449402.85
 3758875.85      0.17819c (12121708)
      449406.72  3758875.85      0.17271c (12121708)          449410.59
 3758875.85      0.16753c (12121708)
      449414.46  3758875.85      0.16264c (12121708)          449418.33
 3758875.85      0.15801c (12121708)
      449422.20  3758875.85      0.15362c (12121708)          449426.07
 3758875.85      0.14945c (12121708)
      449429.94  3758875.85      0.14549c (12121708)          449433.81
 3758875.85      0.14171c (12121708)
      449437.68  3758875.85      0.13811c (12121708)          449441.55
 3758875.85      0.13470c (12121708)
      449445.42  3758875.85      0.13147c (12121708)          449368.02
 3758889.89      0.24846c (12121708)
      449371.89  3758889.89      0.23821c (12121708)          449375.76
 3758889.89      0.22877c (12121708)
      449379.63  3758889.89      0.22005c (12121708)          449383.50
 3758889.89      0.21195c (12121708)
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        449387.37    3758889.89         0.20440c (12121708)                    449391.24
3758889.89          0.19734c (12121708)
        449395.11    3758889.89         0.19073c (12121708)                    449398.98
3758889.89          0.18453c (12121708)
        449402.85    3758889.89         0.17870c (12121708)                    449406.72
3758889.89          0.17321c (12121708)
        449410.59    3758889.89         0.16803c (12121708)                    449414.46
3758889.89          0.16313c (12121708)
        449418.33    3758889.89         0.15849c (12121708)                    449422.20
3758889.89          0.15409c (12121708)
        449426.07    3758889.89         0.14992c (12121708)                    449429.94
3758889.89          0.14594c (12121708)
        449433.81    3758889.89         0.14215c (12121708)                    449437.68
3758889.89          0.13854c (12121708)
        449441.55    3758889.89         0.13513c (12121708)                    449445.42
3758889.89          0.13189c (12121708)
        449368.02    3758903.93         0.24893c (12121708)                    449371.89
3758903.93          0.23866c (12121708)
        449375.76    3758903.93         0.22921c (12121708)                    449379.63
3758903.93          0.22049c (12121708)
        449383.50    3758903.93         0.21242c (12121708)                    449387.37
3758903.93          0.20489c (12121708)
        449391.24    3758903.93         0.19785c (12121708)                    449395.11
3758903.93          0.19126c (12121708)
        449398.98    3758903.93         0.18507c (12121708)                    449402.85
3758903.93          0.17925c (12121708)
        449406.72    3758903.93         0.17376c (12121708)                    449410.59
3758903.93          0.16857c (12121708)
        449414.46    3758903.93         0.16366c (12121708)                    449418.33
3758903.93          0.15900c (12121708)
        449422.20    3758903.93         0.15458c (12121708)                    449426.07
3758903.93          0.15038c (12121708)
        449429.94    3758903.93         0.14639c (12121708)                    449433.81
3758903.93          0.14258c (12121708)
        449437.68    3758903.93         0.13895c (12121708)                    449441.55
3758903.93          0.13552c (12121708)
        449445.42    3758903.93         0.13227c (12121708)                    449368.02
3758917.97          0.24920c (12121708)
        449371.89    3758917.97         0.23892c (12121708)                    449375.76
3758917.97          0.22947c (12121708)
        449379.63    3758917.97         0.22075c (12121708)                    449383.50
3758917.97          0.21272c (12121708)
        449387.37    3758917.97         0.20522c (12121708)                    449391.24
3758917.97          0.19823c (12121708)
        449395.11    3758917.97         0.19167c (12121708)                    449398.98
3758917.97          0.18552c (12121708)
```

 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                          *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP: ALL   ***
                              INCLUDING SOURCE(S):   L0000183   , L0000184
, L0000185   , L0000186   , L0000187   ,
                    L0000188   , L0000189   , L0000190   , L0000191   , L0000192
, L0000193   , L0000194   , L0000195   ,
                    L0000196   , L0000197   , L0000198   , L0000199   , L0000200
, L0000201   , L0000202   , L0000203   ,
                    L0000204   , L0000205   , L0000206   , L0000207   , L0000208
 ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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

    X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
Y-COORD (M)   CONC   (YYMMDDHH)
 -
- -
        449402.85 3758917.97   0.17972c (12121708)   449406.72
 3758917.97   0.17426c (12121708)
        449410.59 3758917.97   0.16908c (12121708)   449414.46
 3758917.97   0.16416c (12121708)
        449418.33 3758917.97   0.15950c (12121708)   449422.20
 3758917.97   0.15506c (12121708)
        449426.07 3758917.97   0.15084c (12121708)   449429.94
 3758917.97   0.14681c (12121708)
        449433.81 3758917.97   0.14298c (12121708)   449437.68
 3758917.97   0.13932c (12121708)
        449441.55 3758917.97   0.13587c (12121708)   449445.42
 3758917.97   0.13261c (12121708)
        449368.02 3758932.01   0.24942c (12121708)   449371.89
 3758932.01   0.23912c (12121708)
        449375.76 3758932.01   0.22965c (12121708)   449379.63
 3758932.01   0.22092c (12121708)
        449383.50 3758932.01   0.21290c (12121708)   449387.37
 3758932.01   0.20545c (12121708)
        449391.24 3758932.01   0.19847c (12121708)   449395.11
 3758932.01   0.19194c (12121708)
        449398.98 3758932.01   0.18580c (12121708)   449402.85
 3758932.01   0.18003c (12121708)
        449406.72 3758932.01   0.17458c (12121708)   449410.59
 3758932.01   0.16943c (12121708)
        449414.46 3758932.01   0.16453c (12121708)   449418.33

```
3758932.01          0.15986c (12121708)
      449422.20   3758932.01          0.15543c (12121708)                    449426.07
3758932.01          0.15120c (12121708)
      449429.94   3758932.01          0.14717c (12121708)                    449433.81
3758932.01          0.14332c (12121708)
      449437.68   3758932.01          0.13965c (12121708)                    449441.55
3758932.01          0.13618c (12121708)
      449445.42   3758932.01          0.13291c (12121708)                    449368.02
3758946.05          0.24965c (12121708)
      449371.89   3758946.05          0.23933c (12121708)                    449375.76
3758946.05          0.22985c (12121708)
      449379.63   3758946.05          0.22109c (12121708)                    449383.50
3758946.05          0.21312c (12121708)
      449387.37   3758946.05          0.20565c (12121708)                    449391.24
3758946.05          0.19870c (12121708)
      449395.11   3758946.05          0.19216c (12121708)                    449398.98
3758946.05          0.18604c (12121708)
      449402.85   3758946.05          0.18026c (12121708)                    449406.72
3758946.05          0.17482c (12121708)
      449410.59   3758946.05          0.16967c (12121708)                    449414.46
3758946.05          0.16479c (12121708)
      449418.33   3758946.05          0.16014c (12121708)                    449422.20
3758946.05          0.15570c (12121708)
      449426.07   3758946.05          0.15148c (12121708)                    449429.94
3758946.05          0.14746c (12121708)
      449433.81   3758946.05          0.14361c (12121708)                    449437.68
3758946.05          0.13993c (12121708)
      449441.55   3758946.05          0.13645c (12121708)                    449445.42
3758946.05          0.13315c (12121708)
      449368.02   3758960.09          0.24986c (12121708)                    449371.89
3758960.09          0.23953c (12121708)
      449375.76   3758960.09          0.23003c (12121708)                    449379.63
3758960.09          0.22126c (12121708)
      449383.50   3758960.09          0.21330c (12121708)                    449387.37
3758960.09          0.20583c (12121708)
      449391.24   3758960.09          0.19888c (12121708)                    449395.11
3758960.09          0.19234c (12121708)
      449398.98   3758960.09          0.18622c (12121708)                    449402.85
3758960.09          0.18045c (12121708)
      449406.72   3758960.09          0.17501c (12121708)                    449410.59
3758960.09          0.16987c (12121708)
      449414.46   3758960.09          0.16499c (12121708)                    449418.33
3758960.09          0.16036c (12121708)
      449422.20   3758960.09          0.15593c (12121708)                    449426.07
3758960.09          0.15172c (12121708)
      449429.94   3758960.09          0.14770c (12121708)                    449433.81
3758960.09          0.14386c (12121708)
      449437.68   3758960.09          0.14018c (12121708)                    449441.55
3758960.09          0.13669c (12121708)
      449445.42   3758960.09          0.13336c (12121708)                    449368.02
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         3758974.13        0.25030c (12121708)
        449371.89   3758974.13        0.23994c (12121708)                  449375.76
  3758974.13        0.23041c (12121708)
        449379.63   3758974.13        0.22162c (12121708)                  449383.50
  3758974.13        0.21359c (12121708)
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC                              ***         11/11/21
  *** AERMET - VERSION  16216 ***   ***
                        ***        11:24:07


                          PAGE  28
  *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

                          *** THE   1ST HIGHEST  8-HR AVERAGE CONCENTRATION
VALUES FOR SOURCE GROUP:  ALL       ***
                              INCLUDING SOURCE(S):    L0000183    , L0000184
 , L0000185     , L0000186    , L0000187     ,
                    L0000188    , L0000189     , L0000190    , L0000191    , L0000192
 , L0000193    , L0000194    , L0000195     ,
                    L0000196    , L0000197     , L0000198    , L0000199    , L0000200
 , L0000201    , L0000202    , L0000203     ,
                    L0000204    , L0000205     , L0000206    , L0000207    , L0000208
 ,

                                         *** DISCRETE CARTESIAN RECEPTOR POINTS
***

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


     X-COORD (M) Y-COORD (M)     CONC    (YYMMDDHH)              X-COORD (M)
Y-COORD (M)     CONC    (YYMMDDHH)
 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - - - - - - - - - - - -
         449387.37   3758974.13        0.20608c (12121708)                  449391.24
  3758974.13        0.19907c (12121708)
         449395.11   3758974.13        0.19253c (12121708)                  449398.98
  3758974.13        0.18638c (12121708)
         449402.85   3758974.13        0.18061c (12121708)                  449406.72
  3758974.13        0.17516c (12121708)
         449410.59   3758974.13        0.17001c (12121708)                  449414.46
  3758974.13        0.16516c (12121708)
         449418.33   3758974.13        0.16053c (12121708)                  449422.20
  3758974.13        0.15612c (12121708)
         449426.07   3758974.13        0.15191c (12121708)                  449429.94
  3758974.13        0.14790c (12121708)
         449433.81   3758974.13        0.14406c (12121708)                  449437.68
  3758974.13        0.14039c (12121708)
         449441.55   3758974.13        0.13688c (12121708)                  449445.42
  3758974.13        0.13354c (12121708)
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   449368.02   3758988.17        0.25070c (12121708)                    449371.89
3758988.17        0.24030c (12121708)
   449375.76   3758988.17        0.23073c (12121708)                    449379.63
3758988.17        0.22191c (12121708)
   449383.50   3758988.17        0.21384c (12121708)                    449387.37
3758988.17        0.20629c (12121708)
   449391.24   3758988.17        0.19925c (12121708)                    449395.11
3758988.17        0.19267c (12121708)
   449398.98   3758988.17        0.18652c (12121708)                    449402.85
3758988.17        0.18072c (12121708)
   449406.72   3758988.17        0.17526c (12121708)                    449410.59
3758988.17        0.17013c (12121708)
   449414.46   3758988.17        0.16527c (12121708)                    449418.33
3758988.17        0.16066c (12121708)
   449422.20   3758988.17        0.15626c (12121708)                    449426.07
3758988.17        0.15206c (12121708)
   449429.94   3758988.17        0.14805c (12121708)                    449433.81
3758988.17        0.14422c (12121708)
   449437.68   3758988.17        0.14055c (12121708)                    449441.55
3758988.17        0.13704c (12121708)
   449445.42   3758988.17        0.13368c (12121708)                    449368.02
3759002.21        0.25074c (12121708)
   449371.89   3759002.21        0.24033c (12121708)                    449375.76
3759002.21        0.23075c (12121708)
   449379.63   3759002.21        0.22193c (12121708)                    449383.50
3759002.21        0.21390c (12121708)
   449387.37   3759002.21        0.20636c (12121708)                    449391.24
3759002.21        0.19937c (12121708)
   449395.11   3759002.21        0.19280c (12121708)                    449398.98
3759002.21        0.18663c (12121708)
   449402.85   3759002.21        0.18085c (12121708)                    449406.72
3759002.21        0.17539c (12121708)
   449410.59   3759002.21        0.17025c (12121708)                    449414.46
3759002.21        0.16537c (12121708)
   449418.33   3759002.21        0.16075c (12121708)                    449422.20
3759002.21        0.15634c (12121708)
   449426.07   3759002.21        0.15215c (12121708)                    449429.94
3759002.21        0.14815c (12121708)
   449433.81   3759002.21        0.14433c (12121708)                    449437.68
3759002.21        0.14068c (12121708)
   449441.55   3759002.21        0.13718c (12121708)                    449445.42
3759002.21        0.13382c (12121708)
   449368.02   3759016.25        0.25077c (12121708)                    449371.89
3759016.25        0.24035c (12121708)
   449375.76   3759016.25        0.23078c (12121708)                    449379.63
3759016.25        0.22194c (12121708)
   449383.50   3759016.25        0.21428  (14121224)                    449387.37
3759016.25        0.20644c (12121708)
   449391.24   3759016.25        0.19943c (12121708)                    449395.11
3759016.25        0.19290c (12121708)
```

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         449398.98   3759016.25        0.18673c (12121708)              449402.85
 3759016.25        0.18094c (12121708)
         449406.72   3759016.25        0.17549c (12121708)              449410.59
 3759016.25        0.17032c (12121708)
         449414.46   3759016.25        0.16544c (12121708)              449418.33
 3759016.25        0.16080c (12121708)
         449422.20   3759016.25        0.15640c (12121708)              449426.07
 3759016.25        0.15220c (12121708)
         449429.94   3759016.25        0.14821c (12121708)              449433.81
 3759016.25        0.14440c (12121708)
         449437.68   3759016.25        0.14076c (12121708)              449441.55
 3759016.25        0.13727c (12121708)
         449445.42   3759016.25        0.13391c (12121708)              449368.02
 3759030.29        0.25143c (12121708)
```
♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                          ***   11:24:07

                            PAGE 29
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                              *** THE   1ST HIGHEST 8-HR AVERAGE CONCENTRATION
 VALUES FOR SOURCE GROUP: ALL   ***
                                INCLUDING SOURCE(S):   L0000183   , L0000184
 , L0000185   , L0000186   , L0000187   ,
                      L0000188   , L0000189   , L0000190   , L0000191   , L0000192
 , L0000193   , L0000194   , L0000195   ,
                      L0000196   , L0000197   , L0000198   , L0000199   , L0000200
 , L0000201   , L0000202   , L0000203   ,
                      L0000204   , L0000205   , L0000206   , L0000207   , L0000208
 ,

                                      *** DISCRETE CARTESIAN RECEPTOR POINTS
 ***

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

     X-COORD (M) Y-COORD (M)   CONC   (YYMMDDHH)   X-COORD (M)
 Y-COORD (M)   CONC   (YYMMDDHH)
 -
 -
         449371.89   3759030.29   0.24095c (12121708)   449375.76
 3759030.29   0.23131c (12121708)
         449379.63   3759030.29   0.22243c (12121708)   449383.50
 3759030.29   0.21434c (12121708)
         449387.37   3759030.29   0.20678c (12121708)   449391.24
 3759030.29   0.19973c (12121708)
         449395.11   3759030.29   0.19312c (12121708)   449398.98

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3759030.29         0.18693c (12121708)
      449402.85   3759030.29        0.18109c (12121708)                449406.72
3759030.29         0.17559c (12121708)
      449410.59   3759030.29        0.17038c (12121708)                449414.46
3759030.29         0.16547c (12121708)
      449418.33   3759030.29        0.16080c (12121708)                449422.20
3759030.29         0.15638c (12121708)
      449426.07   3759030.29        0.15218c (12121708)                449429.94
3759030.29         0.14818c (12121708)
      449433.81   3759030.29        0.14437c (12121708)                449437.68
3759030.29         0.14073c (12121708)
      449441.55   3759030.29        0.13724c (12121708)                449445.42
3759030.29         0.13387c (12121708)
      449368.02   3759044.33        0.25198c (12121708)                449371.89
3759044.33         0.24144c (12121708)
      449375.76   3759044.33        0.23175c (12121708)                449379.63
3759044.33         0.22283c (12121708)
      449383.50   3759044.33        0.21465c (12121708)                449387.37
3759044.33         0.20703c (12121708)
      449391.24   3759044.33        0.19992c (12121708)                449395.11
3759044.33         0.19326c (12121708)
      449398.98   3759044.33        0.18701c (12121708)                449402.85
3759044.33         0.18112c (12121708)
      449406.72   3759044.33        0.17558c (12121708)                449410.59
3759044.33         0.17034c (12121708)
      449414.46   3759044.33        0.16540c (12121708)                449418.33
3759044.33         0.16073c (12121708)
      449422.20   3759044.33        0.15630c (12121708)                449426.07
3759044.33         0.15209c (12121708)
      449429.94   3759044.33        0.14810c (12121708)                449433.81
3759044.33         0.14429c (12121708)
      449437.68   3759044.33        0.14066c (12121708)                449441.55
3759044.33         0.13717c (12121708)
      449445.42   3759044.33        0.13379c (12121708)
```

♠ *** AERMOD - VERSION 19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC   ***   11/11/21
 *** AERMET - VERSION 16216 ***   ***
                       ***   11:24:07

                          PAGE 30
 *** MODELOPTs: RegDFAULT CONC ELEV URBAN ADJ_U*

                            *** THE SUMMARY OF MAXIMUM ANNUAL RESULTS
AVERAGED OVER   5 YEARS ***

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

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

ALL      1ST HIGHEST VALUE IS       0.12140 AT (  449368.02,  3759044.33,
198.07,   198.07,    0.00)  DC
         2ND HIGHEST VALUE IS       0.12131 AT (  449368.02,  3758889.89,
195.17,   195.17,    0.00)  DC
         3RD HIGHEST VALUE IS       0.12126 AT (  449368.02,  3758903.93,
195.79,   195.79,    0.00)  DC
         4TH HIGHEST VALUE IS       0.12124 AT (  449368.02,  3758875.85,
194.70,   194.70,    0.00)  DC
         5TH HIGHEST VALUE IS       0.12103 AT (  449368.02,  3758861.81,
194.14,   194.14,    0.00)  DC
         6TH HIGHEST VALUE IS       0.12059 AT (  449368.02,  3758917.97,
196.55,   196.55,    0.00)  DC
         7TH HIGHEST VALUE IS       0.12036 AT (  449368.02,  3758847.77,
193.38,   193.38,    0.00)  DC
         8TH HIGHEST VALUE IS       0.12009 AT (  449368.02,  3759030.29,
198.53,   198.53,    0.00)  DC
         9TH HIGHEST VALUE IS       0.12001 AT (  449368.02,  3758932.01,
197.19,   197.19,    0.00)  DC
        10TH HIGHEST VALUE IS       0.11987 AT (  449368.02,  3758988.17,
198.06,   198.06,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC                     ***          11/11/21
 *** AERMET - VERSION  16216 ***   ***
                        ***        11:24:07

                                  PAGE  31
 *** MODELOPTs:   RegDFAULT  CONC  ELEV  URBAN  ADJ_U*

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


                                  ** CONC OF TOGGAS    IN MICROGRAMS/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      0.30723  ON 13020301: AT (   449368.02,
3759016.25,   199.00,   199.00,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC                    ***          11/11/21
 *** AERMET - VERSION  16216 ***   ***
                      ***          11:24:07


                             PAGE  32
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*


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


                              ** CONC OF TOGGAS    IN MICROGRAMS/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      0.25198c ON 12121708: AT (   449368.02,
3759044.33,   198.07,   198.07,    0.00)  DC


 *** RECEPTOR TYPES:  GC = GRIDCART
                      GP = GRIDPOLR
                      DC = DISCCART
                      DP = DISCPOLR
♠ *** AERMOD - VERSION  19191 ***   *** C:\LAKES\AERMOD VIEW\14172
HRA\TOGGAS\TOGGAS.ISC                    ***          11/11/21
 *** AERMET - VERSION  16216 ***   ***
                      ***          11:24:07


                             PAGE  33
 *** MODELOPTs:    RegDFAULT  CONC  ELEV  URBAN  ADJ_U*
```

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

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

A Total of            0 Fatal Error Message(s)
A Total of            2 Warning Message(s)
A Total of         1638 Informational Message(s)

A Total of        43848 Hours Were Processed

A Total of         1039 Calm Hours Identified

A Total of          599 Missing Hours Identified (  1.37 Percent)


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


    ********   WARNING MESSAGES   ********
ME W186     130        MEOPEN: THRESH_1MIN 1-min ASOS wind speed threshold used
     0.50
ME W187     130        MEOPEN: ADJ_U* Option for Stable Low Winds used in AERMET


    **********************************
    *** AERMOD Finishes Successfully ***
    **********************************
```

APPENDIX 5.1:

RISK CALCULATION WORKSHEETS

URBAN
CROSSROADS

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Table A1
Quantification of Carcinogenic Risks and Noncarcinogenic Hazards
30 Year Exposure Scenario / Maximum Residential Receptor

Source	Concentration		Weight Fraction	Contaminant	Carcinogenic Risk			Noncarcinogenic Hazards / Toxicological Endpoints*									
	(ug/m3)	(mg/m3)			URF (ug/m3)	CPF (mg/kg/day)	RISK	REL (ug/m3)	RfD (mg/kg/day)	RESP	CNS/PNS	CV/BL	IMMUN	KIDN	GI/LV	REPRO	EYES
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)
Freeway	0.12140	1.2E-04	4.67E-01	Benzene	2.9E-05	1.0E-01	6.8E-07	3.0E+00	8.6E-04			1.8E-02					
			3.28E-01	Formaldehyde	6.0E-06	2.1E-02	9.8E-08	9.0E+00	2.6E-03	4.2E-03							
			1.06E-01	1,3-Butadiene	1.7E-04	6.0E-01	9.0E-07	2.0E+00	5.7E-04							6.2E-03	
			7.40E-02	Acetaldehyde	2.7E-06	1.0E-02	1.1E-08	1.4E+02	4.0E-02	6.2E-05							
			2.50E-02	Acrolein				3.5E-01	1.0E-04	8.3E-03							
	0.02368	2.4E-05	1.00E+00	Diesel Particulates	3.0E-04	1.1E+00	2.9E-06	5.0E+00	1.4E-03	4.5E-03							
Total							4.60E-06			1.7E-02	0.0E+00	1.8E-02	0.0E+00	0.0E+00	0.0E+00	6.2E-03	0.0E+00

* Key to Toxocological Endpoints

RESP	Respiratory System
CNS/PNS	Central/Peripheral Nervous System
CV/BL	Cardiovascular/Blood System
IMMUN	Immune System
KIDN	Kidney
GI/LV	Gastrointestinal System/Liver
REPRO	Reproductive System (e.g., teratogenic and developmental effects)
EYES	Eye irritation and/or other effects

Note: Exposure factors used to calculate contaminant intake

exposure frequency (days/year)	350
exposure duration (years)	30
inhalation rate (m3/day)	20
average body weight (kg)	70
averaging time$_{(cancer)}$ (days)	25550
averaging time$_{(noncancer)}$ (days)	10950

Table A2
Quantification of Noncarcinogenic Acute Hazards
1-Hour Exposure Scenario / Maximum Exposed Receptor

Source	Concentration (ug/m3)	Weight Fraction	Contaminant	Noncarcinogenic Hazards / Toxicological Endpoints*								
				REL (ug/m3)	RESP	CNS/PNS	CV/BL	IMMUN	KIDN	GI/LV	REPRO	EYES
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
Freeway TOG	0.30723	4.67E-01	Benzene	2.7E+01			5.3E-03	5.3E-03			5.3E-03	
		3.28E-01	Formaldehyde	5.5E+01								1.8E-03
		1.06E-01	1,3-Butadiene	6.6E+02							4.9E-05	
		7.40E-02	Acetaldehyde	4.7E+02	4.8E-05							4.8E-05
		2.50E-02	Acrolein	2.5E+00	3.1E-03							3.1E-03
Freeway Diesel/TOG	0.04939	8.20E-02	Benzene	2.7E+01			1.5E-04	1.5E-04			1.5E-04	
		6.07E-01	Formaldehyde	5.5E+01								5.5E-04
		8.00E-03	1,3-Butadiene	6.6E+02							6.0E-07	
		3.03E-01	Acetaldehyde	4.7E+02	3.2E-05							3.2E-05
Total					3.2E-03	0.0E+00	5.5E-03	5.5E-03	0.0E+00	0.0E+00	5.5E-03	5.5E-03

* Key to Toxocological Endpoints

RESP	Respiratory System
CNS/PNS	Central/Peripheral Nervous System
CV/BL	Cardiovascular/Blood System
IMMUN	Immune System
KIDN	Kidney
GI/LV	Gastrointestinal System/Liver
REPRO	Reproductive System (e.g., teratogenic and developmental effects)
EYES	Eye irritation and/or other effects

Table A3
Quantification of Noncarcinogenic Acute Hazards
8-Hour Exposure Scenario / Maximum Exposed Receptor

Source	Concentration (ug/m3)	Weight Fraction	Contaminant	Noncarcinogenic Hazards / Toxicological Endpoints*								
				REL (ug/m3)	RESP	CNS/PNS	CV/BL	IMMUN	KIDN	GI/LV	REPRO	EYES
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)
Freeway TOG	0.25198	3.28E-01	Formaldehyde	9.0E+00	9.2E-03							
		1.06E-01	1,3-Butadiene	9.0E+00							3.0E-03	
		7.40E-02	Acetaldehyde	3.0E+02	6.2E-05							
		2.50E-02	Acrolein	7.0E-01	9.0E-03							
Freeway Diesel/TOG	0.04051	6.07E-01	Formaldehyde	9.0E+00	2.7E-03							
		8.00E-03	1,3-Butadiene	9.0E+00							3.6E-05	
		3.03E-01	Acetaldehyde	3.0E+02	4.1E-05							
Total					2.1E-02	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	3.0E-03	0.0E+00

* Key to Toxocological Endpoints

RESP	Respiratory System
CNS/PNS	Central/Peripheral Nervous System
CV/BL	Cardiovascular/Blood System
IMMUN	Immune System
KIDN	Kidney
GI/LV	Gastrointestinal System/Liver
REPRO	Reproductive System (e.g., teratogenic and developmental effects)
EYES	Eye irritation and/or other effects